

Global investment flows in land restoration and nature conservation

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HANDBOOK OF TRANSLOCAL DEVELOPMENT AND GLOBAL MOBILITIES

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1. Introduction to the Handbook of Translocal Development and Global Mobilities

Guus van Westen, Maggi Leung, Kei Otsuki and Annelies Zoomers

INTRODUCTION

When the coronavirus hit the world end of 2019, something happened that had not been observed in previous pandemics. Media coverage of the pandemic has exceeded the attention given to any other virus outbreak. This can be explained by the unprecedented scale of the disease, but arguably also because it squarely hit the self-centred core areas of the world: East Asia, Europe and North America. Furthermore, media attention has focused not just on the health impact and its human toll, but at least as much on the widespread 'lockdowns' imposed by governments in many countries in attempts to contain the spread of the virus. The pandemic virtually froze the world, immobilising what had become a global society based on flows: flows of people, of finance and capital, of merchandise and of information; flows that had become the defining features of the world of globalisation. The unprecedented feature was that the immobilisation of these flows seemed the real issue at stake in the pandemic, and that its cause, the health crisis due to the spread of a new virus, was the lesser issue of the two.

At the time of writing, the true impact of COVID-19 is far from clear, but serious repercussions have been reported from across the globe. While the richer countries have been first-hit in relative terms – this due to their prominent involvement in global exchanges – it is clear that increases in the number of people being thrown into absolute poverty will be highest in low-income countries (IMF 2020). Unlike their counterparts in wealthier countries, vendors, craftspeople and people working in all sorts of local service activities in the Global South have little to no savings and cannot afford to remain home. Without a buffer or support scheme, they have to get out to make a living in markets, street-side shops and other places with often high levels of exposure to others and therefore risk of infection. This, admittedly, would have been the same in quarantine conditions imposed in the past. But now, much of the food and merchandise needs to be brought in from elsewhere, often over long distances. From the production side, much of the new employment linked to recent economic growth has been in industries of the networked economy of globalisation, be it garment workers in factories working for export or cleaners and waiters in

tourism establishments. They suffer directly as a consequence of the collapse of the majority of mobility flows.

TRANSLOCAL FLOWS

Thus COVID-19 shows how our world has been transformed in recent decades. Connections to other places have become a key feature in defining a locality in terms of its economic and social performance, arguably even more so than the characteristics of the locality. Manuel Castells, the Catalan sociologist who greatly contributed to our understanding of globalisation, first elaborated this change in the 1990s, when he contrasted the role of the 'space of flows' - that is, the connections in terms of travel by people, and flows of capital and merchandise, and of knowledge and ideas - in shaping the fate of any locality, with the declining role of the 'space of place'; that is, the physical and other in-situ characteristics of that place. In a globalising world, what matters in the first place is the nature of these translocal links connecting people, communities and places with others far and close. Being included in 'global' networks of economic activity, finance, travel, political power and knowledge is a prerequisite of local development. But the terms of inclusion - that is, the position of people, communities, localities, in such translocal networks – are important. To a greater or lesser degree, places and communities across the globe have moved along this path of networked local development, where flows and connections through space and between levels of scale shape the nature of local transformations.

To be sure, globalisation has created opportunities for development: the global shift of much of manufacturing and some service industries to countries such as China, India, Mexico and Turkey has literally lifted hundreds of millions of people out of debilitating poverty. Worldwide progress in education, health and human longevity over the last half century is impressive. These successes have been achieved at the cost of several drawbacks, however. One is increasing inequality that is intrinsically linked to the model of neoliberal deregulation dominating the global political economy. 'Winner takes all' is almost literally the case in some new industries, such as computer software, where frontrunners set standards (think of Microsoft, Google, Facebook) that turn them into monopolists. This principle has become more mainstream as global market integration means that people with few marketable assets or skills have to compete with others worldwide, while people with assets that are high in demand can benefit from the best opportunities globally. Socio-economic inequalities have reached levels where they effectively undermine human development, as most forcefully argued by French economist Thomas Piketty (2014, 2019). Beyond inequality, the coronavirus crisis made us more aware of our vulnerability and the many insecurities on which our lives are built. The global economy has built on a development model that hinges on flows and connections while the reality of crises - pandemics, political or economic shocks, ecological limits - impose borders and renewed territorialisation. Beyond this clash of systemic interdependence and mobility with the resurgence of delimitation and territory, we are more than ever

confronted with planetary boundaries (Rockström 2015). In fact, the spread of new viruses may be linked to massive human encroachment on the natural environment – an aspect that has hitherto captured little attention. Human-induced climate change undercuts the sustainability of the status quo development model that thrives on growth and expansion of resource use. As Bruno Latour (2017: 16) pointed out, focusing on the politics of the new climate regime, 'the planet is much too narrow and limited for the globe of globalization; at the same time, it is too big, infinitely too large, too active, too complex, to remain within the narrow and limited borders of any locality whatsoever'.

TRANSLOCAL DEVELOPMENT

This Handbook of Translocal Development and Global Mobilities aims to review how local development has been shaped by global flows (and 'lockdowns'), while offering a new framework for understanding the implications for local people's livelihoods and wellbeing. In searching for (new) ways to improve local livelihoods - and achieve the Sustainable Development Goals (SDGs) with the motto of 'leaving no one behind' - we start from the idea that the flows of capital and flows of people will play a key role in shaping people's livelihoods opportunities. The opportunity to benefit from investment and mobility, and the constraints imposed by such flows or being excluded from or trapped in networks, will bear heavily on the future. In addition to large-scale foreign and domestic investments, the scope for development is further shaped by other money flows, ranging from remittances and traditional donor money (Official Development Assistance), but also money originating from the BRIC countries (Brazil, Russia, India, China) and new charities (for example, the Bill and Melinda Gates Foundation), to a growing network of social businesses and impact investors. While recent decades have seen rapid increases in the total volume and diversity of capital flows, these can, however, no longer be taken for granted. The post-coronavirus world is an arena of conflicting trends, with some pushing for continued openness and integration while others backtrack from the fluid world of globalisation in search of localisation and renewed territorial control.

Discussing the construction of space and spatial differences, Doreen Massey (2005) likened the effects of flows of capital to the layers of sediments rivers leave in the landscape. Just like geological sedimentation, successive waves of investment deposit production capacity, infrastructure and other assets in particular places that fit the needs and opportunities of a particular period. Most strikingly, though, investment favours existing concentrations of people and assets; that is, the power and sunk investment anchored in particular in metropolitan centres. With the exception of harvesting natural resources (agriculture, mining), nearly all economic activity benefits from close proximity to markets, suppliers, knowledge, workers and infrastructure. But changing circumstances also channel investment to new places. Recent years have seen the rise of new hubs: places where new investments and newcomers concentrate, with direct implications for the livelihood opportunities of

'local' groups – targeted beneficiaries, but also bypassed people – inside and outside. Such investment and settlement hubs are often conflictive in the sense of generating competing claims between different groups, creating new opportunities for some and attracting migrants, while also displacing others, forcing them to move and seek resettlement in other places. The inflow or outflow of capital (and, more particularly, large-scale land-based investments, or investment in other natural resources) has enormous implications for the livelihood opportunities of local groups, not only for directly affected populations in the investment hub, but also for successive waves of others. The effects will travel in space, creating ripple effects or chains of translocal effects which also affect people in bypassed places: people are triggered to move and resettle in nearby or faraway places, or are confronted with the arrival of displaced groups, which may lead to competing claims but can also generate new opportunities.

Large-scale capital investment and migration are very much interconnected, and should not be analysed in isolation. In addition to the link mentioned between capital flows and (im)migration, displacement and resettlement, diasporas but also individual migrants often play a direct role by investing in their home communities or nearby cities. They may also open the door for domestic and foreign investors and trigger new flows of commodities (trade), knowledge and ideas. As a consequence of the emergence of new flows of capital and people, global landscapes are undergoing rapid transformations. Traditional North–South relations have given way to a more diverse and multi-polar pattern in which South–South, South–North and North– South exchanges play their roles. Large-scale flows of people and capital investments have direct consequences for 'local' people's livelihood opportunities. These flows are responsible for much of the 'development' we witness taking place in different localities.

The link between capital and people flows is very controversial. As a consequence of global investment and migration (including repatriation) policies, many people are limited in their freedom to stay, or forced to move (Zoomers, Leung and Van Westen 2016). Taking into account this reality (and accepting the new SDGs as the new universal agenda for action), the question is how to steer flows of capital and flows of people in the direction of inclusive and sustainable development.

THIS HANDBOOK

This handbook aims to contribute to a better understanding of the link between large-scale flows of capital/people and 'inclusive development'. Given current dynamics of capital investment and migration, what kind of mobilities are taking place, and in what direction? What are the new geographies of development, and what are the consequences of the moving in and moving out of capital/people (including goods and ideas) for 'local' development and achieving the various SDGs?

More theoretically, we argue that flows and circulations of capital and people merit a more central place in theorisation about development. 'The so-called mobilities turn in social science has undoubtedly been of major significance in challenging the sedentarist assumptions embedded in much social thought' (Sheller and Urry 2006; Walters 2014: 4), but this is often not reflected in discussions about 'local' development. Globalisation, in alternation with waves of de-globalisation and re-territorialisation, has given rise to new and intensified flows and circulations that will shape places, development trajectories and livelihood possibilities in distinct ways. Local development plays out not just in fixed settings, but is increasingly shaped by the way people are attached to and participate in networks. Rather than looking at 'local development' in terms of local people having access to and control of 'local resources', we acknowledge the importance of 'networked space' and positionality (Zoomers, Leung and Van Westen 2016). Given the rapid transformations, accepted notions such as 'development as freedom' (Sen 1999) are increasingly under pressure. Sen is credited for emphasising a human focus on 'development', defining it as 'the promotion of overall freedoms of people to lead the kind of lives they have reason to value' (Sen 1999: 10). This was instrumental in overcoming a narrow focus on development as economic growth and structural transformation till the 1990s, which highlighted processes of change rather than linking to meaningful outcomes for people. But there is an increasing gap between this ideal of steadily removing limitations to individual choice, and a reality of growing constraints and vulnerabilities imposed on people's real-life options. We need to better understand the link between wellbeing and the new types of flow-driven developments from outside, without downplaying the agency of individuals and groups.

In practical terms, development is now generally seen in terms of the 17 SDGs adopted within the framework of the United Nations in 2015 for the period to 2030. The SDGs cover key global objectives without a unifying concept underpinning them, and some are actually not easily aligned - take, for instance, the tension between SDG8 (decent work and economic growth) and environmental objectives such as SDG13 (climate action). This is inevitable as the Goals result from negotiations among governments with very different perspectives and priorities. Nevertheless, the SDGs have considerable near-universal support, with the added benefit of offering operational guidance with their 169 targets and 232 individual indicators. The latter at the very least contribute to our grasp of the state of global society as these statistics become more available and better thanks to their newly acquired status. The SDGs themselves can be seen as a flow of policy from the global level to countries around the world, uniting them in their diversity. While sharing the Goals and the accompanying slogan of 'leaving no one behind', there is a need for a conceptual update on how people and communities can benefit from new types of flow-driven development, plug in the relevant flows and mitigate undesirable effects. Meanwhile, the pandemic and the ensuing economic downturn also imply a threat to the pursuit of the SDGs. The enormous costs involved in overcoming the crisis mean that less is available for investment in attaining the SDGs. Transformations towards a more inclusive and sustainable society are both more needed and more difficult to realise as a result. Health, climate change adaptation and social justice are all indispensable and should be tackled with an integrated agenda, not competing ones.

This handbook sets out to do this by means of the concept of translocal development. This implies a relational perspective on human development, constructed through flows and links between people, institutions and localities. The interactions of actors conducted in networked space are non-linear and multidirectional, and also multi-scalar (Freitag and Von Oppen 2010). This means that there need not be a direct causal link between flows and their effects, that causality of influence may travel in different directions, and that different levels of scale (say, international agreements, national policy, individual behaviour) are linked, but not in predefined ways. Local human development is best seen as a system, typically a complex system in the sense that many variables (connections, actor initiatives) play a role in ways that cannot always confidently be predicted, as both actions taken and their consequences may vary according to different sets of circumstances. That does not mean patterns cannot be observed. Repeat behaviour creates structures, which in turn guides further behaviour (agency) in certain directions, though without actually fixing it - alternatives are possible. Translocal development should therefore be construed as a complex outcome of agency within local and wider networks.

Translocal development highlights the role of external relations but does not deny the importance of 'the local'. Not only can local agency be decisive, but what also matters is how different subsystems share a particular space or 'landscape'. The landscape approach focuses on how changes in one system may clash with others in a particular geographical setting, or alternatively may cascade into dynamic effects. For instance, export opportunities for a local crop may encourage large-scale expansion of production, at the detriment of environmental conditions or displacing the use of land resources by less powerful groups than the export farmers. Thus, the systems approach favoured in translocal development tries to view external influences as well as knock-on effects in other domains locally; it recognises the structural role of links while having an open eye for agency.

In development studies, and especially in livelihood research, considerable attention has long been given to local people's agency and the importance of capitals and capabilities (Bebbington 1999; de Haan & Zoomers 2005; Kaag et al. 2004). Seen from this perspective, people make their own choices in building their livelihood by making use of the different kinds of capital they can mobilise: human capital (labour, skills) and natural capital (land, water) are important assets, together with financial and physical capital (tools, equipment, buildings), social capital (for example, networks of relatives and friends) and, lastly, cultural capital (norms and values, and so on). In the world of networked globalisation of the twenty-first century, however, it is clear that people's agency is increasingly under pressure. Whether or not people are capable of benefiting from global flows cannot be understood in local terms of agency or capital stock available. Opportunity structures depend on decisions by outsiders, and whether people can link up with the right networks, and under what terms. Moreover, the set of capitals people need is no longer the same. Development is increasingly about protecting local capital from appropriation by others or from de-capitalisation, as in becoming obsolete because of competing options. People not only need to be able to do a job well enough, but must also compete with distant

others under different conditions (including at the household level). Competing often involves being able to 'link up', gaining access to information and making timely decisions. Development is also increasingly about whether or not people are capable of dealing with the unexpected and with extremes, and being resilient not only in response to climate variability, but also socially and economically. Instead of focusing on 'meeting local demands', the emphasis in current discussions is on fulfilling expectations and fulfilling promises (that is, that businesses and migrants keep their word; see Schapendonk 2014). What these bring about is not necessarily the type of development to which people aspire. This handbook aims to push forward the old school of livelihood-approach thinking and offer new frameworks.

CONTRIBUTIONS

In order to analyse the link between different types of capital/people flows and inclusive development, we pay particular attention to the following domains: large-scale investments in land for food and biofuels; large-scale investments in nature conservation and REDD+ (reducing emissions from deforestation and forest degradation); large-scale investment in urban development and infrastructure expansion; flows of remittances/tourist spending in relation to different types of mobilities; and the developmental impact of different types of donor money/impact investments. In assessing the implications for inclusive development, the chapters will focus on strategies by local groups to 'link up' (or 'become linked') and share benefits. In doing this, explicit attention will be given to the fact that development increasingly comes from the outside. We have a special interest in better understanding of the complex link between 'locals' (or 'natives'), on the one hand, and outsiders (or 'foreigners', including new categories of returnees), on the other.

This book is composed of 15 chapters, each of these focusing on particular types of people/capital flows and having particular dynamics on the ground with implications for translocal relations and livelihoods.

The first part (chapters 2, 3 and 4) analyses development from a flows-of-people perspective, focusing on 'migratory landscapes' with people flowing in and out, dependent on opportunity structures and border regimes, and producing flows of remittances. It shows how mobility of people is a 'normal' or at least very functional part of local livelihoods, facilitating people to combine the best from various places while minimising risks, showing the role of migration as a livelihood capital (in addition to social, physical, financial and other types of capitals) and making people more flexible and less vulnerable.

Nanneke Winters, Griet Steel and Carlos Sosa (Chapter 2) bring our attention to Nicaragua (with a continuous flow of people moving forward and backward to Costa Rica and the US), where temporary migration helps men and women to achieve socio-economic improvement in their home community. In turn, these strategies result in development corridors between people and places. After this, Ingrid Boas (Chapter 3) illustrates how in Bangladesh people responding to extreme levels of

climate variability are continuously on the move, sometimes as a conscious *ex ante* strategy, but also in response to emergencies; she also analyses the role of mobile technologies in how people move, showing that this has not contributed to a drastic shift of social networks. Rather, the networks often remain the same, but technology helps in enabling mobility in a more coordinated manner, making mobility decisions more effective and communities more resilient. This is followed by a chapter by Joris Schapendonk (Chapter 4), who, by zooming into migration between sub-Saharan Africa and Europe, points to the fact that migration is increasingly blocked and that it is increasingly difficult to speak about 'migration flows'. As a consequence of large-scale investments in border surveillance and anti-migration industries are playing active roles in helping people to overcome hurdles. This often goes hand in hand with exploitation and new vulnerabilities. Many migrants are stuck and/or have to deal with danger and risks. Migration is increasingly 'bumpy', as is being illustrated by experiences from the Gambia.

After this, the second part (chapters 5 to 8) analyses local development processes from the perspective of different types of capital flows, making a distinction between different types of landscapes.

First, large-scale investments are being made in value chain development and agribusiness, often with irrigation and going hand in hand with the expansion of cultivated areas.

In Chapter 5, Guus van Westen shows how worldwide food production is increasingly organised in global value chains, linking producers, traders, processors and consumers in distant localities. Inserting smallholders in poor countries into corporate value chains by means of inclusive business models has become a major development strategy, aiming not only for just and sustainable agricultural growth, but even for further goals such as food security. While outcomes in terms of farmer incomes can be positive, there are also risks involved in this approach, certainly when private-sector-led initiatives are expected to deliver development objectives beyond production increase and the interests of those involved in the business model and value chain. Examples draw on current research in sub-Saharan Africa.

Sebastiaan Soeters, Ruben Weesie and Annelies Zoomers (Chapter 6) show how in Ghana private sector investments in the agro sector have rapidly increased; even though this might contribute to the increased wellbeing of some farmers locally, it soon translates into rapidly increasing flocks and expansion of the cultivated areas, followed by new conflicts, especially between the farmers and pastoralists who are increasingly blocked and can no longer access traditional commons. Janwillem Liebrand, Wouter Beekman, Chris de Bont and Gert Jan Veldwisch (Chapter 7) demonstrate the fact that in spite of large investment in top-down large-scale irrigation schemes, bottom-up and farmers-driven irrigation should not be underestimated, often inducing multiple impulses to local development, and often being much more productive than large-scale irrigation. In Chapter 8, Alberto Alonso-Fradejas focuses on the translocal effects of large-scale investment in cane and palm complexes in Guatemala. He shows that many of these investments come with promises on development, while they are also the drivers of chains of 'impairing destruction', going hand in hand with destruction of landscapes and processes of expropriation and displacement.

In addition, simultaneously with the expansion of cultivated areas, large-scale investments are also made in areas for nature conservation and wildlife conservation (often in the form of parks and reserves); and, oppositely, large-scale mining (LSM; leading to resettlement and destruction of landscapes). Maria Spierenburg (Chapter 9) brings forth the consequences of the upsurge in investments in nature conservation and wildlife conservation, including land restoration and REDD+, showing the emergence of an 'environmentalists' paradox'; that is, human wellbeing in areas with high rates of biodiversity is lower than in areas with degraded ecosystems. While premised on promises to increase human wellbeing, investments in nature conservation are reshaping spaces, creating new forms of enclosure and exclusion, privatising nature and turning it into a commodity. Focusing on investments in wildlife ranching in South Africa, she shows the consequences for local groups, whose manoeuvring space is increasingly limited. Kei Otsuki (Chapter 10) further explores translocal effects of the Limpopo National Park in Mozambique by analysing one of the largest conservation-induced resettlement schemes in southern Africa. The chapter highlights that much of the discussions focus on the sustainability of the national park and the problem of the enclosure, and displacement and resettlement is usually considered to be a solution. The chapter shows that the sustainability of resettlement is not guaranteed because of the ripple effects after people are resettled and a new built environment emerges at the edge of the conservation area. Therefore, sustainability of resettlements requires more attention.

Chris Huggins (Chapter 11) and Marjo de Theije (Chapter 12) analyse the local dynamics triggered by investment in mining and resources exploitation/landscape destruction. Chris Huggins underlines the importance of flows of capital and people in the global mining sector for countries like Tanzania, making the distinction between LSM by transnational corporations (with small 'expatriate' workforces) and artisanal and small-scale mining (ASM), which, conversely, involves a large number of workers, who often migrate within state borders towards new mining opportunities. Commodities originating from ASM are usually informally traded, resulting in 'illicit' and 'invisible' material and financial flows and development chains. Over the last decade, several African states have attempted to regulate LSM capital flows to maximise government revenues, and adopted local content policies to benefit local businesses. Simultaneously, states are trying to 'formalise' ASM production and commodity chains. Marjo de Theije focuses on the link between local development (in Suriname) and the Brazilian-driven business of gold mining, showing the multiple controversies in the meaning of 'local' development. Also in Suriname, the extraction of gold can take diverse shapes, from large-scale mines operated by multinational companies, to junior corporations that focus on the exploration of mineral resources, to a variety of small-scale and artisanal gold-mining activities. In some cases, these different modalities of gold mining co-exist in complementarity, while in other contexts they clash and enter into long-lasting conflicts. Large

mining companies are present in different countries, and their skilled labour force travels between the operations. Small-scale gold mining brings many more miners on the move, typically unskilled workers who live in poverty and have few other opportunities to improve their economic situation. Finally, Joanny Bélair and Thabit Jacob (Chapter 13) explore the positionality of civil society organisations (CSOs) in initiatives to make investments in land and mining more inclusive. They analyse the subject at both the national (influencing policy) and local (empowerment) level. Their findings underline the importance of local context in steering the scope and outcomes of civil society initiatives. The rise of civil society movements as such can be seen as a translocal flow of ideas and organisation models spreading around much of the globe and being reinterpreted locally. The realities of operating in Tanzania, the locus of Bélair and Jacob's case study, is that CSOs have to balance a difficult position between the need for foreign resources (funding) and local priorities, while on the ground their room for manoeuvring is constrained by having to balance donor expectations, their position nationally as legitimate partners in development debates and the perspectives of local communities that are not necessarily aligned.

The final part focuses on urbanising landscapes, analysing the developmental impact of flows of capital – investments in new city development and urban infrastructures. Femke van Noorloos (Chapter 14) focuses on the fact that nowadays, consortia of investors, developers and architects, sometimes in collaboration with national governments, have across Africa introduced large numbers of new utopian urban mega-projects or 'new cities'. She critically analyses the effects of such investments, showing (using the case of Konza Techno City in Kenya) that such new cities pose severe risks to inclusive urban development as formulated in SDG11. She shows that one of the main problems of new cities lies in the failure to accept 'informal' development as being an intrinsic part of African cities. Pre-existing activities, humans and livelihoods start to change and co-evolve as soon as an idea for a new city is elaborated, but vulnerable groups are often excluded from the benefits.

This is followed by Murtah Shannon (Chapter 15) on the emergence of 'donor cities', focusing on the case of Beira (Mozambique). Although investment in infrastructure development is widely recognised as being crucial to sustainable urban development, it is also coming with contra-productive types of development; for example, development-induced displacement. He shows how in Beira – a hotspot of international infrastructure investments and regarded by donors as an example of successful urban development – global investments have instigated chains of displacement, with far-reaching implications for urban sustainability which have been excluded from the city's development narrative.

These chapters are followed by a conclusion. In making a distinction between different types of stakeholders, we try to learn lessons about how to move in the direction of inclusive and sustainable development.

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PART I

TRANSLOCAL DEVELOPMENT IN MIGRATORY LANDSCAPES

Moving far away to stay: translocal livelihoods, labour migration corridors and mobility in rural Nicaragua¹

Nanneke Winters, Griet Steel and Carlos Sosa

INTRODUCTION

Over the last three decades, scholars, practitioners and policy makers have extensively discussed the linkages between migration – in particular, migrant labour flows – and development.² A growing recognition of the dynamic and multi-dimensional nature of both phenomena allows for an increasingly sophisticated analysis of the so-called 'migration–development nexus' (Bastia, 2018; De Haas, 2005; De Haas and Rodríguez, 2010). It remains imperative to resist simplistic notions of both migration and development, in which migration is presented as either an obstacle to or a solution for reaching pre-defined, circumscribed development goals rather than an 'integral part' of social change (De Haas and Rodríguez, 2010, 179). Moreover, migration-development discussions have often neglected the social inequalities that affect the development potential of migration and tended to analyze local development from a narrow, sedentary perspective according to which it is fixed in time and space (Zoomers and Van Westen, 2011). The debate thus needs to be continuously refined by empirical case studies that take into account specific local contexts as well as the diversity of flows and interconnections between people and places.

The transnational approach has played an important role in establishing a clearer focus on the multiple – but often punctuated – linkages between people and places (Glick Schiller, 2018; Levitt et al., 2003). Transnationalism, initially defined as 'the processes by which immigrants build social fields that link together their country of origin and their country of settlement' (Glick Schiller et al., 1999, 26–27), has provided a useful starting point for analyzing migrants' connections to different countries. However, scholars have also criticized the transnational approach on multiple levels, including the large extent to which it rests on studies of permanent migration from the so-called 'Global South' to the United States or other 'Western' countries (Olwig, 2003, 791). The ways in which families try to improve their well-being through seasonal south–south migration, recurrent rural–urban movements and daily mobilities, for example, may then remain invisible (Olwig and Sørensen, 2002, 2). In order to do justice to this fragmented diversity of migrations and multiple connections, which materialize in concrete localities, we prefer to make use of the notion of translocality.

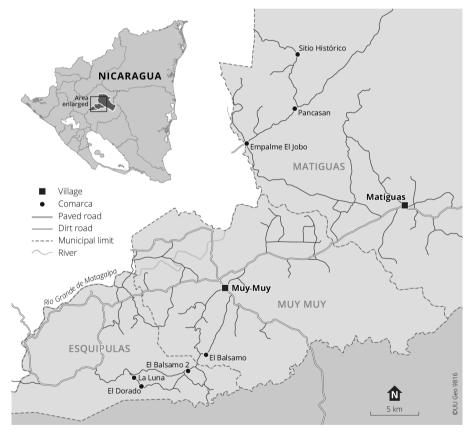
We explore translocal development – the way multiple attachments of people to different localities influence development processes in a specific locality (see Zoomers and Van Westen, 2011) – by focusing on livelihoods. Diversity and adaptability are important dimensions of livelihoods, and livelihood studies have increasingly recognized the multi-locality of livelihood strategies (Scoones, 2009) and migrants' active use of geographical scale as a resource (Bebbington and Batterbury, 2001, 374). These studies emphasize the significance of moving and constructing spatially dispersed ties in order to be able to benefit from opportunities in different localities and hence, to improve livelihoods. In many Latin American countries, popular discourses on well-being are explicitly related to ideas of moving elsewhere. For example, the expression 'seguir adelante', commonly translated as 'to get ahead' or 'to move forward', reflects the common belief that migration is an important means of escaping poverty (Leinaweaver, 2008). Moreover, creating multi-local livelihoods may not only result in an expansion of economic opportunities, but also increase social, cultural and political connections between geographically distant areas (Duany, 2002).

Acknowledging the multi-locality of livelihood strategies requires the explicit inclusion of a mobility concept in livelihood studies. Olwig and Sørensen (2002, 9) argue in favour of a 'mobile livelihoods' notion, which 'explores the various practices involved in "making a living", as well as the social relations used to make a living possible, in the different contexts where they take place'. Although useful for focusing on people's day-to-day use of mobility and the variety of forms this may assume, we would suggest that mobility should be incorporated with greater caution. The term 'mobile livelihoods' might create the impression that the livelihoods in question are characterized by a constant and unproblematic mobility.

Such an approach would largely neglect recent developments in mobilities studies, which recognize both increased interconnectivity between people and places as well as its inherent inequalities (De Haas and Rodríguez, 2010). The 'new mobilities paradigm' (Sheller and Urry, 2006) envisions a 'movement driven social science in which movement, potential movement and blocked movement are all conceptualized as constructive of economic, social and political relations' (Urry, 2007, 43). Initial celebration of 'unbounded' mobilities has been tempered by an emphasis on rootedness, simultaneous immobilities and questions of access. Mobility, like any other livelihood asset, is a resource mediated by power (Sheller and Urry, 2006, 211) and not available to all (Kothari, 2003). Even if people experience certain levels of mobility, they do not necessarily reap its fruits. This is in line with what Massey (1993) calls the 'power-geometry' of contemporary global flows. Incorporating this notion into our analysis yields a more qualified understanding of the relations between translocal development, livelihood strategies and migration.

This chapter focuses on rural households in Nicaragua in order to analyze how labour migration flows shape their livelihoods. It explores how different members of these households use their ability to (temporarily) move and work elsewhere as a livelihood asset and as a strategy for achieving socio-economic improvement in their home community. At the same time, it provides insight into how this mobility is played out in unequal power relationships that affect its experience and potential. This approach allows us to shift away from simplistic notions of development and migration towards a more dynamic, multi-dimensional and empirically grounded conceptualization. This way, we intend to contribute to a better understanding of how local development processes shape – and are shaped by – a diversity of interconnectivities and (im)mobilities.

This chapter is based on four months of ethnographic fieldwork by a team of three researchers – combining interviews, participant observation, financial diaries, creative workshops and visual methods such as social mapping and photo elicitation – in 2009 and 2010 in Matiguás and Muy Muy. These are two municipalities in the department of Matagalpa in the central region of Nicaragua. In the municipality of Muy Muy, we conducted research in the village itself and in the rural communities El Bálsamo 1, El Bálsamo 2, El Dorado and La Luna. In the municipality of Matiguás,



Source: Carlos Sosa, Institute of Research and Development, Nitlapan, 2011.

Map 2.1 Research areas in Matiguás and Muy Muy in Nicaragua

we carried out research in the communities El Jobo, Pancasán and Sitio Histórico. Our main research group of 46 family households was composed of predominantly young couples, mostly in their twenties or thirties with young children. Almost all these households maintain links with both the countryside and the village. In our empirical analysis, we distinguish between three types of labour migrants: male household members, single mothers and couples. We analyze how the various actors experience mobility in different ways and establish important connections between different places and people in order to improve their livelihoods.

TRANSLOCAL LIVELIHOODS AND LABOUR MIGRATION FLOWS IN RURAL NICARAGUA

Nicaragua is the most rural country of Central America, and a large share of its jobs, exports and income depend on agricultural production (Pérez, 2011). At the same time, however, many rural households reap little fruit from this concentration, instead experiencing persistent poverty and a tradition of out-migration (ibid.). In theory, as rural areas such as Matiguás and Muy Muy boast an abundance of land and labour and a favourable climate, they are well positioned to become increasingly integrated into lucrative global value chains of milk and meat (Grigsby Vado and Pérez, 2009). However, the majority of households are either excluded or benefit only marginally from these chains and rely mainly on activities providing irregular income.

These activities include labour migration. Nicaragua's substantial rural population traditionally makes use of migration-related farm and non-farm income to diversify their livelihoods, providing cheap labour elsewhere in tandem with regionally interrelated dynamics including conflict, industrialization and labour market transnationalization (Morales Gamboa, 2007; Robinson, 2003). In broad terms, it is estimated that around 10 per cent of Nicaraguans live and work abroad (Orozco, 2018). This figure does not yet include Nicaragua's substantial internal and irregular migration, which is difficult to estimate (Morales Gamboa, 2007). Costa Rica, the United States, Spain, Honduras and Panama are the most important destinations for Nicaraguan migrants (OIM, 2013). A considerable share of these migrants send home remittances, mostly from the United States, Costa Rica and Spain. According to the Banco Central de Nicaragua, family remittances have remained relatively stable over the last two decades, representing on average 10 per cent of the country's GDP (BCN, 2021).

On a microeconomic level, these remittances complement small-scale agricultural activities and other unstable, low-paid labour opportunities. Since most of our interlocutors belong to young, recently formed households, they tend to rely heavily on older members of their families for organising their livelihoods. Although those from the rural communities often strive for independence – that is, to acquire their own house, land and other assets – this is difficult to achieve in a location characterized by inequality, lack of education and limited economic opportunities. They feel that, in order to earn the necessary cash to be able to cope with crises, to improve their standard of living and to become more independent, they must leave. In the words of Sara, a young mother whose husband frequently works in Costa Rica and at the time of the interview had not yet seen their new-born daughter, 'to be able to work, we have to go far away' (interview, 17 February 2010).³ Before Sara married, she was employed as a domestic worker in Managua to pay for her university studies. Afterwards she returned to live with her mother, father, siblings and her young baby in El Bálsamo 1. However, she emphasized that her father and brothers, as well as her sisters and their respective husbands, tend to migrate to make money to support the family household in daily subsistence.

In this chapter, we focus on three different groups of people whose livelihoods involve labour migration flows that are common in this locality: male household members, single mothers and couples.⁴ We analyze their main aspirations and objectives and turn our attention to their multi-local strategies through which movement and exchange take place. We make use of the 'development corridors' concept (see Zoomers and Van Westen, 2011) to explore how movement establishes linkages and how it relates to development processes at household and community level.

Young Men Boosting Seasonal Development Corridors

In the rural communities, most young households depend on subsistence agriculture, cultivating beans and basic grains on their parents' plots. The first group in our study consists of the adult male members of these households, who tend to migrate from November until January to earn money in coffee harvesting elsewhere in Nicaragua or in Costa Rica. They may also migrate from March to May, during the so-called 'dead season', when there is little in the way of intensive agricultural activity in the communities, in order to find labour opportunities elsewhere in either agriculture or the construction sector. The female members of these households generally stay at home to take care of domestic work, to look after the children and to keep an eye on the crops. Occasionally they may also earn some money by washing and ironing, by raising small animals and selling homemade food.

Although these women are often excluded from seasonal labour migration flows due to their family responsibilities, this is not to say that they are not involved in mobility in other ways. Starting from the notion that improving a household's livelihood is a joint effort (Pribilsky, 2007), we see that they share in the benefits of increased cash flows, manage the payment of loans and invest in assets. Additionally, several women in the village indicate other benefits, emphasizing that they enjoy living alone with their children. Maria, whose partner frequently works in Costa Rica while she sells tortillas and tends to their children, explained that her partner commands all her attention when he is at home. They have arguments about the children and, not being used to each other's company, they just tend to get on each other's nerves (interview, 17 July 2009). Although Maria likes spending a couple of days together, she generally finds it easier when her partner is away. However, the female interlocutors also emphasize certain drawbacks to having a partner who migrates to work elsewhere. In the rural communities, women often perceive the absence of their

partner as burdensome: it leaves them with more responsibilities, such as tending the crops, and often makes them feel lonely, especially when living in relative isolation. In addition, women in the rural communities as well as in the villages must revert to their own coping strategies in order to make ends meet when their husbands are temporarily unable to send money, or rather when they agreed to bring money home upon their return. In this sense, the women who stay behind are directly and indirectly involved with the costs and benefits of their partners' movements.

The main purpose of the male household members' short-term migration is to obtain the necessary financial means to maintain their households and to be able to make small investments in housing, education and agriculture. Generally, these investments are more likely to be made when they return. As a consequence, local development opportunities at the community level are very much related to the labour migration flows and the agricultural calendar. This is most noticeable in the rural communities, where people already take agricultural seasonality into account. Migrants tend to be at home when crops need to be harvested and away from home when no heavy work needs to be done. In other words, they return home to exploit agricultural opportunities. At the same time, their return generates employment in other sectors. For example, December, January and May tend to be financially rewarding months for local carpenters, as this is the time when temporary migrants are at home and thus are able to spend their earnings on furniture (interview with Jonas, a young father, 15 February 2010).

In the village, economic opportunities would appear to be more evenly distributed over the year and to be less dependent on the agricultural calendar. However, even here, local craftsmen and businesses are affected by the irregularity of household incomes, as they generally do not get paid until money is sent or brought back home by migrants. This effect is felt most strongly by grocers, money-lenders and sellers of construction materials. The close connection between the rural and village economy and the dynamics of labour migration flows also became apparent during the global economic crisis of 2008. The downturn and the ensuing decline in employment opportunities, especially in the construction sector, meant that many migrants lost their jobs. This had direct implications, such as tangible decreases in cash flows and local investments (including in agriculture), coupled with increases in loans and payment defaults.

It is the combination of migration's far-reaching implications for different actors and the continuing importance of the home community that results in clear development corridors. In the case of the labour migration flows of male household members, these corridors may be characterized as seasonal in the sense that the movements involved and the kind of socio-economic opportunities they generate are very much related to agricultural dynamics at home and elsewhere. They rely on the cash flows generated by planting and harvest seasons in multiple locations, job opportunities in the construction boom during the low season in the home community, and so on. Although different incomes are combined, the fundamental irregularity of these incomes remains, resulting in a development corridor geared towards subsistence and paying off loans and making modest investments in the future.

Single Mothers Shaping an Education Corridor

The second group of migrants that we identified consists of single mothers.⁵ As became clear in the previous section, women with a partner generally stay in the home villages and communities while their partner migrates. They may have temporarily left their community for educational reasons when they were still single, but most women quit education upon settling with a partner. They become responsible for their newly formed household and increasingly dedicate their time to household reproductive activities. Furthermore, their partners often do not allow them to work outside the home. This is due in part to the expectation that women should be home-makers and in part to the perceived low returns on local female employment. In order to gain a better understanding of the migration experiences of young men compared to young women, we conducted social mapping as part of creative workshops intended to stimulate discussion and reflection.⁶ The maps drawn by youngsters in the rural communities illustrate how men tend to leave the Matiguás and Muy Muy area in search of labour opportunities, whereas the movement of women is usually restricted to the immediate community, where most of their activities take place (see Figures



Figure 2.1 Social mapping drawn by male youngsters in the rural communities

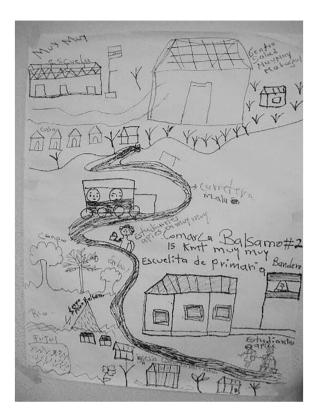


Figure 2.2 Social mapping drawn by female youngsters in the rural communities

2.1 and 2.2). Women sometimes go to the village or to the nearby city of Matagalpa to shop, study or visit a doctor, but the further away they live, the less frequent such trips are. The maps drawn by the female villagers show that their movements are very much restricted to their own and the surrounding rural communities, usually to visit relatives. Only in cases of emergency or other life events are they more likely to travel further.

However, this pattern seems to change as soon as women become single mothers and start raising their children alone. Many single mothers see very few livelihood opportunities within their community and consequently seek paid domestic work in the cities of Nicaragua and Costa Rica. In contrast to the male migrants described above, these single mothers find it relatively easy to obtain a job all year round. They generally work in the urban service sector and are more likely to find a new job should they lose their present one. Therefore, their income is usually more stable and the flow of remittances associated with their mobility is more regular. However, as it is almost impossible to find paid domestic work when accompanied by children, most of them leave their children behind in the community, with their parents, sisters or other relatives.

In general, these remittances are used to pay off the loans that those who look after their children take up with local businesses, such as grocery stores and pharmacies. However, we also observed a difference in investment behaviour between these single mothers and the male migrants described above. Whereas households where the male members leave the community temporarily are inclined to combine expenditures for the children's education with the acquisition of assets such as land and housing, the latter type of spending appears to be a lower priority for single mothers. Although they do invest in home improvement, they do not usually aspire to separate living arrangements as they depend heavily upon the care network of their parents and siblings at home. Moreover, it is often considered inappropriate for women to live alone without a partner or an extended family. Without the immediate pressure of acquiring land and housing, the single mothers are more inclined to invest continuously in their children's schooling. In addition to being more stable, the corridor established through the mobility of single mothers is thus also more explicitly oriented towards education.

It is important to emphasize that in this second case, too, the options for moving and the way movement is shaped depend on the involvement of actors other than those moving. To be able to make the most of labour opportunities and thereby improve their livelihood, single mothers fall back on the carework of relatives. As Leinaweaver (2008) observed in the case of Peru, 'child circulation', the practice of placing children in a relative's home, is very important to families' projects for getting ahead. In both the village and the rural communities, we observed that it is often the parents or sisters of the single mothers who assume the day-to-day care for their children while they are away, providing the extended household with much-needed income from elsewhere. When the childcare falls on the shoulders of a sister, this responsibility may significantly decrease this sister's own possibilities for grasping livelihood opportunities elsewhere. Although, like the grandparents, they generally benefit from the cash flow that a migrant generates, the fact that others are moving does limit their own mobility and may put their own livelihood plans on hold (Winters, 2014). These dynamics again illustrate that the movements of some actors are intimately linked to the staying-put of others.

Migrating Couples and 'On Hold' Development Corridors

Finally, we identified a small but noteworthy third group consisting of couples travelling to Costa Rica in the hope of earning sufficient money to start a more independent and secure life in their home community. Whether or not they take their children with them depends on many factors. Often, however, as can be seen in the case of single mothers, income-generating opportunities abroad are limited for people accompanied by children. Eliana and Julio provide an example of a couple that eventually decided to take their two children along with them to Costa Rica after years of working there without them and having missed them too much. However, it was not long before

they returned them to relatives in Muy Muy, because they could not afford for them to stay in Costa Rica: not only had their daily expenses increased significantly, but also Eliana's earning capacity had fallen because of the increased burden of house-hold chores (interview, 16 February 2010). When couples leave their children behind with relatives, the ensuing development corridor does not differ fundamentally from that of the single mothers. In both situations, money is sent home to the extended family for daily expenditures and the education of the children who have stayed behind.

In the few instances where a couple takes the children along, the characteristics of the development corridor differ significantly from the previous group, as usually there is no continuous flow of cash to the home community. These couples do maintain linkages with their home community, but tend to send money to relatives home more occasionally, for example, as a gift or in case of emergencies. Earnings are generally either used for expenditures in the household's temporary place of residence or set aside for investment upon returning to their home community. In this sense, their migration shapes a development corridor 'on hold'. Only when these couples return to their home community to continue building a future there do they create more tangible economic opportunities by investing in land, housing and the like. But as long as they remain elsewhere, the couples predominantly maintain non-monetary linkages. Through ongoing communication, they exchange ideas and nourish the hope of return. The case of migrating couples thus further illustrates the fact that development corridors are not restricted to cash flows but also involve other material and immaterial aspects. Moreover, the case substantiates our argument that development corridors are shaped by both migrants and non-migrants, by mobility and immobility, and by dynamics 'here' and 'there'. When migrants become (temporarily) less dependent on non-migrants and more detached from the development processes in their home community, the development corridor becomes less explicitly effective, but does not vanish: it remains on hold.

CONCLUSION: IDENTIFYING DIVERSITY AND DIFFERENTIATION IN DEVELOPMENT CORRIDORS

The starting point of this study was the observation that many livelihoods actively incorporate connections between people and places. Labour migration – seasonal or not – is one of the flows that permeates livelihoods in dynamic and unpredictable ways and as such exemplifies the challenge of interpreting the migration–development nexus. In this chapter, we have contributed to a better understanding of the linkages between migration and development by starting from a translocal approach. Building on the concept of development corridors, we have analyzed the direct and indirect implications of the diversity of labour migrations, interconnectivities and mobilities for livelihoods in rural Nicaragua. Although many of the young rural households in our study do not see sufficient livelihood opportunities in their home communities, they *do* aspire to building a future there. The notion of improving one's life at home

ensures an enduring connection between people and places and shapes development corridors.

The concrete and diverse ways in which these corridors develop attest to the complexity of the relationship between migration and development. An important component that shapes development corridors is the variety of ways in which different interdependent actors are involved in migration through their mobility or immobility. This way, labour migration flows influence lives and livelihoods far beyond those of the (seasonal) migrants (see also Kothari, 2003). This is apparent in the fact that those who are unwilling or unable to migrate can still be involved in negotiating the costs and benefits of migration. It is also apparent in the explicit livelihood strategy of reserving migration for some, while denying it to others, according to specific household circumstances. Hence, mobility may be regarded as a negotiated asset, and how it is managed and the way its costs and benefits are shared are instrumental to internally differentiated household well-being and to communal opportunities.

Our focus on translocal livelihoods indicates that flows, connections and corridors are far from inclusive. The interdependencies involved disparately affect both migrants and non-migrants at different points in time. These insights clearly call for more sustained policy attention for the diversity of mobilities, immobilities and translocal connections that are part of labour migration flows. Often directed towards enhanced well-being 'at home', these labour migration flows are an important component in poverty alleviation. Although they might be recognized as such, we need to ask how policy can support these strategies without falling into the trap of exploiting the often already precarious resources and positionings of the people involved. How can policy avoid a one-solution-fits-all approach, while it is clear that these labour migration flows are extremely dependent on dynamic local and regional conditions? How could these flows be steered so no one is 'left behind'? These questions about differentiation and precarity are especially important given the issues of (supra) national security agendas, externalized bordering and illegalization that are increasingly recognized components of the migration-development nexus (Sørensen, 2012). Attention to these and other factors in the unequal experience of mobility is vital for avoiding simplistic migration-development accounts. Moreover, our understanding of the ways in which these labour migration flows materialize through specific development corridors would be significantly enhanced by the incorporation of insights from the other end (or ends) of those corridors; that is, the diversity of places and people in Nicaragua, Costa Rica and elsewhere.

EPILOGUE

This chapter builds on fieldwork conducted by the three authors in 2009 and 2010. In the meanwhile, Nicaragua has been overwhelmed by a severe political and socio-economic crisis and has been struggling with the impact of the Covid-19 pandemic. Such ruptures display the precarity of the flows, connections and investments that we discuss. They affect people's ability to move elsewhere and

capitalize on their mobility. As mentioned in the chapter, the global economic crisis of 2008 spurred a decline in employment opportunities, a decrease in cashflow and an increase in household debt, which (temporarily) limited the possibilities and gains of migration. Since April 2018, migration again became more complex due to Nicaragua's political instability. Starting with demonstrations against its authoritarian government, Nicaraguans have experienced increased violent repression as well as ongoing economic decline, heightened insecurity and social polarization. This situation has urged thousands of Nicaraguans, including some of our interlocutors, to flee, often by making use of already established translocal connections to Costa Rica. At the same time, re-entering the country has become more difficult because of Nicaragua's stricter border control in response to the possibility of cross-border protest and dissent.

New and re-intensified migrations seem both inescapable and more challenging during the current pandemic, while lengthy separations increasingly complicate translocal family life. It has become even more difficult for Nicaraguans to cross borders in the region because they have been (partially) closed to limit the risk of contagion and further spread of the virus. Whereas neighbouring countries suspect Nicaragua's attempts to downplay the presence of Covid-19, the Nicaraguan government itself also regards its own border-crossing citizens with suspicion. In addition, our interlocutors indicate that a partial shutdown of Costa Rica has led to higher rates of migrant unemployment, while increased poverty in Nicaragua has further fuelled the need for remittances. Within Nicaragua, the large share of the population who work in the informal sector and engage in daily mobilities to sustain their families may not have the means to adequately protect themselves from Covid-19. For those young rural households that continue to engage in a diversity of labour migration flows, the resulting corridors are thus still marked by inequalities, as well as changing directions and dynamics. As the diversity of translocal livelihood connections intensifies or gets interrupted due to multiple crises, attending to the differentiated experiences of im/mobility only becomes more pressing.

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NOTES

- 1. This chapter is an extensively reworked version of Steel et al. (2011).
- 2. Although our focus here is on (seasonal) labour migration flows, we acknowledge that any kind of migration involves multi-dimensional motivations and outcomes.

- 3. All names have been changed to preserve confidentiality.
- 4. We are aware that a typology of this kind has its limitations, not in the least because many households combine different types of migration, including beyond Central America. However, distinguishing between the most common migration experiences helps us gain insight into the significance of mobility and multi-locality for the livelihoods under study.
- 5. We define a single mother as a woman who raises her children on her own. This does not necessarily mean that she receives no financial support from her ex-partner.
- 6. These workshops were announced with the support of Nitlapan-UCA (Instituto de Investigación y Desarrollo Nitlapan de la Universidad Centroamericana). They took place between 30 January 2010 and 18 February 2010 in El Bálsamo 1 and 2, El Dorado and La Luna in Muy Muy and in El Jobo, Pancasán and Sitio Histórico in Matiguas. The number of participants varied between 10 and 33. In one of the exercises, the participants were divided in a group of men and a group of women and were asked to draw a map of their daily mobility experiences in the communities and their surroundings.

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3. Environmentally related migration in the digital age: the case of Bangladesh *Ingrid Boas*

1. INTRODUCTION

The nexus between environmental change and human mobility has become one of the key defining elements of global flows in the 21st century. Environmental change, and climate change in particular, whilst in interaction with other socio-economic factors, may affect people's mobility through the impacts of sea-level rise, storms and droughts. People may be compelled to move to safety in the context of rapid-onset events, such as storms or cyclones. But the decision to move may also develop gradually, as environmental changes develop slowly and worsen step by step, such as sea-level rise or erosion. Environmentally related human mobility, as such, does not manifest itself in one form. Some people may need to migrate for longer periods of time, whereas others may be temporarily displaced for short distances, and still others may not be able to move to safer places at all and may be stuck in dangerous environments (Boas et al. 2018).¹

Above all, the relation between environmental change and human mobility is not a direct one. Scholarly work on the environment, climate change and migration nexus emphasises the complex and multi-causal relationships in play, demonstrating how this nexus is shaped by a range of social, economic or political factors that inform people's ability to stay or move and aspirations to leave (Black et al. 2011; Morrissey 2013). This nexus is, as such, being shaped (redirected, restricted, regulated, and so on) by other global flows, such as labour markets, climate adaptation funds, information or technological innovations.

Indeed, one of these flows shaping environmentally related human mobility is digital information, exchanged via information and communication technologies (ICTs); in particular, mobile technologies. The ICT revolution has rapidly simplified and expanded options of information exchange from landlines and fax services to more dynamic mobile technologies. Especially in developing countries, mobile technology has provided a boost for connectivity given the lack of landlines (Horst and Miller 2006). It is this interaction of flows that this chapter will address: the nexus between mobile technologies, human mobility and the environment. Yet rather than examining this on a global scale, this chapter will interrogate the interactions of these flows in a case study of environmentally related human mobility in coastal Bangladesh – a place heavily impacted by cyclones, erosion and salination. The resulting human mobility is largely internal and highly varied in terms of being short- or long-distance, temporal or more structural, quick or gradual, depending on

the environmental impacts and socio-political processes at play. This case therefore has a different context to most of the studies done on the migration–ICT nexus, which often centre on diasporas and transnational movement (for example, special issue by Oiarzabal and Reips 2012; special issue by Leurs and Smets 2018). Furthermore, the focus on Bangladesh also means that this study does not just centre on social media and smart phones, as many studies do. The mobile phone has become widely spread in many developing countries, but the proliferation of smart phones and internet connections is lacking. It is thus still of much interest to examine the impact that access to feature phones (phones without the internet) has (Horst and Miller 2006; Madianou 2015).

In that context, this chapter asks how in this case the social networks and the networking of migrants, and through that their migration trajectories, are being shaped by mobile technologies, including how this informs levels of resilience and sustainable development for those involved. Rather than it necessarily leading to a transformative change in the social networks of these migrants and involved communities, this chapter particularly identifies the change in the content of relations, as in how they are utilised to enable mobility or for mobilising help in a well-coordinated manner. Through the use of mobile technologies, mobility decisions become more reflected on and to an extent less risky, and in this way to an extent positively influence the sustainability of these communities and their mobility practices.

The Bangladesh case study is based on fieldwork that took place between August and December 2017, and centres on two sites heavily affected by environmental impacts from which people were moving away. The first is in the central-south area of Bangladesh, where I studied the southern Upazilas (local political districts) of the island and political district Bhola: Lalmohan and Char Fasson. Here I concentrated on two villages, named Mohammadpur (in Char Fasson) and Patoarir Hat (in Lalmohan), affected by erosion, storms and cyclones, and on village and harbour areas around the local Unions (local districts) Hajarigonj and Jahanpur (in Char Fasson) vulnerable to cyclones but not erosion. The second site is the island and Upazila Kutubdia in the south-east of Bangladesh, where I researched two village areas: one in the local Union Uttar Dhurung in the north, heavily affected by cyclones, daily floods and salination due to a breach in the embankment; and one in the local Union Kayarbil in West Kutubdia, heavily impacted by sea erosion, storms and cyclones. After doing several scoping visits and explorative interviews in these village areas, I selected a set of representative mobility narratives that I researched in more detail. To capture the intersection between the environment, ICT usage and human flows, the research also consisted of tracing the nodes and information exchange central to the selected mobility narratives. This led me to places where people move(d) to, such as neighbouring rural areas or nearby cities like Dhaka, Chittagong and Cox's Bazaar (see Map 3.1 for an overview of the different sites). By following this trail, I gained an in-depth understanding of how the local social networks function and are utilised, of what ties such networks consist, and in particular how this social networking was shaped by mobile technologies.



Map 3.1 Research area

The chapter is structured as follows. Section 2 provides further background into the growing role of ICTs in Bangladesh, with a focus on mobile technologies, and their implications for migration and social networks. Section 3 provides the case study. Section 4 discusses the findings and concludes.

2. ICT-ENABLED NETWORKS IN BANGLADESH

The introduction of the mobile phone has had a major impact on connectivity in Bangladesh, with many areas not connected via landlines and with low-priced feature phones and mobile phone credit. Mobile cellular phone subscriptions have risen from 1 to 83 per 100 people between 2002 and 2016 (World Bank 2018), with prices for basic feature phones and credit being low, making them widely affordable, combined with the increased use of solar panels in rural areas used for mobile charging. Calling via mobile phone has become a key avenue of communication. People call each other frequently and often just briefly, just to check in. It is not odd to have five missed calls from someone. Texting, on the other hand, is much less popular – partly because still many cannot read and write, and cheaper mobile phones do not support the Bengali characters whilst only higher-educated groups master texting in Latin letters.

Access to phones with the internet is much more limited, however, and network access in rural areas fluctuates (Boas 2017). Facebook is highly popular amongst those having access to the internet on their phones. It is actively used amongst the urban elite and is emerging in rural areas; for instance, amongst the college students. Yet, still many of those I met in affected rural areas in Bangladesh did not have such access during this time of research. There thus remains a divide between those having access to feature phones only and those with smart phones, and between the illiterate who are able to use the calling function of a mobile phone and those who are able to use a variety of ICT functions (Madianou 2015; Boas 2017).

Even so, the ICT revolution is rapidly unfolding, with profound changes in how we communicate and exchange information (Castells 2009), having implications for human mobility and migration (Oiarzabal and Reips 2012; Dekker and Engbersen 2014; Gillespie et al. 2018). This chapter will scrutinise further what these impacts are, how strong they are and how these interact with the social networks and networking of migrants. Building on Granovetter's thesis (1973, 1983), it is often assumed that the expansion of weak ties is beneficial for a person's network. By connecting to people or agencies outside the close circle of family and friends, access to information is increased, allowing for more innovation and opportunities to unfold. However, as emphasised by Ryan (2011), Granovetter does not just mean any weak tie being helpful in that regard. They are less valuable when being from similar social locations. They can still be helpful for people to facilitate moving or in getting access to a job, but not so much in the sense of "upward social mobility", and may risk reinforcing social marginalisation (Ryan 2011, 713, 721). It is about "getting by" as opposed to "getting ahead" (Putman 2000, 23, cited in Ryan 2011). In that context, Ryan (2011) proposes to differentiate between horizontal and vertical weak ties: the first is about linking weak ties from similar social locations, and the latter about bridging social distances and providing access to new opportunities and resources, and it can therefore allow someone to progress from their social location.

This begs the question, do ICTs help migrants to more easily connect with vertical weak ties, and what types of contacts are these? Do ICTs help to actually transform social networks in this way, and how does access to ICTs and related changes affect

mobility decisions? To what extent do existing network dynamics of in/exclusion and unequal access to ICTs prevent that? And if greater access to ICTs does not actively lead to new social networks, what role do ICTs have? How does it impact on the constellation of, and engagement with, strong ties (Larson et al. 2006; De Bruijn 2014) and their resilience to cope with environmental changes?

3. ICT-ENABLED NETWORKS FOR ENVIRONMENTAL MIGRATION

The analysis below will demonstrate how social network relations that are not proximate are made relevant to varying forms of environmentally related human mobility through access to mobile technologies. These ICT-enabled networks include networks for micro-coordination in times of emergencies, networks enabling options to leave or to return home, and networks enabling collective action seeking to prevent migration. Most of these networks consist of relatively poor communities, living in highly vulnerable locations to environmental change, without much structural connection to more well-off groups or non-governmental organisations. They live close to the river or the coast, protected by poor embankments, and thus are most vulnerable to cyclones and erosion. Their ICT access is mostly limited to basic feature phones. The exception is the final ICT-enabled network discussed below, being of a more collective nature and led by the more affluent groups in Bangladesh. It is relatively more mixed in terms of ties from different social locations, and includes active smart phone usage.

Micro-coordination in Times of Emergency

Cyclones come suddenly. Warnings can start early on but may still reach areas late or only few hours before if directions of cyclones change (Lu et al. 2016), or when areas are cut off from proper information flows. In Char Fasson and Kutubdia, affected by some of the more recent cyclones that hit Bangladesh (Char Fasson: Cyclone Mahasen 2013: Kutubdia: Cyclone Roanu 2016 and Cyclone Mora 2017), this resulted in, on the one hand, people staying put to save their belongings or being unable to move to safer areas, and on the other hand, people being forced to leave their homes to take shelter or using their mobility to save livelihood resources several kilometres away. It was about temporary shelter and temporary mobility as people returned to their living areas after the storm had gone and water levels had gone down to fix or rebuild their houses.²

When temporarily leaving houses during the storm, quick information exchange was crucial to micro-coordinate coping strategies. The mobile phone is central to enable that (given the mobile towers are still functioning, which they did in the case of Cyclone Mahasen; Lu et al. 2016). As argued by Ling (2000, 112), in introducing the notion of micro-coordination: "the mobile phone allows for a type of very precise adjustment of everyday activities". Responding to a cyclone is no everyday activity,

but does require very precise and frequent coordination between those affected. Being able to call each other makes it possible to find out quickly what the situation is like some kilometres away, which is crucial to make a decision about the most effective strategy to take. For instance, in Char Fasson many people were reported to be calling each other actively during extreme storms (including Cyclone Mahasen) to coordinate actions to secure and protect the fishing ships at the harbour.³ In this way, trade-offs between saving belongings, securing livelihoods and protecting lives by going to the shelter could more easily be made. People could quickly enquire whether it was safe to go to the harbour and to coordinate what help was needed, and to check in with their family whilst at the harbour. This includes a mix of existing strong ties and horizontal weak ties, as this mainly involved exchange amongst families, friends, boat owners and co-workers they already knew and worked with on a daily basis. For example, Zakir, a local fisher, used his mobile phone when at the harbour, to advise other fishers to come whose boats were damaged.⁴ Along similar lines, another local fisher asked a few of his crew members to stay at the ship during the storm to protect it. He constantly communicated with them via mobile phone to know whether all was under control or whether more support was needed. Also these crew members at the ship used their mobile phones to communicate with their families at home or in the shelter to check whether they were safe.⁵

Another example of such micro-coordination in times of emergency is cases where part of the family resided in the shelter whilst another part was elsewhere or unfound. For example, Sahana took shelter with her husband during the cyclone. The next morning her husband returned home to assess the damage, then called her to say all was destroyed.⁶ Women married to fishers also used their mobile phones (or those of others) to trace their husbands if they were still out on sea during a storm. They would try to call him and other fishers on that boat first. If there was no response, they would send someone to the harbour to wait for the husband's return and to report back.⁷

These examples show the central role of the mobile phone in allowing community networks to exchange accurate and up-to-date information for decision-making in times of distress. This is particularly vital as many of the coping strategies involve some form of mobility. Families need to be in different places at the same time to protect their lives and livelihoods, whilst needing to stay in touch to remain up to date on each other's safety.

Enabling Options to Move Away

Most of the people I met did not move away to another village, region or city on a more permanent basis just because of a cyclone. It can play a role in such movement, but often combined with problems of an economic–political nature and more gradual dynamics of environmental change with unmanaged long-lasting impacts, such as erosion or salination (see also Black et al. 2011). In North Kutubdia, for example, salination has become a key reason for people to move after the embankment was severely broken following several cyclones and storms whilst not being fixed. Even under these circumstances, people try to stay as long as they can. Often people do not necessarily want to move away (Adams 2016), nor do they directly know how or what the possibilities are to do so. Over the years an increasing number of people from Bhola and Kutubdia have moved to urban centres, leading to high land and rent prices, with cities being full and slum areas often facing eviction threats to make space for roads, airports and middle-class urban housing. As such, several people I spoke to saw their options as limited. A common strategy is to move more in-land – to move the house bit by bit away from the water. Others move to the side of the embankment, where land is often free (as it is government land). But embankments get increasingly full, plus people may be evicted if the government wants to make changes to the area. That is when the real challenge starts.⁸

Whilst people take it step by step, the need to eventually move does not come as a surprise either. This is where mobile technology comes in - to facilitate the possibility to move should the need arise. The story of Morsheda from North Kutubdia typifies this dynamic.9 Morsheda, together with her husband and children, lives in an area that is on a daily basis affected by tidal water, with many houses damaged and agricultural fields destroyed. So far, they have not had the chance to move away. Whilst not an ideal situation, they have managed thus far. Her brother-in-law lives on the mainland facing Kutubdia, where the land is hillier, fluffy and green. She has become very close to her sister-in-law Kadiza (the brother-in-law's wife). She regularly visits them with her children, also during times when the water level is too high for the children to stay home. When being there she actively asks around for opportunities to stay – in a temporary house on someone's land – or about possibilities to get a new piece of land. Currently, Kadiza is also staying in a temporary house on someone else's land, and actively helping to persuade others that Morsheda's family can do the same. Thinking in the long term, she is looking for land they could buy together, although for now they do not have the money to afford it. Morsheda and Kadiza, and also Morsheda's husband and his brother, are in frequent mobile phone contact about this, calling each other frequently. After every severe storm or flood, Morsheda and Kadiza call each other about how "fed up" they are with the situation that is becoming increasingly dangerous for Morsheda's children.¹⁰

Morsheda's story well reflects that mobile phone technology has been central in maintaining social ties that can facilitate mobility for when the time comes. In this way, the relations are kept warm, and the topic remains urgent, making it a real possibility for Morsheda and her family to move to the same area, even if only temporarily, if the situation demands it. In most such migration narratives traced, including the one by Morsheda, the ties people rely on are strong rather than the weak ones. Most of the people in the areas under study keep in close contact with family members or close neighbours who moved away – if not too far away, they would visit each other, especially during important festivals. This contact frequency has increased with mobile phones, as migrants and those still in places of origin reported calling each other a few times per week. In doing so, as Morsheda's story exemplifies, people make some kind of promise or agreement to help each other out should the need arise. Such informal agreements stay active as people can continue to discuss this via phone.

Enabling the Return Home

Just as mobility is dynamic, so is the Bangladesh landscape, with its highly dynamic river delta where land is gradually disappearing, whilst reappearing in other places (see, for example, Haque and Zaman 1989, also on the associated politics and injustices).¹¹ The eroded areas in Bhola have seen numerous embankments, which get broken by erosion and are poorly fixed with temporary sand-based embankments, with many holes remaining. Whether a stronger concrete-based embankment will be made depends on the existence and execution of a tender for a new or improved coastal embankment (and thus political will, available funds and any level of corruption around the execution).¹²

Once the concrete blocks for the embankment actually start to appear on the shore – which can be after years or even decades of waiting – people get excited. Hope returns. What is interesting to see in such instances is the dynamic of people wanting to move back, to resettle in their places of origin. Mobile phone communication plays a key role in facilitating this drive to return, by sharing photos, via Facebook or Messenger, and spreading the news that something is happening. Nonetheless, not many people actively use Facebook in the area where this embankment is being made (Mohammadpur, Char Fasson). It is an area with low 3G connectivity, and many inhabitants do not own a smart phone. Simple calling came up more frequently during the interviews as a way in which people were spreading the news and were strategising about the new situation.

A migration narrative representing this dynamic of return is from Babul, from Mohammadpur (Char Fasson). He lives in Dhaka to earn more income after his family experienced land loss due to the erosion and floods from storms, whilst his wife and children stay in Mohammadpur. However, he is gradually moving back to Mohammadpur on a more permanent basis. After years of waiting, the concrete blocks to make a stronger embankment had finally arrived, and new strong sluice gates had been made, making the area more liveable (at least, in the near future). In this new situation, he got the idea to start investing in a family-run sweet-water fish business in his home town, hoping that he could stop working in Dhaka. He has been buying pieces of land to make sweet-water ponds – one is already finished, and he has others in the making. Babul cannot do this alone. He is not the only member of the family who had to work elsewhere who is now wanting to return to make a sweet-water pond fish business. So do his two cousins. This family network of young men is in active mobile phone contact (they call each other every three to four days) to update each other on the situation with the embankment, to discuss progress and problems and doubts about whether it is ever going to get finished, and of course their strategies and plans for their new business. They see it as a serious project and as a way to reunite with their families.¹³

Through such active mobile phone contact, part of the family network can maintain their jobs in Dhaka to produce income, whilst the others can focus on the new business in the home town. They can discuss their strategies, ensure a balance in responsibilities and tasks, and coordinate their mobility around this effort (when to go to Dhaka, how long to stay in Dhaka, when to go back). Thus the fact that they can stay in active contact via mobile calls helps to ensure that moving back becomes something planned, organised, coordinated and, most of all, less risky.

Collective Action to Prevent Further Migration

The diaspora in new locations is not all relatively poor immigrants that had to leave their houses behind. Many are more wealthy and higher educated community members who left to study at the university or to get a better paid job in the city. Particularly in the city of Chittagong, there is a well-connected wealthy diaspora from the island Kutubdia organised via the Kutubdia Association.

The Association aims to better connect the Kutubdia diaspora in Chittagong – though limited to the richer and well-educated members of this community. On top of that, it actively tries to help Kutubdia in becoming a safer and more prosperous island.¹⁴ In that context, the Kutubdia Association has organised a protest action in the form of a human chain in the streets of Chittagong city following Cyclone Mora, which hit Kutubdia in May 2017. It aimed to raise awareness of a broken embankment in Kutubdia that worsens with every cyclone and ongoing erosion, making some areas unliveable. It demanded supervision by the Bangladesh Navy of the reconstruction of the embankment to overcome the ongoing corruption scandals that have led to serious delays and poor-quality construction work.¹⁵

It was able to attract much attention to the protest and in this way succeeded in making the government promise to take action via the Bangladesh Navy – although the actual implementation remains to be seen. Facebook was a key channel to achieve that. This was led by a university student originally from Kutubdia. He made an event page and a Facebook group specifically for the action, and has actively been posting on the subject. In this way, he argued, "it is easier to reach people, to promote the event. I can even do it from sitting in my home; you do not need to go to all people's houses for impact."¹⁶ He was not just any student but a well-connected one, also linked vertically upwards to the political establishment, and in this way could use Facebook quite effectively in reaching a wide audience.

Via Facebook, the human chain action became something people in Kutubdia itself were talking about. To know and see via Facebook that people living in Chittagong were going to the streets to fight for their livelihoods and land resonated. It made them feel connected and less abandoned. At the same time, however, most of the people on Kutubdia seeing such posts and images about the human chain action were those with access to Facebook, meaning young college students in Kutubdia, and especially those groups being somewhat more middle or elite class, such as businessmen and those active in government parties, council members, and so on. These groups also post pictures themselves of flooded areas, damage to the embankment and salinated

areas to help raise awareness amongst the affluent diaspora in Chittagong having connections to the press, funders and the government.

In that sense, via the photos shared on Facebook, some weak ties – including vertical weak ties – were made, but were limited to those having access to Facebook. Many of the most vulnerable groups living closest to the coast and in the most dangerous zones are often relatively poor and do not have such access. They were less aware of these developments and less involved. In that sense, the enabled network remained relatively elitist and activated horizontal weak ties within similar social circles, or expanded vertically upwards from the more affluent community members and diaspora to more powerful political actors such as members of parliament by sharing Facebook pictures. It did, however, not actively involve the most vulnerable groups, and thus forged no vertical weak ties with the more low-income or marginalised groups. Digital inequality in this way reproduces social hierarchies and strengthens certain support and information networks whilst excluding others from it (see also Madianou 2015).

4. DISCUSSION AND REFLECTIONS

To conclude I discuss these findings from two angles. First, I reflect on what the increased access to mobile technologies implies for the social networks and networking of migrants and in what way these are utilised to enable particular mobility practices. Second, I discuss the implications of the intersection between environmental change, human flows and mobile technologies for levels of sustainable development for those involved.

Shifts in Social Networks

This case study gives little indication of mobile technologies to actively transform the social networks towards a proliferation of vertical weak ties. Instead, existing strong ties – in particular, (extended) family members, close friends and (former) neighbours who people are very closely connected with – remain central for decisions about moving and the stages beyond that. Especially on a village/rural level, there is often a very close interaction with the extended family and neighbours, and that often makes up the basis of the network. When connecting to weak ties, the case study demonstrates these were usually of a horizontal nature.

Part of this can be explained by the particular context of this case, shaping what role the mobile phone plays in ways of connecting and communicating (Horst and Miller 2006). This case study is about migration within a country that has a strong hierarchical culture where it is difficult to rise from one's social location, particularly when being from a lower income group. As such, the digital divide and social inequalities can mutually reinforce each other (Madianou 2015), preventing social networks from becoming more vertical for some. In that context, many of the poorer and less empowered community members I spoke to did not seem to believe in their

own ability to raise awareness and support for their community; for instance, via collectively using Facebook to spread the word about their situation. Instead they frequently referred to the respected and connected village members or the government as the only avenues from where action can come. Thus whilst social networks "can move" (Schapendonk 2015), there are limits, especially if wanting to connect to more vertical ties (Ryan 2011). Migrants and communities at risk face social and cultural obstacles that are not necessarily easy to overcome.

Despite the limits of ICTs in creating more vertical ties in the social networks of the migrants and communities in the case study of this chapter, the case study results do show that ICTs are creating new roles for geographically distant relations consisting of horizontal ties. These are most often strong ties that people already had, such as friends or family already living in other cities or villages. Via mobile technologies these are kept close and made relevant to facilitate or coordinate someone's mobility - both in the sense of trying to stay, moving away and returning to places of origin. As distance becomes less of an issue, it becomes easier to collectively reflect on, or discuss, mobility strategies and to do so in a very precise and coordinated manner. In this way, connecting with strong ties enables more than a continued "feeling of intimacy" amongst family and friends after having moved away (Dekker and Engbersen 2014, 407). The role of strong ties, and thus the content of these ties, becomes different as well when people are far apart and staying in different geographical spaces. Through mobile technologies these ties can easily provide up-to-date information about a new place and what is needed to get there. Close friends and (extended) family members already in other places are then vital nodes to connect with to enable mobility in a coordinated fashion and keep the moving process informed by real-time information. Similarly, in the case of the friends and cousins returning back home, the ties in the various locations can easily exchange information about what is needed to organise this most effectively. In that sense, the fact that they are in different locales affords them a particular knowledge, making them key agents of information exchange in facilitating human mobility.

Implications for Sustainable Development

Has enhanced access to mobile technologies made mobility decisions more resilient to environmental and socio-economic changes, and in what way? Has it contributed to translocal development amongst those involved, and contributed to the United Nations Sustainable Development Goal of making more inclusive, resilient, safe and sustainable human settlements?

As discussed above, in Bangladesh mobile technologies have been proven to better enable people to rely on mobility if the situation demands it. This clearly shows in the experiences of Morsheda, Babul, and of those fishermen micro-coordinating their moves during Cyclone Mahasen. Furthermore, in terms of translocal development, the case of Babul and his cousins typifies how translocal linkages are better enabled through enhanced means of communication to aid and contribute to the exchange of

ideas, resources, money and environmental information on the state of the embankment, needed to set up their business and enable the return home.

Nonetheless, this translocal development and resilience-building was mainly generated by the migrants and affected communities themselves. The enhanced access to mobile technologies did not generate more vertical ties with non-governmental organisations (NGOs), governments or others. This is partly because of still limited social media usage amongst affected communities and limited attempts from NGOs or other organisations to make such links. But it also relates to the more general character of environmentally related human mobility, being relatively slow and gradual in nature. This is especially so for communities who are affected by river or sea erosion, as erosion does not affect everyone at the same time. Unlike with rapid-onset disasters, people do not leave in large groups who end up in the same shelters or camps, but instead become gradually spread out over the country. In Bangladesh, many areas are affected by gradual river or sea erosion, leading to a highly fragmented yet continuous form of migration: those living closest to the coast have to move first, whilst those living farther away leave a few years or even decades later (Boas et al. 2018). As such, many of these environmentally related migrations do not match the profile of suddenly displaced persons in disaster situations receiving temporary housing and humanitarian relief. Instead, people who migrate in the context of slow-onset changes miss out on more formal forms of protection. Interviewees from affected areas in Bangladesh stressed that most aid comes after a cyclone, whereas hardly any agency responds to the gradual but devastating impacts of erosion. The slowly creeping problems of erosion often do not make it to the news, making them less attractive for donors. In the absence of formal protection, people are largely on their own, self-governing their situation via their (digital) social networks. The information exchange and support for migration, resettlement, return and inclusive development thus largely originates from, and stays within, the affected community (Boas et al. 2018).

In sum, access to mobile technologies does not necessarily lead to a drastic shift in the network structure that can enhance the resilience and inclusive development of migrants and affected communities through assistance from and exchange with more vertical weak ties (for example, with NGOs or communities in a better socio-economic position). In this case of environmentally related migration in Bangladesh, it instead remains a constellation of mostly strong ties and horizontal weak ties. But there has been an active shift in how these ties, if geographically distant, are used. Precisely because of their distance, translocal connectivity and afforded assets (for example, experience with migration, contacts in destinations, information about places), they become particular helpful to enable mobility, and the decisions around it, in a more coordinated and precise fashion. As a consequence, the decision to move, and the related implications for sustainable development of those involved, becomes more reflected on, better coordinated and in that sense less risky.

EPILOGUE

During the Bangladesh Covid-19 lockdown, Kutubdia island (one of the case studies for this chapter) became cut off from the mainland. To prevent travel, the harbour was closed to residents, and no ferries were allowed to transport people to the other side. This had severe impacts for people's incomes. Take the example of Hasan, from Kutubdia island. Hasan lives in a house on the beach side. He used to have a large piece of private land, with trees and space for the cultivation of vegetables. But as the sea slowly ate away the land (as part of erosion processes inherent to the delta), it gradually transformed it into a beach. Today, only a small portion of his land remains. As the sea took his agricultural plot, he turned to drying fish as an alternative livelihood. Yet, COVID-19 and the lockdown made this livelihood impossible. as most of his customers live on the mainland. On top of that, Kutubdia was hit by Cyclone Amphan during the lockdown period, leaving people trapped on the island and seeking safety in crowded cyclone shelters. As Amphan made landfall in another area of Bangladesh, it did not significantly impact Kutubdia. Still, strong winds destroyed Hasan's home. Having already limited income due to the lockdown, he had no other option than to sell his only cow and take a loan to rebuild his house, and to think of other business options. He also reported that the mobile network was weaker than before (it was not clear whether or not this was in any way related to the lockdown), which was complicating his efforts to network and to think of ways ahead.

NOTES

- 1. This chapter is a shortened version of Boas 2019, with some new elements. It also contains some paragraphs of Boas et al. 2018.
- 2. This account is derived from field observations and interviews.
- 3. Based on interviews, individual and group-based, with fishers, their family members, Red Crescent officers, the head of the dockyard, boat investors and other bystanders.
- 4. Interview 27 August 2017, Hajarigonj, Char Fasson.
- 5. Interview with crew members of the ship, 7 October 2017, Jahanpur, Char Fasson.
- 6. Women's focus group, 23 October 2017, Hajarigonj, Char Fasson.
- 7. Women's focus group, 23 October 2017, Hajarigonj, Char Fasson.
- 8. This account is derived from field observations and interviews.
- Reconstructed from interviews with Morsheda and Kadiza on 19 September 2017, 21 September 2017, 28 September 2017 and 15 November 2017, and from regular visits to their houses and surrounded areas, and regular phone contact with Morsheda.
- 10. Interview Kadiza, 28 September 2017.
- 11. See http://aqua-monitor.appspot.com.
- 12. This account is derived from field observations and interviews.
- 13. Reconstructed from interviews with Babul and his cousins on 21, 23 and 24 October 2017, 4 November 2017 and 3 December 2017 (in Mohammadpur and Dhaka), and regular visits to Babul's house, the fishpond, and surrounding areas, including the work-places in Dhaka.
- 14. Based on interviews with and visits to this association, 22–24 November 2017, Chittagong.

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- 15. This account is derived from interviews.
- 16. Interview, 24 November 2017, Chittagong. Quote slightly altered to make it direct and correct English.

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4. Development against migration: investments, partnerships and counter-tactics in the West African– European migration industry

Joris Schapendonk

INTRODUCTION

In the region known in European Union (EU) policy frameworks as 'the Sahel and Lake Chad', European migration-related interventions are mushrooming (see Map 4.1). In the Gambia, Senegal and Niger alone, there are 25 national projects, worth a total budget of over 170 million euros, all funded by the EU Emergency Trust Fund for Africa (EUTF). However, this 170 million euros counts for only 12 per cent of the total budget for this particular region. The general goals of these projects vary from improved conflict prevention, better governance and strengthening resilience to creating better economic opportunities, among others. They involve many different actors, but the International Organisation for Migration (IOM) and European-based development institutes are at the top of the lists of partners. These projects share a lexicon of 'root causes', 'instability', and 'displacement' and hence fit a wider master narrative of EU policy: the prevention of migration from the African continent.

The above text illustrates that not only the facilitation of migration but also the fight against it has become a lucrative business for a wide range of actors in the context of African migration and European borders (Schapendonk 2018). It fits a wider observation regarding the commercialization of migration control that involves various monetary flows across the globe that move through a 'food chain' (Andersson 2014, p. 52) of actors that link together powerful global institutions, like the UNODC and IOM, several governmental bodies, civil society organizations and local NGOs. The main aim of these expanding migration industries is to prevent so-called unwanted migration from the Global South. With this aim, these industries are constantly fed by overlapping policy arenas that concern development cooperation, migration policy and border security. In terms of policy making, these arenas are full of tensions and contradictions since different policy agendas start from very different ideological grounds, varying from humanitarianism to securitization (see also Andersson 2014; Collyer 2019; Smith and Schapendonk 2018; Trauner and Deimel 2013). In the European context, these tensions are particularly visible in the Global Approach to Migration and Mobility (GAMM) – which is the overarching framework of EU

policy making regarding migration and asylum. In terms of international politics these arenas are even more spikey since Eurocentric ideas of 'migration management' heavily rely on the willingness of African partners (not only states) that may have very different ideas about what is important with respect to migration (see also Zoomers, Van Noorloos and Van Liempt 2018a). From the perspective of African states, the EU is accused of neo-colonialism for approaching these partnerships as highly unequal terrains¹ full of conditionalities (Collyer 2019).

This chapter aims to outline the investments and partnerships in the expanding industry of migration control. In so doing, I apply a critical 'translocal development' lens (Zoomers and Van Westen 2011; Greiner and Sakdapolrak 2014) to better understand the gains and losses as well as openings and closures involved. In this chapter, this translocal dimension does not so much refer to decentralized development practices below the level of the state (Grillo and Riccio 2004); rather, it is used as a lens to analyze the complex web of relations outlined above. This web does include both state and non-state actors.

The chapter first provides a brief discussion of the migration industry as a conceptual framework. From there, I focus on the African–European context – as one of the geopolitical settings where partnerships and investments are rapidly growing in number as well as in terms of the money involved. I thereby dive first into the emergence of bilateral and multi-lateral agreements and subsequently discuss the EUTF – a development-aid-induced fund being one of the major outcomes of the Valetta Summit whereby African and European leaders discussed the challenge of migration management in November 2015. The EUTF was put in place with the mission to 'foster stability and to contribute to better migration management, including by addressing the root causes of destabilization, forced displacement and irregular migration'.² After this framework, I outline some of the implications of this growing industry in terms of the creation of new translocal linkages in border regimes, the shifting positionalities and the everyday responses of people on the ground. In this context, I particularly rely on empirical insights from the Gambia.

1. A GROWING 'INDUSTRY' FUELLED BY MIGRATION DEALS

The migration industry concept is usually referring to the increasing presence of commercialized actors that shape processes of migration. It looks both at the ways migration is facilitated through a wide range of brokering services that lower the threshold for people who wish (or not) to travel across borders. These include the smugglers, transporters, visa brokers, labour intermediaries and student recruitment offices (for example, see Deshingkar 2018; see also Kleist and Bjarnesen 2019). At the same time, states and supra-state actors (like the EU) increasingly turn to non-state actors in their quests for effective migration control (Cranston, Schapendonk and Spaan 2018; Gammeltoft-Hansen and Nyberg Sørenson 2013). These emerging industries are particularly discussed in the context of hard borders, such as in the case of Australia, the Mexico–US border and Europe (see Schapendonk and Cranston (2020) for an elaborative discussion on the migration industry).

In the West African–European context, these emerging industries are closely related to the outsourcing of migration management. One of the most important instruments European states have to reduce unwanted migration are migration agreements. These deals have been mainly bilateral - between two states - and some have a multi-lateral character, often implemented under the EU flag. In the context of the former, individual European states have established numerous bilateral agreements with states in North and West Africa. The cases of Senegal-Spain (Andersson 2014), France-Mali (Trauner and Deimel 2013), Nigeria-Italy (Adepoju, Van Noorloos and Zoomers 2010), Morocco-Spain (Cassarino 2007) and Libya-Italy (Paoletti 2011) are particularly well documented. These agreements include, among other things, investments in border control and readmission agreements, often in exchange for development aid. In so doing, migration management has become an important condition to receive considerable development aid funds. Since it appeared to be extremely difficult to work towards a formal concretization of border control and readmission agreements, European states have sought more informal ways to achieve their policy goals (Cassarino 2007). In the Libya-Italy case, for example, discussions on migration date back to the late 1990s. In the subsequent period 2000-2007, there was no formal agreement signed between the two governments, but different deals and efforts have been documented. For instance, it is stated that in July 2003 the Italian government spent some 15 million euros to improve the control of Libyan land and sea borders. In addition, roughly 3,000 third-country nationals have been returned from Italy to Libya between October 2004 and March 2006, from where they were expelled to other places (Paoletti 2011, pp. 274–276). These are the early European interventions in this North African country.

In the multi-lateral context of the EU, the GAM (Global Approach to Migration) and later the GAMM served as the overarching policy framework. This framework has four policy pillars (see also Smith and Schapendonk 2018):

- 1. Better organizing legal migration and fostering well-managed mobility
- 2. Preventing and combating irregular migration
- 3. Maximizing the development impact of migration
- 4. Promoting international protection and enhancing the external dimension of asylum

Through several cooperation frameworks, the EU has emphasized both the security dimension and the preventive dimension of irregular migration. The preventive dimension has a strong development connotation to it. The logic behind this preventive approach is: if we develop a particular place, people are less confronted with the so-called root causes of migration. This underlines the long-standing sedentarist underpinnings of development thinking, which is not only related to migration agendas (Bakewell 2007; Nijenhuis and Leung 2017), but also to the wellbeing of mobile groups that do not fit the development agenda of the state (Soeters, Weesie

and Zoomers 2017). Thus, 'development' is seen as an important policy field to hamper unwanted migration. This assumption, however, is strongly contested by migration-development theorists noting that more development does not necessarily lead to less migration (for example, de Haas 2007). At the same time, the GAMM frames 'development' as being one of the positive effects of migration (Pillar 3 of the GAMM) – which shows the contrasting logics of the EU's migration agenda (Collyer 2019; Smith and Schapendonk 2018). To put it simply, migration is considered to benefit the development of the areas of origin, yet development is at the same time framed as a suitable instrument to stem migration.

Since the invention of the GAM, Mali has been an important target for the EU's migration-development policies. Together with Niger it is considered to be the crossroads of West African migration to Europe. In 2006, the EU and Mali signed a migration control and development aid agreement for the period 2008–2013, worth 426 million euros (Trauner and Deimel 2013). One well-known intervention was an information hub called CIGEM (Centre for Migration Management and Information) that came to be known as the 'Job Centre'. However, with a total budget of 18 million euros coming from the European Development Fund, this information centre was not invented to advertise the availability of jobs in Europe, but informed potential clandestine migrants about vocational training opportunities and jobs in the West African region (see also Andersson 2014; Trauner and Deimel 2013).

The EUTF has been one of the latest developments in this policy arena. Trust funds are not an uncommon instrument in international cooperation. In fact, since the 1990s this instrument has been increasingly implemented, especially in relation to natural disasters or conflicts³ (see also Spijkerboer and Steyger 2019; Vermeulen, Zandonini and Amzat, 2019). This is already a first hint at how the European Commission approaches migration. The EUTF, with a substantial budget at the beginning of 1.8 billion euros, expanded with a budget of 4.7 billion in 2019.⁴ By means of this new funding scheme, development projects have been implemented in almost all West African countries.⁵ The stemming of root causes of migration is one of the main discourses of this fund. Strikingly, one of the many fact sheets of the EUTF (2019, p. 1) articulates that the main beneficiaries are 'refugees, migrants and potential migrants, internally displaced persons, returnees and the local communities hosting them'. However, later on in the same briefing, there is very little evidence that the aspirations of these people are taken into account, since the board of EUTF announces that it identified the following six priority areas:

- 1. Return and reintegration
- 2. Refugees management
- 3. Securitization of documents and civil registry
- 4. Anti-trafficking interventions
- 5. Essential stabilization efforts in the Horn of Africa and the Sahel
- 6. Actions supporting migration dialogues

Most of these priority areas, if not all, articulate the notion that development funds are used as a means for a policy agenda that combats migration. They are meant to transform migrants into returnees, and potential migrants into stayers. This is troublesome for several reasons. First, the fact that development funds are used for migration control indicates that 'development intentions camouflage a hidden agenda' (de Haas 2007, p. 828) of European states. This argument of a hidden agenda relates to a wider criticism that EU-led migration deals are characterized by a lack of transparency in terms of negotiations and contents. As Zoomers, Van Noorloos and Van Liempt (2018b, p. 5) write:

Negotiations between EU member states and African countries often took place behind closed doors and often ad hoc in response to rapidly changing situations. Arrangements for repatriation and migration control, as well as incentives such as development aid and preferential entry quota, were often established outside formal agreements.

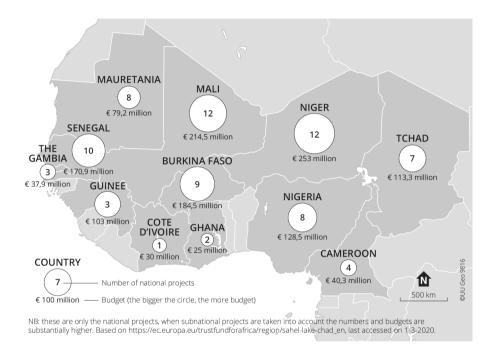
Secondly, the development agenda *against* unwanted migration is also troublesome for sharpening the divide between people who are entitled to move and people who are deprived from this right. If we consider Africa's general positionality in the world today as a form of abjection (Ferguson 2006) – meaning that Africans are generally affected by global imaginations and interactions while they cannot actually have a say in the same interactions – these anti-migration interventions can be considered counterproductive since they are likely to produce even more involuntary immobility (Carling 2002; Prothmann 2017). The latter can in fact be seen as an important explanation why irregular migration occurs in the first place.

Thirdly, it is reported that in many cases EU funds have induced significant human rights violations. There are severe negative effects regarding migrant human rights reported in the Libyan case. Human Rights Watch writes that the EU's migration deal with Libya creates a 'cycle of extreme abuse' because Libyan coast guards intercept migrants and detain them under inhumane conditions.⁶

In other African regions, further away from actual European territory, other important destabilizing effects of European-led migration agreements are documented. With the aim of reducing unwanted migration from Eritrea and Ethiopia, for example, the EU stimulated border control and financed detention facilities in Sudan (Baldo 2017). These investments also improved and extended the surveillance capacities of an already oppressive state. Moreover, the financial support concerning border security went to a large extent to a violent militia that had a prominent role in the Darfur conflict (Baldo 2017).

Finally, there is the issue of the disruption of people's livelihoods by the EU's migration funds. Along the migration corridor from West to North Africa, Niger (and in particular the city of Agadez) has been at the centre of attention for European migration interventions. Critical reports show how this combat against irregular migration disrupts local livelihoods. As Molenaar et al. (2017, p. 18) write:

[T]he majority of migration-related interventions in the Agadez region have thus focused on dismantling the migration industry without putting short-term substantial economic alternatives into place. As the remainder of this report documents, this situation has resulted in a further decline of economic opportunities in a context already characterized by low levels of state authority legitimacy as well as insecurity concerns.



Map 4.1 West African development against migration

The interviews with local actors in this report show that the general sentiment among people in Agadez is that the EU's migration-related interventions mainly serve the interest of the international development community. This reflects the notion discussed above that these migration deals are not just deals between governments, but that there is an industry attached to it with a specific hierarchy. As Collyer (2019, p. 174) notes:

Rather than acting directly on the lives of potential migrants, wealthy states are able to recruit allies to act directly on their behalf. The most willing recruits are almost certainly private companies, though even here the relationship with the state may be necessarily coercive, as in the case of carrier sanction legislation. Other widely used intermediaries are international organizations, such as IOM, or NGOs.

If one consults the EUTF website, one can already identify more than 120 'partners' that are subsumed under this fund. This concerns conventional humanitarian aid organizations, including the Red Cross, CARE and Oxfam, as well as consultancy

agencies and research institutes. If one zooms further into the projects launched, one comes across a wider variety of actors and more opacity in terms of who is accountable for what. If one zooms further into the projects launched, one also becomes more confused regarding what the policies actually aim at. With a translocal lens, I will unpack these webs of relations further for a very particular West African case: the Gambia.

2. CLOSING 'THE BACKWAY': A TRANSLOCAL ANALYSIS OF THE COMBAT AGAINST GAMBIAN IRREGULAR MIGRATION

The Gambia faced a lasting political crisis between 2012 and 2017 before the former long-time leader and dictator Yahya Jammeh gave up power. In the final episode of this political turmoil, Senegalese and Nigerian troops entered the Gambian territory to support the foreseen regime change. In this same period, irregular migration from this small West African country across the Sahara and the Mediterranean grew substantially, with a peak of 8,400 arrivals in 2017 (IOM 2017). This escape route is popularly called 'the backway'. The emergence of this backway can only be explained by a mixture of political, socio-economic and cultural factors (Gaibazzi 2015; Schapendonk 2020; see Prothmann 2017 for a Senegalese case). Migrants who take the backway need to navigate their routes carefully since trust is a peculiar issue during their travels. For many migrants who travel through Burkina Faso, Niger and Libya, migration facilitators are not easy to distinguish from migration controllers (Schapendonk 2018). Several reports show how migrants get stranded on their way, which is one of the direct consequences of the EU's outsourcing of border control. To understand the EU's attempt to close the Gambian backway, we look at two dimensions of the EU's mobility regime: borders and development. For these two dimensions, I attempt to unravel the interventions made, the financial flows involved and the results that are presented.

Bordering Europe in the Sahel

Remarkably, right after the political turmoil (with the dictator Yahya Jammeh going into exile in January 2017) European states opened up new avenues of migration management for the Gambia. The most visible indicator for this argument is the presence of IOM, having an office in Banjul since July 2017. This IOM office got injected with funds from the EUTF for Africa. This monetary investment of 3.9 million euros was directed to a project that concentrated on the reintegration of assisted-return migrants and the sensitization of local communities regarding the risks of overland irregular migration. IOM documents reveal that 'the targeted groups' consisted of 300 migrants returned from Europe, and 1,200 migrants returned from other African countries. IOM press updates indicate that over 3,500 migrants were returned to the Gambia between 2017 and 2019, of which 2,000 received 'reintegration assistance'.⁷

This investment in IOM's presence in the Gambia does not stand on its own, and must be regarded as an inherent part of a series of investments across this particular West African migration corridor across the Sahel and North Africa. It relates, among other initiatives, to border security projects in Mali (with a budget of 11 million euros), Burkina Faso (30 million euros), Senegal (42 million euros) and, most notably, multiple investments in Niger and Libya. In Niger, some 12 national projects (with a total budget of 253 million euros) and 16 regional projects (with a total budget of 122 million euros) are subsumed under the Trust Fund header.⁸ Regional interventions in Niger include an Interpol project to strengthen police information systems (5 million euros) as well as the installation of rapid border-control groups (41 million euros). For Libya, the EUTF only allocates money to the issue of migration management (281 million euros), according to its website. However, all budgetary labels of EUTF projects need to be approached with caution as specific objectives are diffuse.⁹

The Trust Fund, however, is certainly not the only investment channel that contributes to the bordering of Europe in this particular region of Africa. The European Council, for example, added the fight against irregular migration to its military missions in Mali and Niger (EUCAP). In this context, the city of Agadez, a major mobility hub on the road to Libya, became one of the main targets for interventions. The installation of an outpost in Agadez and the new goal to combat irregular migration were probably the most important reasons why late 2015 the budget for EUCAP Sahel Niger was doubled, from 9.8 million to 18.4 million euros (European Council 2015). This indeed makes the defence sector one of the winners of the continuously expanding mobility regime between Africa and Europe (Andersson 2016). All this emphasizes that the EU's border regime creates a web of institutional linkages – or indeed translocal spaces (Zoomers and Van Westen 2011) – that create an entire zone of intervention across West Africa. In other words, the installation of the IOM office in Banjul is closely connected to the creation of a repatriation infrastructure in Libya and Niger and investments in border security across the entire West African region.

Development Against Migration in the Gambia

Next to the border security dimension, it is worthwhile to take into account development projects in the Gambia that closely relate to the migration management agenda of the EU. After the installation of the IOM office in the Gambia, and its reintegration programmes of repatriated migrants, two additional projects have been developed in the Gambia that are both linked to the EUTF's objective of promoting 'greater economic and employment development'. The first is the Youth Empowerment Project (YEP), and the second is called Building a Future. Both of them focus on training and employment opportunities for young people. Both also explicitly refer to 'return migrants' and 'potential migrants' as their target groups and hook up with IOM's reintegration mission. YEP works with an allocated budget of 11 million euros, and the budget of Building a Future is roughly as twice as high. The market-driven logic of modernization is seen as a main driving force, as explained by the programme manager of YEP during an interview with one of my master students in June 2017 (see Schippers 2017, p. 68):

Our mandate is to connect small and medium sized enterprises to markets, to value chains. [...] if you want to export or you want to engage in trade, you also need to comply to whatever market requirements there is, whether that is related to food safety and is related to standards and so on. We help them (Gambian enterprises) to comply with that. We help them to become more productive, more competitive on the international market and hence also so they become able to employ more people. What is the link between this and the Youth Empowerment Project, you might ask. In the Gambia we have been asked to come here to address the root causes of irregular migration, so essentially those drivers that lead [...] Gambian youth to take the backway and the economic reasons are very important ones. [...] we have been asked to come here to the country to create jobs by taking a market led approach. [...] Jobs that are interesting for youths, jobs that should be able to change their opinion about taking the backway. [...] focus on those economic opportunities that are interesting for youth to engage and at the same time also a demand within the market. [...] hence trying to address the root causes of irregular migration.

The view on development of this Gambian YEP programme manager has a strong neoliberal connotation. This view drives on the notion of being better equipped to work in an 'international market'. It is a view that opens up to the world. Interestingly, this agenda of opening up is also related to socio-political closure in the sense that it is designed to pin people down to their places of origin. YEP's approach is thus based on sedentarism as a political ideal (Mac Laughlin 1999). One telling illustration of this observation is the Tekki Fii 'concept' (it is indeed framed as a concept).

In the Wolof language, 'Tekki Fii' means 'make it here'. This motto is, among other initiatives, used for the creation of popular music videos, bike repair activities, sports events, an itinerant theatre and a fashion weekend. All these initiatives point to the typical question of migration: go abroad, or make it here? Evidently, the Tekki Fii concept stresses that the Gambian youth should stay in their country of origin. According to the Tekki Fii brochure, there are 11 institutions attached to this concept. Next to YEP, the EU and the Gambian national government, these institutions include: the International Trade Centre (the joint agency of the World Trade Organization and the United Nations, having only recently a local branch in the Gambia), ENABEL (the Belgian development agency), GIZ (a public-benefit federal enterprise from Germany), IMVF (a Portuguese NGO), the Gambian National Youth Council (a public agency of the Gambia), Alianza por la Solidaridad (a European civil society organization), ADWAC (an NGO from the Gambia) and United Purpose (a UK-based charity organization). This food-chain logic (Andersson 2014) can be related to a wider critique on EUTF initiatives in the Gambia. These initiatives have been criticized for the lack of local ownership and the lack of formal mechanisms of cooperation with a wide range of partners with various aims (Zanker and Altrogge 2017, p. 6). In addition, some people underline the way development funds are now only attracted when repatriation agreements are signed by the Gambian government. This conditionality was particularly well captured by a Gambian asylum seeker in Germany who stated that the national government is now 'selling the backway people' (ibid., p. 8) – a viewpoint that clearly hints at the industry logic of migration management.

3. BOTTOM-UP RESPONSES TO BLOCKED MOBILITY: ETHNOGRAPHIC NOTES

Between 2014 and 2018 I worked on a post-doc project that investigated mobile worlds of West Africans in Europe. Many of my informants had the Gambian nationality, and my multiple visits to them in different European places gave me detailed insights into the ways mobility is embedded in social and cultural practices in the Gambia (Schapendonk 2020; see also Gaibazzi 2015). In September 2017, I went to the Gambia to be able to see the places they talked about: the marketplaces they had worked in, the houses and communities they had lived in and the roads they had travelled. During this visit I was able to meet some family members and friends of my informants.

My Gambian interlocutors, whether in Europe or in their countries of origin, often regarded migration as a process of gambling. They tried different ways to live up to their mobility aspirations. It resulted in multiple attempts to leave the countries of origin. Some tried to get a visa through official channels. But in line with the notion of gambling, the visa system is generally regarded as one big lottery (a notion that resonates in other African contexts; see Akesson and Alpes 2018; Belloni 2016; Drotbohm 2017; Piot 2010). For the Togolese context, Piot (2010, p. 78) described this visa system as 'an enormously inventive, entrepreneurial border practice, which has generated its own scales of value and pricing, and has produced far-reaching networks of debt, rank and clientage'. It is a system that creates a market for brokerage (Akesson and Alpes 2018). Brokers' main business is the distribution of hope (Drotbohm 2017). It is an industry based on the creation of imaginations, the circumvention of borders and the invention of new mobility pathways. It is a counterforce with a worlding dimension.

Lamin (one of my most important interlocutors during this four-year research project), for example, had wasted over 600 euros on this lottery. He paid a broker who had arranged the visa application for France. This particular middleman had bought a flight ticket and arranged an invitation letter and accommodation. All was set for a good arrival in Europe, but Lamin lacked the luck that one needs to win the lottery. He lost his money. As an alternative, he took the backway, but he first needed some years to refuel his monetary resources.

Like so many other Gambian travellers, Lamin established a translocal connection with a European citizen before he moved to Europe. Whereas many young Gambian men use the tourism sector to search for a friendship or love affair that might open up new avenues to mobility, Lamin in fact established a similar friendship online with a Swiss man who was substantially older than him. The Gambian ethnographer Ismaila Ceesay puts both forms of hustling – in the tourist spaces and virtual spaces of the Internet – in one comparative perspective and portrays them as

important bottom-up positionalities of the Gambian youth in times of globalization (Ceesay 2016; see also Smith and Schapendonk 2018). Lamin's encounter resulted in a patronized friendship that Lamin much appreciated. The Swiss man paid for Lamin's education, and Lamin used the small leftovers of these money transfers to gamble. Later, when Lamin started his European adventure and moved through Niger and Libya, this translocal connection was his safety net.

Not long after he left Agadez in a 4×4 jeep, Lamin ended up in serious trouble in Libya (which he called 'the country of the traffickers'). In Sabha, he was directed to a ghetto (a place where migrants wait to make the next step of their journeys). But this ghetto turned out to be a horrific place. According to Lamin, people were imprisoned there and 'treated worse than animals'. In this place, people on their way to better futures get ransomed. During his custody in Sabha, Lamin was forced to call a family member to stop the beatings he was suffering. He decided to call his Swiss 'foster parent' and asked him to pay the ransom that his mobility facilitators requested. This money transfer allowed Lamin to continue his journey to Europe. He arrived in Italy, and after the asylum procedures he started to live in the Italian region of Liguria. From there, however, he moves continuously to Bern to spend substantial time (varying from a week to up to a few months) with his Swiss friend. About this mobility, he stated: 'For me moving to Switzerland is like moving from one house to another house because I have this connection [with his friend].'

As stated above, an increasing number of Gambians return unsuccessfully from the backway. The IOM-led programmes on assisted returns from Libya and Niger are framed to prevent people from going through these violent landscapes in Libya. This seems to be a valid policy concern. However, the same programmes have actually co-created this violent landscape, as discussed above. Moreover, the IOM programme on assisted returns created severe frustration among returnees in the Gambia. Many migrants on their way to better futures are recruited for these return programmes with the message that they find better opportunities in the 'New Gambia'. Once they are back, they find very few opportunities. The so-called reintegration programmes implemented by the EUTF discussed above are rather difficult to access and only designed to serve a small portion of the total returnees (Zanker and Altrogge 2017). I met one frustrated deportee in the village from where one of my informants in Europe originated. Like so many other deportees, he felt useless upon return (for another West African case, see Kleist 2018). His main idea was to hit the road again, to try his luck once more, which is not an unusual reflex in his situation (see also Kleist 2018; Schippers 2017). But in his mind, there was one additional escape route: creating his own mode of mobility. He firmly believed that a car or a motorbike would create a better future for him in the Gambia. To get them, he directed his hope to his Gambian brothers living in Europe, as he stated:

I ask my brothers many times if they can help me to get a motorbike, so I can make business, or a Benz. With a Benz, you can make good business as a driver. But until now the motorbike has not come! So I tell them, 'If there is no motorbike I am forced to take the backway again.'

Thus, the imagined better future of this young Gambian man was inherently connected to international mobility, either by his own migratory project or through acts of networking.

4. CONCLUSION

This chapter started with the endeavours of the EU and its individual member states to stem unwanted migration from West Africa. It showed how migration management relies on formal and informal agreements between states in the North and the South and it articulates that this policy field created new capital flows (for example, see Zoomers 2018) that fuel an industry with a wide range of non-state institutions. The Gambian case showed that investments made in migration management in this particular country are related to a wider web of anti-mobility measures that have spread over West and North Africa. The European border regime, as Andersson (2014) underlines, is therefore very difficult to locate. But it is clear that it does intervene in a supranational region of free mobility (ECOWAS; the Economic Community of West African States). Although it is difficult to verify, the main investments seem to be directed to the sectors of securitization, borders and humanitarianism and large international organizations – like IOM – can be seen as the main beneficiaries of the industry (Brachet 2016; Molenaar et al. 2017). The bordering and security actors involved attempt to oppose mobility through surveillance, data-sharing and control. The actors involved in humanitarian interventions attempt to sell sedentary lives as development. Like any form of development, this development discourse reflects a particular world order (see the postcolonial critique of Escobar 1995; see also Akesson and Alpes 2018; Nijenhuis and Leung 2017) and in this case this world order articulates the contrast between the lives of mobile global citizens and those who are contained and immobilized (Bauman 1998).

It follows that the positionality of the Gambian youth is characterized by openness and globalization (through, for example, Western tourism, diasporic networks and the Internet), but at the same time by enforced immobility (Carling 2002; Prothmann 2017) and social-political closure. This contrast is described by James Ferguson (2006) as abjection. Gambians generally refer to this positionality using the notion of 'sitting' – an expression that has a double connotation of immobility and uselessness. However, through my ethnographic work (of which I could only present anecdotes in this chapter) I have learned how Gambians and other West Africans navigate this positionality and how they create everyday tactics to create space to manoeuvre (see also Schapendonk 2020; Smith and Schapendonk 2018). Gambling in the visa lottery, connecting to tourism, searching for online friendships and irregular migration all fit these hustling practices (Ceesay 2016). These practices are in stark contrast with the development notion of 'make it here' since they emphasize the outgoing character of their worlding lives (Simone 2001).

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NOTES

- 1. See, for example, the interview with Issiaka Konate, a high-level migration policy maker from Ivory Coast: https://decorrespondent.nl/9555/deze-topambtenaar-uit -ivoorkust-houdt-europa-een-spiegel-voor-het-migratiedebat-zit-vol-hypocrisie-leugens -en-racisme/416320905-a80d94d8, accessed on 16 June 2019.
- 2. https://ec.europa.eu/trustfundforafrica/content/homepage_en, accessed on 16 June 2019.
- 3. www.eca.europa.eu/Lists/ECADocuments/SR18_32/SR_EUTF_AFRICA_EN.pdf, accessed on 3 April 2020.
- 4. https://ec.europa.eu/trustfundforafrica/content/homepage_en, accessed on 24 June 2019.
- 5. https://ec.europa.eu/trustfundforafrica/region/sahel-lake-chad_en, accessed on 12 August 2019.
- 6. www.hrw.org/report/2019/01/21/no-escape-hell/eu-policies-contribute-abuse-migrants -libya, accessed on 19 August 2019.
- 7. Next to these EU funds, individual member states finance particular IOM projects in the Gambia. The UK, Italy and the Netherlands all finance, albeit under different headers, projects that aim to stop irregular migration. Interestingly, non-European states also financially support IOM projects in the Gambia. There is a border management programme financed by the Government of Japan and an anti-trafficking programme financed by United Nations money. See www.iom.int/countries/gambia, accessed on 26 November 2019.
- https://ec.europa.eu/trustfundforafrica/region/sahel-lake-chad/niger, accessed on 26 June 2019.
- 9. For the Libyan case, for example, the EUTF website says that all money spent on Libya fits the label of 'Improved Migration Management', while it also includes projects based on post-conflict recovery and socio-economic development.

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PART II

TRANSLOCAL DEVELOPMENT IN LANDSCAPES OF VALUE CHAIN DEVELOPMENT AND AGRIBUSINESS

5. Beyond the value chain: local impacts of 'global' inclusive agribusiness investments – examples from Ghana

Guus van Westen

INTRODUCTION

The years following the turn of the millennium have seen a remarkable increase in flows relating to the production, processing and consumption of food and other agricultural produce. A new trend in this is the surge in agribusiness investment, including direct acquisition of farmland, in countries of the Global South. Although marking a departure from the pattern prevailing since decolonization of the former European empires, international capital flows creating new agricultural production frontiers are nothing new. Historically, much of European colonialism was aimed at incorporating new lands and peoples in the production of agricultural produce and other commodities. In a classic study, Eric Wolf (1982) showed how European merchants, planters and governments converted localities across the globe into *hotspots* of 'agribusiness investment': either directly by converting land into large-scale plantations, or more indirectly by pushing native smallholders into cash crop production – for instance, by imposing monetary taxes on local populations, thus forcing them to gain a monetary income. Seen in this broad historical perspective, the early-21st-century wave of investment in agribusiness flowing into a series of developing countries fits in a well-established pattern, even if much of the context has changed. Decolonization and the building of nation-states throughout the world has lessened the grip of former colonizers, but after the turn of the 21st century cross-border land deals have again expanded rapidly. Around 2008, 'land grabbing' by investors from rich countries (not just those in the Global North, but also oil states and emerging economies with limited agricultural resources) became an issue grasping media attention. While at face value contributing to production, jobs and employment, many large-scale land deals disrupted the livelihoods of local people who have lived there for generations but whose rights may not have been formally registered. In March 2020, the Land Matrix – considered the most reliable source on cross-border land deals of over 200 hectares – had data on 2,106 land acquisitions covering a total of over 80 million hectares.

Two main reasons may account for this recent surge in land acquisitions, both closely linked to globalization. One is the increased dominance of private business; we will return to this point below. The other is the internationalization of economic activity. Although foods and other agricultural produce have long been traded inter-

nationally, farming itself tended to remain contained within national, or even local, frameworks. Many developing countries have preserved semi-customary land tenure systems that protected access to land for large parts of the population, which depend on it for their survival. Moreover, newly independent nations were often not keen to allow foreign ownership of this vital resource. The neoliberal agenda advanced since around 1980 did away with much of those hurdles. Secondly, demand for raw materials increased dramatically with population growth, and economic expansion around the globe – in itself partly related to economic globalization. Especially when giants such as China and India became significantly integrated in the global economy in the late 20th century, the mythical 'world market' emerged more and more as a dominant force, not just in trade and distribution of farm products, but also with respect to the commodification of production factors such as land. When a combination of adverse conditions created a food and raw material crisis in 2007-8, many initiatives were triggered from resource-poor countries to ensure future supplies by taking control of production capacity. The resulting land acquisitions targeted classical agro hubs in North America, Australia and Brazil, but also searched for new frontiers. These included the formerly communist countries of Eastern Europe and the ex-Soviet Union. And the less intensely used fertile parts of Africa, Asia and South America seemed a perfect place to be converted in productive areas.

In this contribution we will consider a specific type of flows: agro commodity flows, in particular as they relate to inclusive business models that have emerged as a popular strategy for equitable and sustainable development in rural areas of developing countries. The chapter will discuss some of the backgrounds and assess outcomes in terms of income and food security, using examples from sub-Saharan Africa.

CROSS-BORDER AGRO COMMODITY FLOWS

Usually the flows linked to international agribusiness are framed in terms of capital investment (in land and production capacity overseas) and merchandise (farm produce). While not wrong, this is a reduction of reality. The flows of capital involved are often fairly limited. This in part because some governments, keen to encourage foreign investment, make land available to investors for rather low prices. Also, much foreign investment is at least partly financed locally: the foreign investor often borrows funds in the country where the investment is located – this especially in countries with more 'mature' financial markets. Nevertheless, the World Investment Report 2019 notes that inward flows of foreign direct investment (FDI) in developing countries has held up quite well in contrast to inflows in the developed economies; especially in the case of Africa this is seen as a result of resource-seeking investment projects (UNCTAD 2019).

As for the flows of agricultural commodities from foreign agribusiness to investor countries: international trade in such commodities has certainly increased a lot, but here too qualification is needed. Managers of foreign agribusinesses in countries like Ethiopia and Mozambique, for instance, often explain that they target the domestic markets of these countries rather than exporting their products. The simple reason is that the demand by urban and industrial users in these countries tends to grow faster than distant and more difficult Western markets, although surging demand from Asia and the Arab world absorbs increasing amounts of goods. Thus, exports have increased considerably: in 2010–2018, world trade in agricultural produce increased by 3.9 per cent per year on average, exceeding trade in manufactures (3.4 per cent) and economic growth in general (2.7 per cent) (WTO 2019).

While capital and goods flows may be less impressive than anticipated, there are other, less expected flows resulting from cross-border agribusiness initiatives. One case in point is comprised of flows of people. To be sure, most foreign agribusinesses are likely to send very few nationals from the country of origin to the new locality: perhaps a manager and one or two experts, if at all. For Dutch flower farms in Kenya or Swedish agroforestry firms in Mozambique, such foreign employees are too expensive to remain an attractive option. Asian, especially Chinese, investors have a reputation for making more extensive use of labour from home, but even this will mostly apply to the construction and start-up phases of the operation. Yet the induced people flows can actually become more important. One factor is that international agribusinesses tend to form clusters: that is, they often group together in selected localities. An example is the cluster of livestock and horticulture companies in Bishoftu in Ethiopia, located in a fertile and well-watered highland area at some 50 kilometres from Addis Ababa, to which it is linked by the country's main highway. A dozen or so Dutch entrepreneurs have settled here in close proximity, of whom many share similar backgrounds in terms of religious affiliation and area of origin. This creates a community with some visibility locally, that also has mass enough to forge regular exchanges and interactions between these specific localities in, respectively, Ethiopia and the Netherlands - a clear example of a corridor connecting two highly specific places far removed from each other. At the same time, foreign flower farms in Ethiopia recruited technical and management staff from neighbouring Kenya, where this industry had developed earlier (Melese and Helmsing 2010). This 'Kenyan connection' was amplified when wealthy urban Ethiopians also started to invest in flower farms and other horticultural initiatives. Beyond technical and management personnel, foreign agribusiness often attracts considerable numbers of migrant workers. Foreign-owned horticulture in Kenya's Lake Naivasha area, for instance, rely on migrant workers from other parts of Kenya. Such people flows are often not anticipated in the planning stage of investment projects. They may have positive consequences - as in providing jobs and income to people in poor areas, even if this requires them to move elsewhere. But there can also be negative repercussions, as when newcomers are perceived as competitors by the settled population, who may see the benefits of incoming investment seep away to others while they may have had to surrender resources such as fertile land and water to make the investment possible. Fast localized population growth can also increase prices for housing and consumer goods, and put an extra burden on ecosystems by means of intensified use of natural resources and pollution.

A final flow linked to agro investment, less stressed but arguably the most important, is the flow of knowledge. Knowledge is embodied in investment and people. More than the injection of external capital, it is the arrival of better varieties, more advanced methods, equipment and certainly also linkages to markets that create new opportunities. This also comes with risks as imported technology does not always fit local conditions well and may upset social and ecological equilibria. In fact, the arrival of a foreign agribusiness means the introduction of a new paradigm of the organization of production. Globalization has spawned the (global) value chain as a paradigm superseding local, stand-alone production models. This warrants a closer look.

BACKGROUND

While traditionally farms can be seen as autonomous production units trading with other economic actors at 'arm's length' (that is, trading partners are not linked other than by the transaction), value chains comprise networked models of production in which a web of actors complement each other in a single process of production, processing, logistics and sale to consumers. More often than not, value chains encompass a certain hierarchy, in which companies located at the most strategic positions dominate the rest of the chain. Value chains as organizing principle are most pronounced in manufacturing, where literally hundreds of companies form part of the chain producing, for instance, a car. But the logic also pervades the food and agro commodity industries. Here, supermarkets or brands producing specific commodities (coffee, chocolate) often orchestrate extensive families of producers, processors and logistical operators in a coordinated fashion. Value chain organization offers chain partners some advantages. Supermarkets and commodity brands can secure their supplies in advance by means of delivery agreements, without having to invest in and supervise the production of the raw materials themselves. Moreover, they can set quality standards in terms of both product characteristics (safety, nutrients) and production process requirements (no child labour, sustainability, and so on). This they can farm out by imposing their own norm or demand compliance with standards monitored by independent certification organizations (Fair Trade, Rainforest Alliance, and so on). Farmers, in turn, secure access to important marketing channels at conditions set in advance, which often include agronomic support packages. The chain model thus offers a degree of security and control in an industry prone to fluctuations. And importantly, it facilitates the flow of information in both directions, with producers receiving market intelligence at the level of supermarket sales, and retailers having advance warning of incidents at farm level, like a failing harvest.

Standards and the certification by lead firms or private certification organizations are examples of private-sector governance: rule making and maintenance outside of the scope of governments. As such, these approaches are part of the prevailing trend since the rise of a neoliberal agenda from around 1980, when the public sector limited its involvement in economic life and private business was increasingly presented as a leading agent of development. Private business was of course always crucial in cre-

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ating income and employment opportunities, but in recent decades has also assumed a prominent role in attaining wider development goals beyond business performance, such as the pursuit of food and nutrition security (Sustainable Development Goal 2, or SDG 2). This is also reflected in public policy, that increasingly emphasizes private business as a channel for realizing societal goals (Mawdsley 2015; Mawdsley et al. 2018). This is justified by the assumption that the private sector is more goals-oriented and efficient in realizing investment than less agile public agencies (Hall et al. 2017; Swinnen and Maertens 2006). There is, however, a logical corollary to the pursuit of societal goals through business instruments, and that is that those businesses look beyond their immediate commercial interests. Or better: the business interests of entrepreneurs and those of others should be made to align - for the sake of sustainability and equity. Inclusive business models are ways of doing business that benefit the poor as producers or consumers (Likoko and Kini 2017). In the context of agribusiness, inclusive business models try to improve the livelihoods of smallholders by integrating them in commercial value chains, thus helping them to get access to markets, inputs and services like finance and knowledge, in ways that are commercially viable (Kelly et al. 2015; Woodhill 2016; Woodhill et al. 2012). In recent years, donor governments and international organizations, as well as host countries and civil society associations, have promoted efforts for inclusive business approaches to boost rural development in developing countries, both in terms of economic performance (output, productivity, income and employment) and as a vehicle to achieve further development goals, in particular food and nutrition security. Donor countries in collaboration with governments in the Global South actively support companies to invest (that is, capital, organization, knowledge) in production capacity in developing countries in ways that include smallholders and communities in their business operations - that is, inclusive business models. Donor governments can thus support their 'own' companies while at the same time claiming to contribute to pro-poor development interventions, justified by the view that a market-oriented approach is the most effective one. At the same time, inclusive business models integrating poor communities in developing countries in international corporate value chains can tap the resources of the Global South for the world market while avoiding negative reports triggered when foreign firms engage directly in land-based investment in developing countries - the 'land grabbing' debate mentioned in the introduction (Cotula et al. 2009; Liu 2014; Schutter 2011). However, including a large number of small-scale operators in your business operation is generally more expensive than working with a few large suppliers. Therefore, development cooperation money is often mobilized to bridge the gap. Not only are transaction costs higher when working with many smallholders, but poor producers may need training, inputs, credit, and so on, to be able to increase production, boost productivity and meet value chain standards and certification requirements. Inclusive agro business thus usually involves (temporary) support packages implemented by the lead company, public agencies or non-governmental organizations (NGOs). Interestingly, and perhaps revealing, when farmers are asked what motivates them to participate in corporate value chain activities, they often mention access to such support in knowledge, inputs

and credit more than the business opportunity as such (Masakure and Henson 2005). This prompts the question how successful inclusive agro business is in improving livelihoods of smallholders and realizing further development objectives.

OUTCOMES

Inclusive agribusiness often takes the form of a variety of contract farming: 'a sales arrangement between a farmer and a firm, agreed before production begins, which provides the farmer with resources or services' (Ton et al. 2018). On the whole, literature on the impact of inclusive agro business models is fairly positive about the income effects for participating smallholders. A meta study by Ton et al. (2018), reviewing 26 contract farming arrangements in 13 developing countries, found that the pooled income effects on farmers amounted to an average increase of 38 per cent. The number must be interpreted with caution, as the available studies tend to be limited to cases of contract farming that have survived the start-up phase, and cases having little or no effect tend to be underreported. Also, attribution of causality can be quite difficult as intervening variables may also result in higher incomes. Nevertheless, the positive finding appears relatively robust in the literature, although there is no lack of studies that have found few or even negative effects (Djokoto 2012; Komarek 2010; Vicol 2017; Wangu et al. 2019). However, Ton et al. also point to an important limitation of inclusive agro business: their review of studies reveals that farmers participating in these ventures in 61 per cent of cases had significantly more land and other assets than the average farmer in the area. Inclusive business in reality is selective, with size of land-holding, and other assets such as capital and household labour force, and characteristics such as gender, playing a role in different cases. In fact, the very concept of 'inclusion' makes sense only when exclusion is also possible, and the dividing line between the two tends to be drawn along lines of resource availability, gender and also age.

The selectivity of inclusive agro business noted above may be implicit in the business model itself, as becoming part of a corporate supply chain involves compliance with a set of standards such as the use of fertilizers, pesticides, and so on, as well as the costs of certification to satisfy downstream buyers and ultimately consumers. These costs not only compel the farmer to raise a certain amount of investment capital, but may also require a minimum size of production to be profitable – in each case working against the smaller producers. In business practice, it is attractive for companies to focus on a limited number of sizeable suppliers rather than a huge number of very small ones. This lowers transaction costs and is easier to supervise, while larger producers are also likely to respond better to guidelines as they can afford more and may be more educated. This of course is where the need for development funding can come in, compensating the extra cost of handling many small suppliers and subsidizing training and other support services. An example is a number of local supply chain schemes undertaken by large beer breweries such as Heineken in a number of African countries. The company has an interest in increas-

ing its local impact offering opportunities to local communities ('social license to operate') and reducing the need for relatively expensive imports of raw materials. And locally, rural development is stimulated by the creation of a new market opportunity, which justifies the use of donor money to set up the local chain. In the Arsi highlands of Ethiopia, organizing the production by local smallholders of malt barley for industrial beer brewing was one such scheme. The scheme was successful in its own terms: the local production capacity of an important ingredient of beer was set up, and participating farmers did show an increase in income as a result of becoming part of a commercial supply chain. However, donor funding on a project basis inevitably runs out after a few years, which makes it more difficult for small participants to maintain requirements. As a result, the larger farmers stay on, becoming better off, while marginal producers drop out and are left with frustration. In such cases the business model is not genuinely inclusive (Worku et al. 2019).

In other cases the business model used by the chain organizer seems fairly inclusive in design – for example, when technical support and credit facilities for participants can be locally institutionalized, but even then, successful participation often turns out to be highly selective. This was the case in a project in Kenya's Makueni county that linked local farmers in a semi-arid area to a mango processing facility. Mangos do well in relatively dry settings, which makes the fruit the main opportunity for a cash income for smallholders in this part of Kenya. Cooperatives were used as intermediaries between farmer and processing plant in order to limit transaction costs. Although open to everybody who wanted to sign up, participation eventually proved selective, with participants being significantly better off in terms of land, education level and access to credit, and also disproportionately composed of male farmers (Wangu et al. 2020). We will return to the key issue of the limits to inclusiveness below, but first consider an example of a successful case of the approach, to see what sort of effects can result when put in reality.

The savannah area of Northern Ghana is by and large the poorest part of the country: it is far from the major cities near the coast, poorly equipped by infrastructure and services, and lesser amounts of rainfall give it a less lush vegetation cover than the south. Nevertheless, rain-fed agriculture is possible and soils are often good for growing crops, especially ones that thrive with a dry season for ripening. Maize is an example, and it happens to be a major staple food for Ghanaians, with increasing demand in the growing cities of Southern Ghana. This is the context that made a European agro business develop a plan to boost the commercial production of maize in the area, adopting an inclusive business approach: the company itself refrains from direct engagement in production, but acts as chain organizer, linking local smallholders (organized in groups) to processors and logistical services, as well as with a range of support services for training, credit, advice, and so on, allowing them to upgrade their production and productivity (Mangnus and Van Westen 2018). Donor funding is acquired to pay for these activities for a period that should enable the production to become self-sustaining. Overall, a model case of inclusive agro business for the benefit of northern farmers as well as southern urban populations while saving unnecessary imports. The implementation is successful, granted the usual occasional challenge. Maize production surges, and many farmers eagerly join the scheme that provides them with a steady cash income. Here too, participants comprise mostly the better-off farmers, as the more marginal ones have difficulty meeting the operational requirements. In fact, socio-economic differences within the community increase: successful maize farmers use some of their new income to acquire more land, emerging as commercial farmers, leaving others behind. But considered within the framework of the original plan, the initiative is certainly successful, and overall the community benefits. It is only when we look beyond the plan that some downsides become visible. The very success of using new techniques and seed varieties for growing maize means that a traditionally diversified rural landscape is increasingly converted to mono-cropping of maize. Large expanses of a single crop are efficient in terms of modern farming techniques; they are also exposing the area to increasing risk. Northern Ghana, not far south of the thirsty Sahel region that borders the Sahara, is increasingly vulnerable to the effects of climate change. Mono-cropping tends to exhaust the soil more than growing a variety of crops, as used to be the case. The traditional practice of growing a variety of crops in combination with some animal husbandry offered a degree of protection against bad years, as in case of drought: some crops may fail but others would be less vulnerable and still yield food to survive. Farmers in the maize region of Northern Ghana are also more vulnerable now they are part and parcel of a financial system involving credit and expensive inputs they need to pay for. Moreover, the expansion of maize cropping has pushed out a variety of food crops that used to be grown and consumed locally. Not much of a problem for households that benefit from the maize scheme – they can purchase their food needs. But others are faced with fewer options, as food brought in from elsewhere tends to be more expensive. Some beans and vegetables have disappeared from the local menu since they are not commercialized, thus worsening the nutritional value of the local diet – which also applies for the wealthier maize-farming households. People are often not aware of such indirect effects of becoming part of the world of commercial flows. The negative outcomes are certainly not foreseen in the planning phase of interventions like the maize chain scheme – launched with the best intentions and in its own terms successfully implemented. But when studying inclusive development the view has to be broadened beyond the narrow functionalist scope of value chain and business model, to include wider ramifications.

Insufficient awareness of local conditions is a recurrent issue in the implementation of policies aiming at integrating farmers in commercial supply chains. While it is true that gaining more cash income widens the options of poor households, cash crops may also increase risk. Cash cropping, especially when destined for distant markets, invariably involves more investments and exposure to market (price) fluctuations (Bacon et al. 2014; Braun 1995; Wiggins et al. 2015). Smallholders therefore try to strike a balance between the production of cash crops on the one hand and food for home consumption on the other (Achterbosch et al. 2014). Donor organizations and companies may overlook this, resulting in a mismatch between policy and farmer strategies. An example was observed in the Mount Kenya area in Central Kenya. This is a very densely populated rural area, where people have to make a living on small, fragmented but fertile land holdings. Considering that the best way to cope with land scarcity is to specialize in the production of valuable crops, an alliance between a vegetable bottling and exporting company, international NGOs and donors launched a programme encouraging local smallholders to take up the production of French beans for export rather than pursuing subsistence farming. Yet smallholders proved reluctant to adopt the crop. Many of them considered that their plots were barely enough to provide their families with their own basic food requirements, and did not want to venture into a commercial scheme that exposed them to market-induced risks. Although this choice did nothing to improve their income, their priority was likely a better judgment than that of well-meaning but locally less well-informed donors, as the scheme proved unprofitable for most of the participants (Wangu et al. 2021). This example underlines the bounded rationality of all stakeholders in such schemes. Farmers may have little knowledge and skills to advance their livelihoods, but donors are limited to approaches that fit their mental schemes revolving around business models and value chains, while it should not come as a surprise that a vegetable export firm thinks only of solutions in terms of exporting vegetables. The lesson to be drawn from this is the key importance of participation: only if and when the target population is actively involved in the design of development initiatives is there a reasonable chance of results matching expectations.

So, inclusive agro business may offer opportunities to better-off smallholders, while doing little for the weaker ones. Where does this leave us with the policy trend of pursuing development objectives beyond business development itself? As noted above, the development paradigm pursued by many donors and governments over the last few decades emphasizes the effectiveness of private sector development and the use of the market mechanism in realizing wider societal goals. Sustainable development goal 2 (zero hunger; or realizing food and nutrition security) presents a suitable example as it is a key priority closely linked to inclusiveness. We have already seen in the maize case of Northern Ghana that positive effects in supplying the cities of Southern Ghana have been realized, but that locally in the maize growing area of the North increased incomes for farmers were not matched by improvements in the local diet. This is because displacement of traditional crops for local consumption led to an overall less nutritious diet dominated by maize. This does not deny that inclusive agro business may have positive effects on food security, through increasing supplies of foods (essentially production) as well as by improving people's access to food the latter usually through raising incomes (Achterbosch et al. 2014; Joosten et al. 2015; Kelly et al. 2015).

There are certainly cases where integration in commercial value chains by means of inclusive business models has improved food security, both in respect of quantity consumed by poor farmers and especially by shortening the period of food insecurity in the agricultural calendar (Kuma et al. 2019; Negash and Swinnen 2013). This includes cases where farmers have adopted cash cropping for distant markets – which can reduce local food availability. A key factor at the level of the farm household appears to be the way in which a cash income is received. A regular flow of income in the rural household proves much more positive for food security than a lump sum at

harvest time. The latter is more likely to be spent on purchase of consumer durables, but also on investment in farming or other kinds of activity (Braun and Kennedy 1986). It appears difficult to save money and food for the lean season, the part of the year when local food supplies run low, in the face of alternative expenditures. But this is not the whole story. Several case studies from countries like Kenya and Uganda reveal that poor households may prioritize other expenditures when income increases - especially education for their children (Minten et al. 2009; Negash and Swinnen 2013). The study on mango growers in Kenya's Makueni county suggests a further nuance: income from mango sales was indeed used to bridge the lean season, but it was not spent on more nutritious foods. Avoiding an empty belly was a priority, but the quality of food is considered less important than ensuring a better future for the kids and other needs. Similar results have been observed elsewhere, and the conclusion matches findings elsewhere when increases in farmer income did not translate into improved food security. The malt barley scheme for beer breweries in Ethiopia mentioned before is a case in point: participants did earn more, but no significant change in their food situation was recorded. Here too, people's priorities appeared different from expectations on the drawing board of policy making (Gebru et al. 2019b; Worku 2019).

All of these findings relate to food and nutrition impacts on smallholder households participating in agro business schemes. But as we have seen, these tend to comprise the better-off part of the rural population. Non-participating households are rarely considered in evaluations of the income and food security effects of inclusive business models. These less fortunate members of the community actually risk being worse off as a result of the interventions. When local farm production is converted to producing cash crops for sale elsewhere, the availability of foods locally may decline. This of course can be compensated by purchasing food from elsewhere, which works fine for those who benefit from commercial farming but not necessarily for others in the locality. When food that used to be produced locally needs to be brought in by traders, prices usually go up in order to cover the costs of logistics. In economic theory this need not happen: when markets function perfectly and sourcing is from the most efficient producers, little needs to change. But in reality, markets are not perfect and scale economies put small and distant markets at a disadvantage, pushing prices up. The diversity of local diets tends to decline because a range of traditional local foods are often not widely commercialized - they do not become part of translocal food flows (Anderman et al. 2015). New types of food may become available, but often these are hyper-processed foods like instant noodles: cheap, tasty, but not nutritious. Moreover, within households, the transformation of smallholder farming along the lines of contract farming can affect family members in different ways, as when a gendered division of labour makes commercial crops part of the domain of men. Women and children can then actually suffer in comparison (Gebru et al. 2019a).

DISCUSSION AND CONCLUSION

Inclusive agro business initiatives have become a popular recipe for rural development by linking small-scale producers to national and international markets. This review in the context of a number of African countries leads to these conclusions.

Positioning smallholders into much wider flows of investment, inputs, knowledge and produce is certainly a much more developmental approach than corporate agro business engaging directly in production and the management of resources like land and water. Even if livelihood results fall short of expectations, small family farms can survive in a way that offers much more in terms of dignity and autonomy than is the case in large-scale plantations. The evidence shows that in many cases – but by no means all – the approach increases farmers' incomes significantly.

That being said, it is now widely recognized that inclusive agro business in poor countries is selective, offering little scope for the poorer part of the rural population. Given the constraints – higher standards of product quality and process performance, necessitating investment and expenditure on certification - it would also be unrealistic to expect otherwise. In particular, those with fewer resources such as land, family labour, knowledge, finance, and so on, are unlikely to meet requirements; increasingly so with population growth leading to steadily smaller, more fragmented farms and encouraging unsustainable practices. The conclusion is that inclusive agro business is a sound strategy for agricultural development, enabling part of the rural population to improve life, but it is not a sufficient approach to combatting poverty. The reality of inclusive agro business stands in marked contrast to the discourse of 'leaving no one behind' proclaimed by the SDG agenda (UN 2015); the very policy framework that is mentioned as underpinning the inclusive business approach. It is far from clear that market forces can be made to work in the interests of the poor; rather, as observed by Blowfeld and Dolan (2014), inclusive business initiatives seek to adapt the poor to the needs of the market. The most needy in an increasingly densely populated countryside have to look for other ways to make a living, either by combining some agricultural activity with other income sources, or by moving out of farming altogether - making more land available for 'professionalising' farmers. A genuinely equitable and sustainable development strategy would therefore complement inclusive business initiatives with policies enabling 'stepping out' farmers to find alternative livelihoods in sectors such as processing and services.

While the record of inclusive business approaches to income generation is mixed, it is quite problematic to use it as a private sector-driven channel to realizing development objectives beyond immediate business results, such as promoting food security. One way to realize food security, increasing the supply of foodstuffs, is complicated here because inclusive agro business usually involves production of agro commodities for distant markets – typically urban areas or the world market. Thus, local food availability in the project area can actually be reduced as a result. This is no problem in functioning and inclusive market economies, but in reality local food availability can suffer a reduction of variety and price increases. There is a conflict of scale and place here: satisfying food requirements at the level of national and world

markets can harm local food security in production areas. Merchandise flows do not necessarily even out. The other way to food security, improving access by means of increasing income, often works for those participating in the scheme but not for others, as discussed. Those excluded from the benefits may also face higher prices.

Inclusive agro business revolves around linking poor rural people to flows of investments, knowledge, goods and people. Such connections are key requirements for improved livelihoods, as increased productivity requires tapping into a wider resource pool than available within a narrow local setting. But connections per se need not be beneficial: it is the terms of inclusion that matter. Understanding these usually requires a wider, more contextual view than is common in designing an inclusive business model. When viewed within the framework of a company's business model or the value chain of a specific commodity, the outcomes of inclusive business initiatives are often quite satisfactory. But it is in the links with its context, the connections with neighbours not involved and indirect effects, that most problems arise. A more comprehensive flows perspective can help to overcome such shortcomings.

EPILOGUE

Aware that they could not rely on the health care system to cushion the COVID-19 pandemic, many African countries took early and drastic actions to control the spread of the virus. This slowed the spread of the disease, but also caused considerable 'collateral damage' in food provisioning and economic life, especially for poor people. Ethiopia attempted to mitigate this by imposing strict rules of social distancing and mobility restrictions, while trying not to disrupt economic activity. This proved difficult to reconcile. Kenva opted for a lockdown and curfew in cities. While reasonably effective in slowing the spread of the virus to especially rural areas, food supply and economic activity suffered considerably in both these and other African countries. Farmers faced difficulty in getting their produce to the market, resulting in food shortages in urban areas. Production, in farming as well as other industries, also suffered from a disruption of import of inputs such as machinery and chemicals, and a drop in world market demand for their products of up to 40 per cent. Many companies (in Kenya over half of small businesses) had to lay off workers, who often had little to fall back on. Governments also suspended or limited public services, especially in rural areas. For instance, in Uganda land registration services have been closed, making it impossible for people to formalize the rights on land. This reportedly led to abuse when local dignitaries in some cases took land that was not rightfully theirs. Women and less powerful groups in particular have suffered as a result.

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6. Land-based investments and the inevitability of increased farmer–Fulani pastoralist conflicts in Northern Ghana

Sebastiaan Soeters, Ruben Weesie and Annelies Zoomers

INTRODUCTION

In the Global South, large-scale investments are currently taking place in irrigation schemes with smallholder engagement as an attempt to push agricultural modernization. Such investments, and stimulating the involvement of the private sector in technology transfer and introducing 'outgrowers' systems¹ allowing for smallholder engagement, are often presented as ways to make a positive contribution to the Sustainable Development Goals, including eradicating poverty (Goal 1), zero hunger (2), decent work and economic growth (8), reduced inequalities (10) and climate action (13). Especially in the African drylands, governments are eager to attract private businesses to come in: private investors are offered concessions for 50–99 years for the realization of irrigated agriculture on plantations and in outgrowers systems. Local farmers are assumed to benefit by getting access to new inputs and technologies, as well as employment and new infrastructure.

Ghana is an example of a country where the government, often supported by donors, is pushing agricultural modernization by enabling private-sector actors (both foreign and local) as key drivers of development. Land concessions required for such agri-businesses are often negotiated through customary authorities, and inject large amounts of money into localized rural systems with low cash bases. Even though that foreign direct investment might contribute to innovation and employment generation, little is known about the broader impact and how effects 'travel' between localities. Interventions that might be beneficial for place or group A can simultaneously have negative implications for other places and groups, whilst also leading to the redistribution of wealth and scarcities between different groups.

In this chapter, we aim to analyze the intended and unintended consequences of agri-business development, by focusing on the impact of a company which started operations in the sub-humid drylands of Northern Ghana around 2012. The company was created in 2011 as a department under Wienco Ghana Ltd to lead the implementation of the Sisili-Kulpawn basin irrigation project. It started operations in February 2012. Since April 2014 it has operated as a company under the name Integrated Water and Agricultural Development Ghana Ltd. (IWAD Gh. Ltd) (https://iwadghana.com/, accessed on April 15, 2020). IWAD, supported by donor money, aims to 'expand

commercial viable irrigation practices in the Sisili-Kulpawn basin through the delivery of high quality irrigation support, new technology development, knowledge transfer, promoting water use efficiency, sustainability and secure farmer revenues for both Smallholders and the Nucleus Estates'. It involves the introduction of an 'ingrowers'² irrigation scheme, and an outgrowers conservation agriculture (CA) scheme, and a nucleus farm (NF), a more 'traditional' modern farming operation. Together, these agricultural 'models' are seen as a way to solve various problems relating to Northern Ghana's development gaps, including youth unemployment and income and food insecurity, whilst also being an important pillar in efforts to strengthen adaptive capacity to climate change amongst Northern Ghanaian communities, with farmers having access to irrigation and being less exposed to immediate climatic shocks, such as rainfall variability.

This chapter, aiming to make a bottom-up assessment of the impacts for local development, will show that IWAD's operations have generated multiple effects going in different, sometimes opposite directions. Irrigated ingrowers farming and outgrowers' CA has indeed offered benefits for some – participating farmers have improved incomes, having more cash to invest in agricultural inputs and pay for agricultural services, such as land preparation by tractors; but it has also greatly altered and congested existing crop calendars, putting pressure on farmer–pastoralist relations in the basin in particular, and resulted in new scarcities, and potential for conflict (also Soeters 2016).

The analysis is based on data collected in the Sisili-Kulpawn basin (see Map 6.1) during two short periods in March and August 2017. As a qualitative study, the fieldwork involved interviews with key stakeholders, including chiefs, farmers, ethnic-Fulani pastoralists, local youth and District Assembly (DA) officials (12 interviews in total). Furthermore, four focus group discussions (FGDs) were conducted, two amongst ethnic-Fulani pastoralists from two different settlements, and two amongst farmer groups from two different communities, both of whom had been engaged by IWAD as part of its operations. The FGDs focused upon the impact of IWAD on livelihoods and decision-making. Farmers were asked, for instance, whether they felt the initiative had been successful, and if so, in what terms. Discussions with farmers also focused on issues with ethnic-Fulani pastoralists, such as whether the frequency of conflicts had increased, and on how incidents of crop damage were settled (and if these had changed, and why?). During the first fieldwork period (March 2017), in addition to holding interviews and organizing FGDs, all Fulani settlements visited were geotagged and included in a map provided by IWAD. The second fieldwork period (August 2017) was used primarily to validate findings amongst participants from both farmer and Fulani groups who had participated during the first fieldwork period.

In short, this chapter aims to unpack wider dynamics resulting from private-sector agricultural modernization efforts, and how the flows of capital, knowledge and ideas supporting such efforts in the context of Northern Ghana may impact upon farmer–Fulani pastoralist relations. After describing the context, we will analyze the direct and indirect consequences of business operations, showing the importance of

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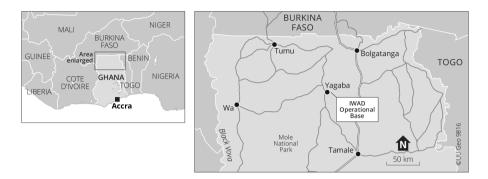
looking at the whole chain of effects, rather than focusing on the direct consequences within the project areas. The chapter shows how business operations like IWAD (and efforts to introduce irrigated farming in dryland areas) produce multiple impacts which are going in different directions. IWAD has served to increase the area under crop cultivation on an inter-seasonal basis, as financial spill-overs allow farmers to purchase larger quantities of agricultural inputs and prepare larger tracts of land. Simultaneously, such direct and indirect cash flows from large-scale agri-business operations also result in larger local herd sizes and an increase in the number of locally owned cattle as cash is exchanged for cattle, since locally cattle represent an important indicator of wealth, as well as serving as a savings account/buffer in the event of emergencies. Larger herd sizes, in turn, attract Fulani pastoralists in search of employment as contracted herders for local cattle owners. The company, whilst contributing to agricultural modernization (that is, expansion of the farming area, productivity gains, employment generation, and so on) has simultaneously generated growing tensions between sedentary and pastoralist livelihoods.

THE RESEARCH AREA AND PROJECT

The Sisili-Kulpawn basin is located in Ghana's Northern Region, in the area known as 'Overseas' on account of being beyond a river which is not passable during the rainy season. In terms of livelihoods, it is not particularly distinct from elsewhere in the Northern Region, with households largely dependent upon rainy-season subsistence farming. Due to a lack of dry-season water sources (dams, dug outs, boreholes), and perhaps as a result of problematic market access, dry-season farming does not appear to be widely practiced, except increasingly along the riverbanks. The region is governed by a complex hierarchy of sub-divisional, divisional and paramount chieftaincies. By and large, chiefs are custodians of the land, and land is largely perceived as belonging to the chief. The chief therefore has the power to sell and/or distribute land as he sees fit. Adjacent to customary governance structures are local government structures. Each community elects a Unit Committee, which supports an elected Assemblyman. The Assemblyman represents the community in the DA. The DA is presided over by a District Chief Executive (DCE) who is appointed by central government. DCEs in turn are accountable to Regional Ministers who, like the DCEs themselves, are appointed by the ruling party.

Yagaba, the operational base of IWAD, is located in the Mamprugu-Moagduri district, within the Sisili-Kulpawn basin. The Mamprugu-Moagduri district has a total population size of 46,894. Average household size in the district is 9.0, compared to a regional average of 7.8 and a national average of 4.5. The 'Incidence of Poverty' in Mamprugu-Moagduri is between 70 and 79.9 per cent (GSS 2015), amongst the highest in Ghana (with a national average of below 25 per cent).

IWAD is a private company³ seeking to reconfigure agriculture within the basin in two distinct ways. It has introduced multiple agricultural and irrigation models upon a 400-hectare land concession, which has been granted to IWAD by the chief of



Map 6.1 West Africa and Northern Ghana, showing the IWAD operational base at Yagaba

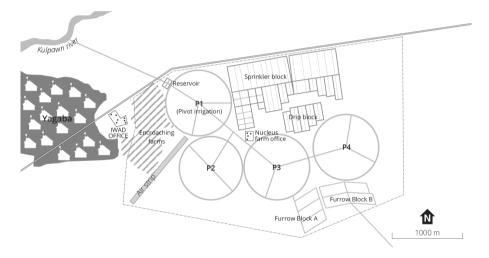
Yagaba. The land concession includes 250 hectares of an NF, and 150 hectares for an irrigated (dry-season) ingrowers scheme (1 hectare each).⁴ The NF employs laborers (mostly women) to sew, weed and sort a variety of crops. Those laborers, who all reside in Yagaba itself, or a nearby community, are paid on a daily basis. Depending on the time of year, a rough estimate of 100 laborers are employed on the NF daily. Within the land concession itself, a number of different crops are being experimented with, including sugar cane, Bambara beans and rice. Beyond the concession land, IWAD is also rolling out an outgrowers system (CA efforts to reach out to smallholder farmers) in nearby communities. This CA program involves establishing demonstration farms in communities, and training interested farmers in improved agricultural techniques for planting, cultivating, water management and use of fertilizer. Payments for inputs and services supplies to CA farmers are recouped retroactively as a portion of harvests. At the time of writing, 21 communities had been engaged, with demonstration farms established. Over half of the communities targeted for CA are within the Mamprugu-Moagduri district, which consists of 20 (large) communities (GSS 2010b). The number of communities engaged in the CA outgrowers scheme is expected to grow. Amongst the outgrowers (distinct from the ingrowers, who take up parcels of land within the concession land), rice production is being promoted by IWAD through CA practices.

The 400-hectare land concession, as is the case of land in Northern Ghana more generally, is controlled by the local chief of Yagaba. He, together with some land-owning families, have the power and the authority to distribute and allocate it as they see fit. Because the chief is the custodian of the land, negotiations regarding the concessions took place between IWAD and the Yagaba chief and a number of land-owning families, and cash transactions for the concessions were also paid to him. The chief also controls the influx of Fulani, allowing them to settle in the area, or indeed expelling them from the area – it is upon his agreement that they are allowed to settle. Because cattle are largely regarded as a wealth indicator, and

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wealth props up customary authority, chiefs in much of Northern Ghana, including Yagaba, are likely to possess large herds of cattle. In this way, they have the most to gain from Fulani who come to settle in the area in search of work as contract herders.

Whilst subsistence farming is at the base of livelihoods in the Mamprugu-Moagduri district, livestock also forms an element of local livelihoods. According to the 2010 Population and Housing Census, there were 34,962 cattle in the district (FAO 2017). The total number of cattle was owned by 1,897 people, with an average of 18 cattle per owner (FAO 2017). The total number of cattle owned per person is high compared to other districts (0.7 cattle per person; FAO 2017), but remains below the average for the Northern Region (25 per owner).⁵ Taking these two calculations, we can infer that an above-average number of households in the Mamprugu-Moagduri district possess cattle (compared to other districts in the Northern Region). Except for some isolated cases, cattle are almost always attended to by Fulani pastoralists who are contracted by cattle owners. All the cattle owners (farmers) spoken to for this study had given their cattle to Fulani to care for.



Map 6.2 The IWAD land concession showing various irrigation schemes

CONTEXT: FARMER-FULANI RELATIONS

The situation in the Sisili-Kulpawn basin cannot be understood without also understanding the close and evolving relationships between farmers and Fulani pastoralists. Within the research area, in addition to different groups of sedentary farmers, the Sisili-Kulpawn landscape is also 'home' of two types of Fulani pastoralists. But they are not mentioned as the beneficiaries of the IWAD program.

Traditionally, since the pre-colonial period, the Fulani have inhabited the Sudano-Sahelian region north of Ghana, practicing a transhumance nomadic live-

stock farming system; during the dry season, Fulani herdsmen migrate into the southern Guinea Savannah belt, including Northern Ghana, in search for pasture and water resources for their livestock. Since the Sahelian droughts of the late 1970s and 1980s, groups of nomadic, transhumant Fulani pastoralists have increasingly started settling on a more permanent basis in the greener southern parts of West Africa, including Ghana (Tonah 2002; Yembilah and Grant 2014). As such, within our research area there are today two broad categories of Fulani pastoralists in Northern Ghana: one group of nomadic pastoralists who migrate from the Sahelian belt during the dry season, and return upon the onset of the rains; and one group of sedentary or semi-nomadic Fulani pastoralists, who have settled on a more permanent basis (and who are often employed by local cattle owners, including chiefs, as contract herders).

This second group come to settle close to existing farming communities (cattle ordinarily graze close by pastures during the day, and are returned to the community in the evening). These semi-settled Fulanis are usually paid in milk, which they are allowed to extract from the cattle owner's cattle, or receive other non-cash benefits, such as manure for compost. Some also have cattle from their own – but capital investments are generally low, due to their insecure situation (not having citizen rights); Fulani are confronted with the continued risk of being forced to move as result of conflicts with local farmers. Whilst some of the cattle to which they tend belong to them, as Tonah (2002) notes that even the richest amongst the Fulani have been given cattle by the indigenous population to manage. Tensions arise easily, also related to the first group: nomadic Fulani who in the context of the rainy season (May–June) and who are usually the owners of their own herds. After the dry season they move to the north.

When influxes of permanent Fulani settlers started in Northern Ghana in the 1970s and 1990s, they were generally allowed to settle on the outskirts of existing farming communities, usually on the condition that they took care of locally owned cattle (Tonah 2003). Once the Fulani households settled, they assisted their family and friends in also settling in the area (Breusers et al. 1998; EPA 2015; Tonah 2006). Cooperation and economic exchanges developed, and Fulani pastoralists utilized their superior herding skills to benefit both groups (Tonah 2002). Local livestock owners contracted the settled Fulani, who took their livestock to more distant pastures for long periods during the dry season. The Fulani obtained milk from the animals, whilst Ghanaian livestock owners focused on farming. Whilst the Fulani were required to take care of Ghanaian livestock in exchange for settlement, they were also able to build up their own herds through interbreeding (Tonah 2006). When larger numbers of Fulani came to settle in Ghana, conflicts became more widespread and broader farmer-Fulani relationships began to deteriorate. Local farmers and stockowners accused Fulani pastoralists of being responsible for the increasing prevalence of cross-border stock rustling, and therefore began retrieving stock placed under Fulani care (Bernardet 1986; Tonah 2000). Numerous conflicts also arose from the alleged destruction of crops by cattle, and the destruction of economic trees, such as Shea and Dawadawa trees. Population growth, deteriorating environmental

conditions and increasingly extensive farming practices intensified competition over natural resources (Folly 1997; Rabbe 1998).

When conflicts continued and intensified, the Ghanaian government developed an increasingly hostile approach towards Fulani pastoralists, resulting in infamous militarized, anti-Fulani operations in the 1980s, such as 'Operation Cowleg' and 'Operation Livestock Solidarity'. During these operations, the military and police were ordered to expel Fulani pastoralists from Ghana, including from Northern Ghana, and seize their cattle.

Despite the aggressive stance towards Fulani pastoralists, the policy of expulsion was difficult to enforce. A sizeable proportion of livestock under Fulani care belonged to Ghanaian stockowners, including chiefs, who continued to employ Fulani to manage their animals. To some extent, the measures were counter-productive, because Fulani pastoralists that herded cattle owned by Ghanaians were allowed to stay. As a result, many Fulani pastoralists sought partnerships with Ghanaian stockowners to secure their stay (Tonah 2006). Some of these stockowners were also local authorities, which made their role highly ambiguous: whilst adopting a strong rhetoric in favour of expelling Fulani they had also incentives to allow their stay.

During the 1990s, large numbers of Fulani pastoralists continued to settle in Northern Ghana. As there were more official restrictions on settlement, they sought agreements with the customary landlords (Tindana) and local chiefs. Permission was given to those who agreed to leave the area in the event that a conflict arose with local farmers. New Fulani settlers also agreed to not use land acquired from the customary authorities for farming until after an initial period of 'acclimatization and good behavior' (interview with IWAD staff 2017). Simultaneously, the cattle numbers in Northern Ghana grew and competition for grazing areas intensified. As a result, anti-Fulani sentiments re-emerged, and Fulani pastoralists came to be widely accused of involvement in cross-border stock rustling, cattle theft, as well as unrelated crimes, such as the rape of women and armed robbery, further deteriorating the farmer–Fulani pastoralist relations (Tonah 2006; interviews with Yagaba youth and Fulani 2017).

CONSEQUENCES AND THE IMPACT OF IWAD ON THE LOCAL LANDSCAPE

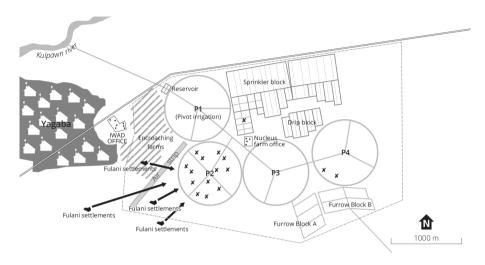
In and Around the Concession

From the moment that the chief of Yagaba granted the land concession to IWAD, a whole series of dynamics appeared, resulting in growing tensions and the erosion of Yagaba's chief's authority, undermining his relationships with the community, but also his power to play a role in conflict resolution between farmers and pastoralists.

Focusing on the direct impacts of IWAD, in spite of having contributed to a number of positive developments in the area, including connection to the electricity grid and the establishment of a new bank, hotel, school and a police station, many people are unhappy and feel that their expectations have not been met; many have not been able to benefit from IWAD operations (IWAD 2017). The chief, by giving away land to IWAD, is blamed by the local youth association, who complain of scarcities of land for farming. Giving away a land concession to the company took place at the cost of possibilities for the local community to expand housing. Tensions even increased when the chief allowed two Fulani settlements to establish within a disputed part of the land concession (see Map 6.3). This area had been reserved for relieving pressure for urban development to the east of a growing Yagaba town (see 'Encroachment farms' in maps 6.2 and 6.3), but had not yet been fenced.

Even though people are reluctant to speak openly regarding their feelings towards IWAD operations, it appears that many are disappointed – promises made by the chief when starting the process did not materialize and outcomes did not meet expectations. The chief is being blamed for not having acted in the interests of the community, and along with the decision to allow Fulani to settle on the land, the number of conflicts has increased (over cattle destroying crops) whereas trust relations between the chief and the farming community have rapidly deteriorated. Given the fact that it was the chief who allowed the Fulano to settle – and most of the cattle that is tended by them is known to belong to him – farmers no longer trust that the chief could play a neutral role in conflict resolution. In cases of conflict between farmers and Fulani pastoralists, he is expected to tend to rule in favor of Fulani. As a consequence, farmers confronted with crop damage caused are no longer reporting to the chief, and thus the traditional mechanism for conflict resolution has broken down. Farmers interviewed for this study, by and large, no longer see the chief as a trusted partner, which is going hand in hand with loss of authority and increasing conflicts.

Because the chief is largely regarded as not acting in the interests of the farmers of Yagaba in the event of cattle destroying crops, violence against the Fulani has intensified. Fulani interviewed for this study noted that violence against them was frequent. Only a few days before the commencement of fieldwork for this study, a Fulani boy had been killed by a number of farmers from a nearby settlement after cattle passed close to a farm of one of the farmers (interviews with Fulani, March 2017). According to IWAD management staff, in the months since the fieldwork period another Fulani herder is said to have been killed in the Mumprugu-Moagduri district, also as a result of an incident relating to crop damage (IWAD 2017). During the second fieldwork period, in August 2017, a number of Fulani settlements which had been visited during the first period had been abandoned, and huts burned. According to people in nearby Fulani settlements, residents had been chased away by farmers, and their huts burned, although it was difficult to verify this account (FGD with farmers 2017). Such incidents are not widely reported and no database is kept on them, including when deaths occur. During certain times of the year, IWAD experiences almost daily incidents of cattle destroying harvests within the land concession, many of them occurring in Pivot 2 (see Map 6.3), with Fulani entering the land concession through the unfenced south-western corner. This not only increases security costs but also undermines profits through the destruction of crops.



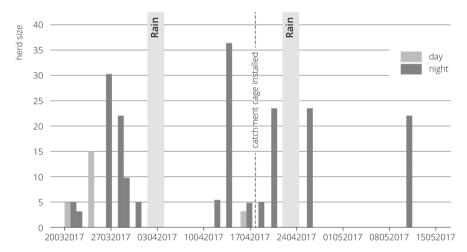
Map 6.3 Mobilities happening in Pivot 2

Another underlying problem, which makes it even more complex, is the fact that when transferring land for the IWAD land concession this was wrongly presented as empty land. At the time of the negotiations (between the chief and the company) the IWAD land concession was said to be unsettled land. According to local Fulani pastoralists, however, this is untrue. Indeed, the land was largely unfarmed and there were no villagers with houses, but there were a number of Fulani settlements located in what is now the land concession (FGD with farmers 2017). Whilst IWAD played no direct role in relocating the Fulani settlements, the chief of Yagaba appears to have forced them to resettled for the purpose of granting the land concession. The Fulani, some of whom had resided within the IWAD landscape for more than two decades, were relocated to a new site several kilometers to the north of Kulpawn River (with the IWAD land concession located to the south of the river). According to the resettled Fulani interviewed for this study, cattle at times cross at the bridge and 'stray' onto the land concession, simply because this is the area where they originally lived and where they will look for water.

At the same time – with IWAD and farmers complaining about cattle destroying crops – Fulani complained that an increasing number of farmers are establishing farms to the north of the Kulpawn River, including a Member of Parliament, leading to an increase in the frequency of incidents of crop damage and conflicts. Fulani state that it is increasingly difficult for them to find pasture and water for their cattle, and attribute much of that to IWAD.

In many of the incidents in which cattle enter the IWAD land concession during the dry season and destroy crops, they are entering from the south. Fulani interviewed noted that this happens as they are trying to access the Kulpawn River to the north of the concession, to allow the cattle to drink. Since Yagaba has expanded eastwards, closing the corridor between the township and the land concession (see 'encroachment farms'), there is no longer a passage for them to access the river. Whilst there are a number of alternative man-made water sources to the south of the concession land during the rainy season (dugouts and dams), during the dry season the Kulpawn River serves as the only source of water, and the places at which cattle can access the water are limited (due to steep banks) to only a few places, including at the IWAD pump house, from which a pipe carries water to the concession land for irrigation. Some of this is supported by an apparent drop-off of incidents in the period immediately after rain (see Figure 6.1 below). Fulani settled to the south of the IWAD land concession regard difficulty in accessing the Kulpawn River to the north of the land concession during the dry season as one of the major negative impacts of IWAD's presence in the region.

IWAD is currently assessing the potential for a cattle route over an airstrip, through the western corridor of the land concession, connecting to the Kulpawn River. It is hoped that such a corridor would not only allow ethnic Fulani to settle to the south and from there access the Kulpawn River, but also prevent the increasing encroachment of the Yagaba settlement eastwards towards the land concession.



Source: IWAD (Integrated Water and Agricultural Development). Security Logbook 2017.

In and Around the Outgrowers Scheme

In addition to ingrowers (and activities taking place on the IWAD concession), and also related to the outgrowers scheme, we see increases in the number of incidents of

Figure 6.1 Incidents of cattle entering IWAD land concessions between March 20, 2017 and May 5, 2017

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conflict (FGD with farmers 2017; GSS 2006; Laube 2007). In contrast to ingrowers operations, in which local farmers claim a land parcel within the land concession for irrigated, dry-season farming purposes, the outgrowers were supported in rainy-season farming and conservation practices, on their own farms, outside of the IWAD land concession.

Also here, outgrowers and Fulani are increasingly in conflict with one another. This is driven largely by the fact that thanks to CA inputs and services, yields and incomes have increased, which in turn has triggered a rapid expansion of the cultivated land.

Through the promotion of rainy-season farming and the introduction of conservation practices, outgrowers are benefitting and use their extra income to expand their land (the size of the area which they put under cultivation depends largely on the success of the previous period; Bhalotra and Heady 2003). In addition, thanks to the development of a new marketplace (7 kilometers to the north) farmers also benefitted in terms of having better marketing outlets, which also brought in more money. Profits were also used to invest in farming larger tracts of land. Increasing numbers of farmers started to intrude on (until then unfarmed) 'bushland'. Importantly, profits from new and improved farming practices are directly invested in cattle. This is done because livestock serve as a good investment, but also as a way of hedging risks across assets. As the number of cattle increases, ethnic Fulani are drawn to the area in search of work as contract herders, often bringing their own livestock, further increasing the number of livestock residing in the area.

These dynamics (an expansion of area under crop cultivation plus an increase in the number of livestock) occur also in the context of shifting land use and changing crop calendars: the introduction of early-yielding maize varieties encouraged farmers to attempt two harvests in one rainy season, starting planting earlier in the rainy season (in fact, at the end of the dry season), and completing their second harvests later in the rainy season. Traditional calendars no longer fit and the scarcity of land is rapidly increasing. Fulani pastoralists recognize that cattle they tend to, or they themselves own, stray onto farms and destroy crops. They stress that pasture is increasingly under pressure, due to the rapid expansion of cultivated land (modern agricultural inputs and practices allow people to farm increasing large areas. The hoe, they note, has been replaced by the tractor, and manual weeding, has been replaced by weedicide). Additionally, water pumps have given a boost to irrigation and riverbanks are permanently cultivated. This has resulted in difficulties in accessing drinking water for cattle.

DISCUSSION AND CONCLUSIONS

Reviewing the IWAD case, it is very clear that private-sector investments (IWAD) have created different types of dilemmas and paradoxes which have undermined the chief's legitimacy (and his ability to settle conflicts). The simultaneous increases in the number of cattle and the expansion of land under crop cultivation – both of which,

as we have argued, are significantly influenced by large foreign investments – are likely to exacerbate conflicts between farmers and Fulani pastoralists as the amount of pasture reduces (in favor of farmland), and the probability of Fulani-controlled cattle destroying harvests therefore increases. This total dynamic is illustrated in Figure 6.2. It presents an evolution of how agricultural investments focused on crop farming unfold in African dryland landscapes.

- In Step 1, prior to the intervention, land is distributed amongst a number of uses, namely farmland, land for pasture and land for settlement. This is not to say that no conflicts occur, but simply to define a point of departure in terms of land use within a landscape.
- In Step 2, a land concession is acquired, and the amount of land available for both crop farming and cattle rearing decreases (directly as a result of the land concession). This, coupled with an increase in the supply of money injected into the local economy through direct cash transfers to chiefs and other high-ranking persons (for the land concession), as well as a series of spill-overs, such as demand for hotels, banks, bars and police stations, provides remunerative opportunities for local residents and pulls in others from elsewhere.
- In Step 3, as new financial injections are re-invested into agriculture, the area of land under crop cultivation increases. Increased profits are, in turn, invested in livestock, which draws ethnic Fulani to the area in search of work as contract herders. The ethnic Fulani often bring their own cattle, further increasing the number of livestock.

Also in Step 3, the size of the land for settlement (housing) expands as more people come to settle in order to exploit new remunerative opportunities.

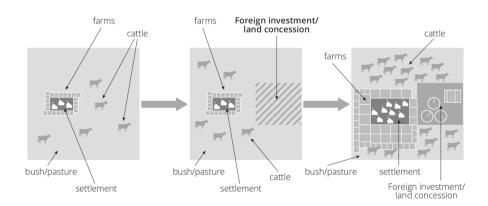


Figure 6.2 Representation of the evolution of dryland landscapes in which agricultural investments have been made

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As this chapter has illustrated, increases in local herd sizes (and Fulani in search of work) not only undermine the legitimacy of local governance institutions, but also undermine agricultural business itself, by increasing security costs (including costs associated with fencing), as well as through the destruction of valuable crops by cattle. Money transferred to chiefs for the transaction, as well as that generated as a result of spill-overs, increases relative wealth. This increases local herd sizes, and people use a part of their newly acquired wealth to purchase cattle. This in turn draws in Fulani in search of employment as contract herders. Farmers engaged as outgrowers, as a result of access to improved agricultural technologies and practices, increase yields and income and expand the area under cultivation on an inter-seasonal basis. The increased competition over natural resource use, coupled with existing momentums of conflict between farmers and Fulani pastoralists, is likely to exacerbate conflict, or increase the risk thereof.

The analysis presented here goes beyond the suggestion that an increase in area under crop cultivation reduces the natural resources available for pastoral livelihoods, such as pasture and/or access to water. Instead, it suggests that agricultural investments that either directly increase money in circulation, or indeed agricultural programming that raises the aggregate incomes, not only initiate an expansion of agricultural (crop-based) activity, but simultaneously increase the number of locally owned cattle. This, in turn, draws in Fulani in search of work as contract herders. In this way, there is an inevitability of heightened competition between sedentary and pastoral livelihoods over natural resources and, in turn, under existing conditions, an increase in the likelihood of conflict. The analysis argues further that these dynamics undermine chiefs as mechanisms for the resolution of conflict, resulting in a greater likelihood that, in particular, violence against Fulani by farmers takes on a vigilante nature (in contrast to conflicts between farmers, for instance, where the chief continues to be impartial and an effective authority for resolving conflict).

Unless Fulani and the cattle they either own themselves, or care for on behalf of local cattle owners, are mainstreamed within large-scale, land-based agricultural investments and operations, there is an inevitability of an increase in farmer–pastoralist conflicts in landscapes where such investments manifest.

In conclusion, we have demonstrated how agricultural, land-based private-sector investments will have multiple ripple effects and spill-offs which are often not taken into account when promoting investments in agricultural modernization. Increases in the area under crop cultivation, either as a result of the acquisition of a land concession or, indirectly, inter-seasonally, as a result of increases in yields of outgrowers, do not occur in a vacuum. Instead, the consequences have spill-overs in terms of heightening competition over natural resources, and ultimately, conflict and/or the risk thereof. Whereas the success of interventions (or businesses) will often be measured in terms of production or income increase and/or expansion of the cultivated areas, the long-term developmental impact will very much depend on other factors: how is the newly acquired money used – does it contribute to farmland replacing bushland or pasture, and does it lead to the purchase of extra cattle? Are investments

a reason for people to leave, or are new residents being drawn in, putting extra pressure on the land – also due to urbanization?

In Yagaba, the locality in which IWAD operates, new dynamics have been triggered with the aim of stimulating agricultural modernization. What emerges is not simply a zero-sum game, where farmer livelihoods win at the expense of Fulani pastoralist livelihoods. The undermining of chiefly authority, mistrust within communities, difficulty on the part of Fulani pastoralists to access pasture and water, increased conflict and violence between farmers and pastoralists and, finally, increased risks to IWAD's operations as cattle enter the land concession and destroy crops, suggest instead that all stakeholders lose, albeit to different degrees. As a result, there is an urgent need to systemize and institutionalize conflict-sensitive agricultural policy and programming by designing and implementing agricultural models that explicitly seek to better synergize sedentary farming and pastoralist livelihoods in Northern Ghana, and elsewhere in West African drylands.

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NOTES

- 1. Outgrowers schemes are systems that link networks of unorganized smallholder farmers with domestic and international buyers. Also known as contract farming, these schemes are assumed to be beneficial for smallholders, providing new opportunities for technology transfer, high-quality inputs and market access.
- 2. Whereas popular outgrowers schemes facilitate the growing of crops on farmers' own farms (often with inputs being provided), ingrowers, in contrast, are allotted land on the land concession, and farm under the large-scale pivot irrigation system.
- 3. Whilst IWAD is a privately owned company, it has received public funding from donors for specific initiatives within the broader aims of both the Government of Ghana and the donor community to modernize agriculture in Northern Ghana.
- 4. The type of irrigation systems include pivot irrigation (four in total, irrigating 65 hectares of land each), furrow irrigation, drip irrigation and a sprinkler block.
- 5. Tamale Metropolitan Area is not included in the calculations. As an urban area (325 persons per square kilometer), the dynamics relating to cattle ownership are significantly different to rural areas, and therefore misrepresent the data.

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Global flows of investments in agriculture and irrigation-related technologies in sub-Saharan Africa

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INTRODUCTION

Agriculture and irrigation development are firmly back on the international development agenda, after a nearly twenty-year hiatus in public investments in the sector (Woodhouse et al., 2016). By the turn of the century, donors and governments in Africa slowly came to realize that the policy of market liberalization and withdrawal of state interventions from agriculture was failing to raise agricultural productivity.¹ In 2003, this realization inspired a new policy initiative under the African Union's New Partnership for Africa's Development (NEPAD), called the Comprehensive African Agriculture Development Programme (CAADP). It urges governments in Africa to strive for an overall target of increasing agricultural output by 6 per cent per year, and commit to an annual allocation of 10 per cent of the national budget to agriculture (de Bont et al., 2019). A key objective of the CAADP – the first 'pillar' out of four – is 'extending the area under sustainable land management and *reliable water control systems*' (NEPAD, 2003; emphasis added), and it is for these type of purposes – introducing irrigation technology and infrastructure – that (more) investments are deemed necessary.

Bilateral and other international funders have also turned their attention to irrigation and agricultural water management more broadly (World Bank, 2006; Giordano et al., 2012). The 2008 World Development Report called for reinvesting in the agricultural sector, notably in sub-Saharan Africa, where agriculture conventionally is perceived as being stagnant over the last few decades (World Bank, 2007).² In the same year, the sharp increase of food prices in 2007–2008 reminded policy makers of the failure to increase productivity of African agriculture during the previous decades, and an alliance of five influential international organizations called for large-scale investments into irrigation (AfDB et al., 2008).³ A common threat in all these new policy initiatives is that they call for public investments, alongside private investments, and more state involvement, alongside agri-business involvement. Donors like the World Bank are refocusing their grant and loan budgets to facilitate state-led investments in agriculture and irrigation, and the CAADP relies on commitments by African governments to increase their expenditure in support of agriculture. These policy initiatives mark a change in a liberalization agenda that has its origin in the 1980s (de Bont et al., 2019), meaning that the state takes up a more active role in the promotion of modern agriculture, in addition to policies that aim to welcome foreign investors to increase foreign direct investment (FDI) in agriculture.

In this new favourable policy and donor-support context, various African governments have responded by drafting new ambitious national policies for irrigation investments; for instance, in Tanzania (2013), Kenya (2015) and Mozambique (2015) (Woodhouse et al., 2016). Many African governments have also responded by increasing their budget allocations and expenditure in agriculture. In 2013, according to a spokesperson of the World Bank, Burkina Faso, Ethiopia, Ghana, Guinea, Malawi, Mali, Niger, and Senegal had already met or were exceeding the CAADP's target of investing 10 per cent of government expenditure in agriculture; and on average, public agriculture expenditures had risen by over 7 per cent per year across Africa, and had more than doubled since the CAADP's launch (World Bank, 2013).

Proponents of agricultural development generally are happy with the new directions in policy and the new flows of investments, especially those who have been critical of liberalization and privatization policies in agriculture. However, the debate on the need to increase both public and private investments in agriculture in Africa is underpinned by a set of persuasive assumptions on the potential of modern technology in agriculture, particularly in relation to irrigation, and they continue to create problems. These assumptions are: (1) increasing the area under reliable irrigation is a necessary condition for increasing agricultural productivity; (2) reliable irrigation and optimal water use can only be achieved through the application of modern irrigation technology; and (3) the application of modern irrigation technology requires large-scale investments – and by implication, a significant increase in the irrigated area can only be achieved by large-scale investments (Woodhouse et al., 2016). These assumptions, we argue in this chapter, limit the analysis of actual dynamics and impacts of flows of investments in agriculture and irrigation on the ground.

They do so in two particular and interrelated ways. First, they help to delineate the question of 'agricultural productivity' in very narrow ways, namely in terms of technology, investment, (unmet) potential and (low) water-use efficiency. In this regard, the central question in today's debate on agriculture is an old and familiar one; it is about whether sub-Saharan Africa can feed itself, and the technical potential of irrigation development in Africa (You et al., 2011; Xie et al., 2014, 2018). The focus characteristically is on the question of 'irrigation potential' in terms of availability of water and soils to grow crops, and the type of technology and amount of investments required to achieve this potential (Beekman et al., 2014). They steer the analytical eye away from a discussion on irrigation development in terms of control, equity, gender, distribution of benefits and 'development as freedom' (Sen, 1999), and fail to conceptualize that irrigation is a deeply human activity embedded in wider networks of local-global exchange, and connected to people's livelihoods and aspirations.

Second, the almost exclusive focus on expert-led technology in agriculture and the associated economic cost-benefit analysis that follows in its trail, based on the assumptions, obscures the fact that farmers themselves already are developing irrigation, and that their initiatives are widespread in sub-Saharan Africa (Woodhouse et al., 2016; de Bont et al., 2019). Their initiatives typically are presented in current policy debates on irrigation development and investments in Africa as 'small', 'informal', 'unplanned', 'inefficient', 'unsustainable' and 'illegal' (Beekman et al., 2014). The initiatives of farmers implicitly are not seen as 'investments', with the effect that the efforts and aspirations of people on the ground are disregarded. Their investments involve, for instance, the organization of family resources, such as land, household labour, exchange networks and savings; they relate to getting access to water, and interacting with forms of (irrigation) technology and markets; and notably, they are embedded in (informal) social life and reflect people's capacities to respond to opportunities in society.

The consequences are manifold. Public and private investments in expert-led irrigation development have a disastrous track record in Africa: irrigation infrastructure projects have often not been completed, or fall into disrepair shortly after construction; farmers' consultation and users' participation has always been poor in the design tradition of irrigation; land rights issues and women's active role in irrigation continue to be underestimated; and definitions of 'value' and 'productive use' in economic feasibility studies of irrigation development generally have led to invidious evaluations of African farming systems (Diemer and Vincent, 1992; Veldwisch, 2015; de Bont, 2018). The risk is that it happens again, with the effect of stagnant or even worsening rural poverty in sub-Saharan Africa (Peters, 2004; Cousins, 2013). In the worst-case scenario, newly constructed, 'modern' irrigation systems are built in areas that were/are previously irrigated under the initiative of farmers, and the new policies, based on modernization arguments and buttressed by increasing investments in agriculture, have the effect that farmers lose access to water and livelihoods, and are left behind.

In the next section, based on field research in Mozambique and Tanzania, we illustrate with examples and data the initiatives of farmers that are happening in irrigation on the ground. Then, we relate these initiatives to new flows of public and private investments and discuss the promotion of so-called 'agricultural growth corridors' in Mozambique and Tanzania. In the concluding section, we discuss the implications of farmers' initiatives for understanding irrigation development and the risks of the new investments policies in agriculture, and what it means for inclusive development and meeting the Sustainable Development Goals.

STUDYING THE RISKS: FIELD RESEARCH IN MOZAMBIQUE AND TANZANIA

This chapter draws on field research from two recent projects (2015–2019) in Mozambique and Tanzania. The objective was to study the scale and dynamic of a process that we conceptualized as African 'farmer-led irrigation development' (see Woodhouse et al., 2016; de Bont et al., 2019; Liebrand, 2019 for the background of these projects). Researchers from these projects pursued in-depth case studies, studied policy papers and did a survey among 18 cases of farmers' irrigation initia-

tives across the two countries. The main argument in this chapter builds on a detailed description of concrete examples of farmers' initiatives in irrigation in Mozambique, and an overview of the survey results, based on one of our publications, de Bont et al. (2019), in which these results have been presented in detail.

EXAMPLES OF FARMERS' INITIATIVES IN IRRIGATION IN MOZAMBIQUE

Research indicates that over 100,000 hectares of irrigated agriculture in Mozambique have recently been initiated by farmers, without much external support (Beekman et al., 2014). This is more than ten times the number in national irrigation statistics. Manica Province is one of the places in Mozambique where such growth can be seen. The methods of irrigation vary from furrow irrigation along the slopes of the mountains to pumped irrigation in the valleys and bucket irrigation along the rivers. The examples that are described below are located in the Godi river catchment in Messica District and the Muenedzi catchment in Macate District (see Figure 7.2), respectively 50 kilometres west and 20 kilometres south of Chimoio, the province's capital.

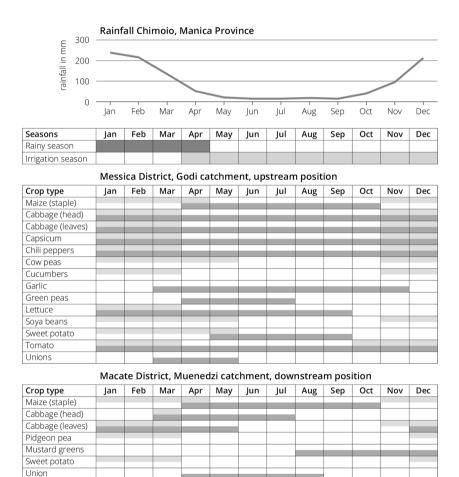
The Initiatives of Members of David's Household

This household consists of David (38 years old), his wife and four children. David's father was born in Báruè District, about 100 kilometres north of Chimoio. He fled to Zimbabwe during the civil war and returned to Mozambique in 1989, looking for suitable land for agriculture. David's father came to know about Messica, an area with *mudimba* (wetlands, water flows due to artesian pressure) through a friend, and he approached the *regulo* (tribal leader) with a request to settle on the land. This request was granted on the condition that existing farming practices were respected by him. At that time, the Godi area was relatively sparsely populated because people had fled from the area during the civil war, to escape the violence.

David's father soon made an agreement in 1995 with a neighbouring farmer, who was digging a furrow at that time by hand, to use water for irrigation. This was an easy solution because the furrow passes his land. Today, the furrow is known in the area as 'canal Richard', after the farmer, Richard, who initiated it and who acts as the *dono de canal* (canal master/owner). The source of the furrow is a *mudimba* wetland. In 2016, twenty years after its original construction, the furrow was supplying irrigation to the plots of eight families in total, including the land of David's father and the land of Richard and his son.

David himself arrived in 2004, got married and started his own household, on the land of his father. He also dug a new furrow, and this made him the *dono de canal* of 'canal David'. Together with his wife, he cultivates about 3 hectares in the Godi catchment, and another 3 hectares in a neighbouring catchment. In the rainy season (December to April), they jointly manage the cultivation of maize for household subsistence. At the same time, and in the dry season (May to October), they cultivate

a number of smaller plots, mainly for commercial purposes: tomatoes, onions, sweet potatoes, capsicum, chili peppers. Both take care of the crops and both practice irrigation. They also regularly hire labourers to do the job, to whom they pay cash. They aim to maximize production in the end of the dry season (September/October) (see Figure 7.1 for an overview of the different seasons and cropping calendars in the area).



rain fed cultivation irrigation secured cultivation

Source: Compilation based on field work; see INAM (2017) for rainfall data.

Figure 7.1 An example of cropping calendars in the research areas

The task of purchasing agricultural inputs, such as seeds, fertilizer, pesticides and irrigation equipment, and dealing with traders at the farm gate is done by David. For instance, in 2015, he purchased three sprinklers and 200 metres of plastic pipe in Zimbabwe (100 metres of 15 mm, 100 metres of 25 mm), spending in total about USD 70. His wife usually travels to the Messica market to sell smaller quantities of produce (two to three boxes of tomatoes). Both are dealing with cash, and they make joint decisions on how to spend it. By 2016, they had started to divert cash away from agriculture for the construction of a second house in Messica town (about 15 kilometres away). For this purpose, David had acquired a DUAT (*Direito do Uso e Aproveitamento da Terra*, a permit that approves the use of land owned by the state) on his name for 1800 square metres, spending about USD 170 on administrative fees.

The Initiatives of Members of Semente's Household

The polygamous household of Semente (48 years old) includes three wives and eleven children. The wives and their children live in separate huts, and Semente stays on average for three consecutive days with one wife. The landholding of the household includes land that Semente inherited from his grandfather, and plots that his three wives inherited from their respective families. In the rainy season, Semente and his wives simultaneously cultivate both a large rain-fed area and individual *machambas* (plots). All household members, including Semente and older children, are expected to provide labour for maize cultivation. In addition, the wives individually cultivate the plots that they inherited, smaller in size and specifically meant to meet the subsistence needs of themselves and their children. These 'individual' *machambas* are located further away from the river, fed by a small stream. The maize is stored in the storage huts of his wives. In case of surplus maize production, Semente sells it at the market in Chimoio, using the cash, or giving some of it to his wives, to meet financial obligations (school fees) and purchase consumption goods (for example, soap).

In the dry season, Semente and his wives jointly cultivate irrigated horticulture crops (cabbage leaves, mustard greens), under management of Semente, on his inherited land, close to the Muenedzi River. In 2012, he took a decision by himself to purchase a small petrol pump (2 horsepower) for irrigation, and he takes care of it in case of breakdown, usually repairing it himself. Both Semente and his wives operate the pump, drawing water from the Muenedzi River. The wives provide labour to the fields and prepare the harvest for sale at the market (packaging of cabbage leaves). Semente organizes the sales of the produce. Usually, he first visits the market with one bag of cabbage leaves, talking to traders. Then, in cases of large quantities, the trader comes to his farm to collect the produce, or he sends the produce by *chapa* (mini-bus) to Chimoio. In cases of small quantities, Semente or one of his children go to the market by cycle. The cash from sales is used according to an informally agreed division among husband and wives. Generally, Semente first deducts cash for inputs (seeds, fertilizer, pesticides, and fuel) for the next irrigation season. Then, the remaining cash is divided among the wives to meet the needs of themselves and

their children (clothes, soap, furniture, oil, cooking essentials). The wives with more children receive a bit more cash.

The Initiatives of Members of Tito's Household

This household consists of Tito (53 years old), his wife and their children. Tito was born in Báruè District, about 100 kilometres north from Chimoio. His father worked at a large farming company at that time, first in Vanduzi District, adjacent to Chimoio, and later in Macate District, in the Muenedzi area. It was then that he decided to settle with his family in the area. In the 1980s, Tito himself also worked for this company, but eventually he joined the army. After serving, in 1994 Tito returned to his father's land and to his wife in the Muenedzi area, and together with his wife he resumed farming.

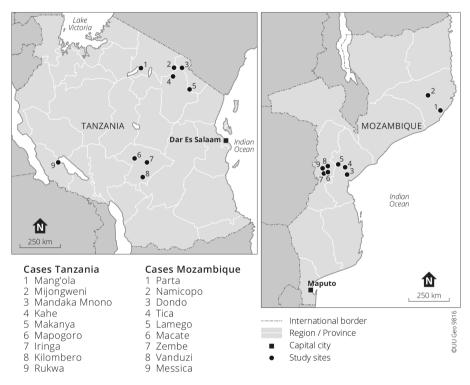
In the rainy season, Tito, his wife and children collaborate on the same plot of land, cultivating staple crops (maize) to meet the subsistence needs of the household. Some specific tasks are taken care of by Tito, such as the ploughing of land with oxen. In the dry season, Tito and his wife cultivate plots separately, adjacent to the Muenedzi River (*matoro* land), using buckets for irrigation. The focus is on vegetable crops: cucumber, carrots and onions. Decisions on plot management lie with the individual. Both have a worker each for their individual plots, and the produce is treated as private yield; it is sold for cash to traders that come to the farm. Usually Tito is dealing with the traders. Tito's wife primarily uses the cash value of her produce for household needs, and if required, Tito does this as well. As Tito explained: 'if she buys something for the house, for instance plates or glasses, I will also buy something, maybe a chair'.⁴

General Trends in the Cases

As can be surmised from the examples above, farmers in the Godi and Muenedzi areas have initiated irrigated agriculture without much of external support in the form of development projects. The examples show that farmers creatively use resources that are available to them (land, household labour and savings) and test methods of irrigation (furrow, pump, and bucket irrigation or hand watering) by means of trial-and-error. In these cases, farmers initiated irrigation with commercial intent, and practiced a shift from subsistence to commercial forms of agriculture (using inputs such as seeds, fertilizer and pesticides). The examples also clearly illustrate that practices of agriculture and irrigation on the ground are embedded in livelihood strategies, translocal exchange networks (traditional authorities, informal institutions of land and water rights, markets), and patterns of mobility (cross-border migration, internal displacement, employment). And perhaps most importantly, the examples illustrate the critical role of the institution of family, inheritance and marriage. Both farm men and farm women are actively involved in irrigation, working with technology, managing water flows, cultivating plots jointly or individually, and dealing with cash; but the (intra-household) distribution of benefits, and the gendered division of rights and responsibilities in agriculture, largely depends on access to land. Hence, under the dominant form of patrilineal customary land tenure, men tend to inherit it and women tend to get access to it as daughters or through marriage – as wives; they acquire both the right and the obligation to cultivate the land (Yngstrom, 2002).

SURVEY OF FARMERS' INITIATIVES IN IRRIGATION IN MOZAMBIQUE AND TANZANIA

The survey results presented here include data from 18 sites in Mozambique and Tanzania (see Figure 7.2), covering in total 2,732 irrigating and non-irrigating house-holds (see de Bont et al., 2019 for a full presentation of the results). A household was defined as a domestic unit in which both consumption and production are organized, including everybody living within the same residence. The purpose of the survey was to obtain a more quantified overview of farmers' irrigation practices and their socio-economic significance for rural households. The key criterion for site selection was that a farmer's initiative was evident in the design, purpose and management of



Source: de Bont et al., 2019, p.118.

Figure 7.2 Overview of case-study sites in Mozambique and Tanzania

irrigation – even though some sort of input or external assistance might have taken place in the past or has followed a farmer's own initiative (for example, approaching government agencies). The selected sites included cases where irrigation was developed by farmers during colonial times, others where farmers have renewed or extended irrigation abandoned by colonial settlers, others where technology had been copied from nearby government schemes, and yet others where farmers have obtained small motor pumps to start irrigation in new areas. The sites studied included a range of irrigation methods (furrow, pump, or bucket irrigation, wetland management), and a variety of crops (paddy rice, maize, horticulture). The survey used random sampling of a target of 150 households in each site, based on household lists obtained from the administrative authorities. Sampling was modified to ensure a minimum of 50 of either irrigating or non-irrigating households in the sample at every site. Table 7.1 presents a summary overview of the survey's results.

The data clearly reveal the scale of African farmer-led irrigation development. Individual areas of irrigating households may be small – on average one to two hectares, typically less than two in Mozambique, and less than one in Tanzania – but taken together, they form a large aggregated irrigated area. The data confirm the commercial nature of farmers' initiatives. Gross values of crop sales by households with irrigation are on average higher than those of households without irrigation, by a factor of 13 (Mozambique) and 5 (Tanzania); and crop sales constitute at least half of the household cash income for irrigating households, suggesting that irrigation-based sales are key to irrigating farmers' livelihood strategies and aspirations.

The data also show that farmers' initiatives in irrigation rely on translocal exchange networks, such as the labour market and supply chains of agricultural inputs. A substantial part of irrigating households is hiring agricultural labour, on average 48 per cent in Mozambique and 73 per cent in Tanzania. Irrigating households are also more likely to use improved seeds, fertilizer and pesticides, compared to non-irrigating households, as indicated by the average intensification index (see Table 7.1). These numbers confirm that farm households, based on their own initiative in irrigation, are practicing a shift from subsistence to commercial forms of agriculture, at least those with access to water. It means, we argue, that farmer-led irrigation development can be conceived as a process of bottom-up agricultural modernization; that is, more intensive land and water use, increased use of agricultural inputs such as seeds, fertilizer and pesticides, and market-oriented production (see de Bont et al., 2019 for elaboration of this argument).

GLOBAL INVESTMENTS IN AGRICULTURE AND IRRIGATION TECHNOLOGY AND THE PRODUCTION OF SCARCITY

In spite of the apparent scale of farmer-led irrigation development in both Mozambique and Tanzania, and the process of bottom-up agricultural modernization that it entails, the initiatives of farmers and their investments continue to be overlooked in both

				house	household (mean)	per irrigating household	usehold	sales per household per	usehold per	irrigating	index of households*	mseholds*
								•		0		
							(mean)	- 1	year (mean)	households		
									4	hiring labour		
	Total	Non-	Irrigating	-non-	Irrigating	ha	%	Non-	Irrigating	%	-non-	Irrigating
	ini	irrigating		irrigating				irrigating			irrigating	
Mozambique	1372	574	798	2.53	3.68	1.81	49	51.9	703.8	48	0.11	0.93
Dondo	120	72	48	1.35	1.86	1.60	86	37.4	249.5	50	0.09	0.52
Lamego	192	61	131	2.79	2.74	1.07	39	18.0	99.1	41	0.09	0.23
Macate	197	86	111	2.86	4.42	2.15	49	114.8	6.976.9	64	0.11	0.73
Messica	245	94	151	3.98	5.69	2.92	51	48.1	1240.0	42	0.23	1.27
Namicopo	43	21	22	1.48	1.32	0.82	62	1.7	187.2	18	0.08	0.81
Parta	100	39	61	1.21	1.73	0.71	41	53.2	186.0	30	0.00	0.00
Tica	136	73	63	2.10	2.87	1.44	50	94.1	1254.0	54	0.13	1.12
Vanduzi	159	53	106	2.74	3.22	1.84	57	21.7	1049.5	60	0.12	1.95
Zembe	180	75	105	2.54	4.61	1.95	42	19.5	635.3	50	0.06	1.17
Tanzania	1361	445	916	0.69	1.35	1.19	88	161.2	884.0	73	0.75	1.51
Iringa	151	54	76	0.76	0.82	0.82	100	33.9	634.1	50	0.06	0.81
Kahe	150	62	88	0.78	1.52	1.31	86	36.3	635.3	69	0.63	1.15
Kilombero	152	75	LL	0.71	1.08	0.84	78	350.6	937.9	69	1.39	2.32
Makanya	149	25	124	0.47	2.06	2.02	98	9.9	370.5	77	0.60	0.83
Mandaka Mnono	152	43	109	0.32	1.26	0.92	73	18.4	739.9	85	1.19	2.20
Mang`ola	150	30	120	0.00	0.71	0.71	100	0.0	1180.2	70	0.00	2.13
Mapogoro	153	34	119	0.54	1.62	1.26	78	9.4	1237.0	82	0.35	1.17
Mijongweni	153	48	105	0.20	1.21	1.15	95	0.7	541.4	LL	1.49	2.30
Rukwa	151	74	77	1.52	1.87	1.60	86	539.9	1920.1	65	0.52	0.75

Survey results on farmer-led irrigation development in Mozambique and Tanzania Table 7.1

Global flows of investments 99

international donor and national policy discussions. Sadly, this is not simply a matter of ignorance among donors, engineers and agricultural policy makers. The neglect of 'small farmers' lies at the heart of the agricultural modernization narrative in Africa and has always characterized development agendas across Africa (Bergius et al., 2018; de Bont et al., 2019). In order to create 'development', based on the US development trajectory, this narrative depicts that agriculture needs to become more land- and labour-efficient, and rural populations need to be liberated from hard agricultural labour and poverty, and freed up for other endeavours. Aligned with the three assumptions that underpin the promotion of irrigation technology in Africa, as discussed above, two specific ideas form a cornerstone in this modernization story. The first is that African lands contain untapped potential - usually termed 'unused' or 'underutilized' - for large-scale commercial agriculture, because 'African agriculture' supposedly is stagnant, underproductive and a cause of land degradation (Scoones et al., 2014) and a waste of water resources (Beekman et al., 2014). The second is that the application of scientific technology is key to 'unlocking' the untapped potential of Africa. More specifically, in agriculture, the introduction of modern irrigation technology is persistently depicted as the way to increase farm productivity, and as the means through which small farmers can gradually be 'separated' from land and nature. As can be surmised, in this particular modernization narrative, the means required for an agricultural 'take-off' in Africa need thus to be mobilized 'from outside'; that is, expert-led irrigation technology, capital investments.

Recently, the agricultural modernization narrative in Africa has taken shape in the promotion of so-called 'agricultural growth corridors' (Bergius et al., 2018; Kaarhus, 2018). As mentioned earlier, following the dramatic increase in world food prices in 2007–2008, the focus in donor and policy circles in Africa in relation to investments decisively turned to 'land' and 'agriculture', and networks such as the Alliance for a Green Revolution in Africa (AGRA), initiated in 2006 by the United Nations and supported by the Bill and Melinda Gates Foundation, started to look for ways to dramatically 'improve' African agriculture. In these networks, taking inspiration from the concept of 'development corridors' - linking export-driven investments to large transport infrastructure and technology to stimulate development of the 'unused' potential - FDI as well as public investments are consistently presented as essential for agricultural development in Africa, and public-private partnerships ideally are created to enrol different actors at different levels in business, governance and agricultural development. Illustratively, the concept of the 'agricultural growth corridor' itself was first proposed in 2008 by Yara, a Norwegian-based multinational company in fertilizer at a private-sector forum of the UN in New York, linking it to the idea of 'partnerships' and 'value chains' (Kaarhus, 2018). The idea was to promote modernized, commercial agriculture by means of joint efforts of companies and governments, and deal with the challenges associated with the new investments in land and agricultural development in Africa.

Concretely, as a result of interactions among private and public actors at the World Economic Forum in Davos and elsewhere, two agricultural growth corridors were launched in 2009–2010, respectively the Beira Agricultural Growth Corridor

(BAGC) in Mozambique and the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) in Tanzania (Bergius et al., 2018; Kaarhus, 2018). From the start, both the BAGC and SAGCOT have been presented by the governments and donors as leading African examples of an 'investment blueprint', promising high investment possibilities in commercial agriculture based on the notion of 'unused' or 'underutilized' land. When the BAGC was launched, for instance, it outlined highly promising investment possibilities in commercial agriculture in the Beira corridor, with 'over 10 million hectares of arable land available' of which 'less than 3%' was commercially exploited (BAGC, 2012, cited in Kaarhus, 2018: 88). In these models, the role of small farmers in Africa is conceived as limited. The agricultural growth corridors, based on a value-chain approach, aim to incentivize linkages between agribusiness and 'smallholders', predominantly through the establishment of nucleus farms and 'out-grower' schemes. The BAGC, for instance, initially proposed two models for inclusion of small farmers, respectively an 'out-grower' model, with a commercial farm as a hub providing services to farmers, such as irrigation or storehouse facilities; and an 'in-grower' model, with irrigated farm blocks managed by a commercial company in which plots of different sizes could be sub-leased to farmers (BAGC, 2010: 22). As can be surmised, both models essentially are forms of contract farming, referring to pre-agreed supply arrangements between producers and buyers in a value chain. In these models, farmers who interact with large-scale commercial farms are conceived as 'advanced farmers', and the rest - those who are unable to make the switch from subsistence to commercial farming - are expected to eventually migrate out of agricultural production, allowing for larger productive units and agribusiness to provide food (Bergius et al., 2018).

To date, both the BAGC and SAGCOT are characterized by a lack of fulfilment of promises. Much of the land in the corridors is already used, especially the more fertile parts, and hence, in practice, it is difficult for the government, in spite of the legal opportunities in the land laws of Mozambique and Tanzania, to actually grant large concessions of 'unused' land to private investors. Furthermore, future investments in both countries have been characterized by uncertainties. In Mozambique, the BAGC was initially strongly associated with the global 'rushes' to get land in Africa (Kaarhus, 2018), and in Tanzania the SAGCOT has been associated in media and research reports with a potential 'crisis of eviction' (Bergius et al., 2018: 834). And especially in Mozambique, violent clashes in the Beira corridor between Renamo militias and state forces in the period 2013–2016 put off potential investments. Nevertheless, the agricultural growth corridor concept, in spite of its limited 'take-off', continues to inform the discussion on agriculture and the need of foreign investments in both countries - and this has negative consequences for the recognition of farmer-led irrigation development in donor and policy circles, and the type of investments that farmers are making *themselves*.

The risks for farmers become apparent in a translocal perspective. As noted above, the process of 'moving' land to more efficient producers – the idea of 'land mobility' – lies at the heart of the modernization narrative (Bergius et al., 2018). It is depicted as *the* solution for scarcity problems. Hence, the idea is that more efficient use of

land and water resources, by means of *outside* investments, be it public, private or foreign direct investments, will reduce the pressure on these resources and create a possibility to secure prosperity for all (and thus save African farmers from poverty). In practice, however, policies in support of foreign investments in the agricultural growth corridors, including for irrigated farms, tend to achieve exactly the opposite: they help resourceful actors in producing new patterns of scarcity and exacerbate existing inequities in access to land and water resources (cf. Becker and Wittmever, 2013). Instead of treating land as a source of livelihood for farmers, rooted in translocal exchange networks (customary rights, local markets) and existing patterns of mobility (of land, water and labour), the policies primarily treat land as a commodity, enabling national and foreign actors to acquire land (rights) as an object of capitalist investment. The result is that land and water resources, used by farmers for their livelihoods and aspirations, can now (also) be claimed by big investment actors. In other words, the policies expose farmers in Mozambique and Tanzania to (legal) claims associated with public and private investments, and in theory they face the risk of losing 'their' access to land and water for irrigation. More specifically, farmers in almost all the investigated sites in Mozambique (except for nos 1 and 2, see Figure 7.2), and half of the sites in Tanzania (nos 6 to 9, see Figure 7.2), in theory, face the risk of competing claims and the uncertainty that the government can qualify their irrigation practices as illegal – as these sites are located in the geographical areas of the BAGC and the SAGCOT respectively.

As noted, it remains to be seen what really happens in practice. The BAGC ended up supporting a limited number of small and medium agribusiness initiatives (Kaarhus, 2018) and for the SAGCOT, it is still early for extensive empirical analyses of the impacts of investments (Bergius et al., 2018), but it is clear that the irrigation initiatives of farmers in Mozambique and Tanzania continue be seen as 'backward' in donor and policy circles, because they are not based on the introduction of irrigation technology *from abroad*. And also, it is clear that the efforts and investments in irrigation that farmers are making themselves go unrecognized as 'investments' because they do not originate from the state or commercial agribusinesses.

DISCUSSION AND CONCLUSION

The above examples and data illustrate that a widespread process of farmer-led irrigation development is taking place in sub-Saharan Africa. In many ways, this can be considered a positive development. The initiatives of farm households in irrigation embody a de-centralized, heterogeneous process of development, characterized by relatively widely distributed benefits, compared to capital-intensive, expert- and state-led irrigation projects. Farmer-led irrigation development can be considered a version of what is today discussed as 'food sovereignty'; that is, the control of food production by farmers, local economies as the basis (rather than globally promoted models of corporate trade and food regimes), family-driving agriculture; the revitalizing of interdependencies between urban consumers and producers; the ability of rural and urban consumers to control their food and nutrition (Patel, 2009). In this regard, the initiatives of the farmers and how they interact with exchange networks such as markets are a subtle reminder that the outcomes of development can only be assessed when paying attention to translocal flows and the wider geographical context.

To iterate, our intention is not to romanticize practices of farmer-led irrigation development. The growth of initiatives of farmers in irrigation means that rates of water use are increasing, and this can create scarcity and trigger exclusion among farmers as well as within farm households. However, our general observation is that the limits of water availability are not yet reached, at least not in most of the places that we investigated. We actually think that bigger areas could be irrigated in Mozambique and Tanzania, but not necessarily by means of large-scale public and private investments, and not by means of large-scale infrastructure development, because of the many farmers that practice irrigation already.

With agriculture and irrigation back on the development agenda, the challenge is thus to take the initiatives of farmers into consideration and steer both public and private investments in the 'right direction'. The dynamics of farmer-led irrigation development clearly diverge from the dominant models of agricultural modernization and irrigation development, as they are currently discussed among donors and governments, and framed in policy documents. Agricultural modernization and irrigation development should not be treated singularly as a field of engineering and economic cost-benefit analysis based on expert-led technology implementation and capital investments; it should be considered in development planning as a practice in which farmers already make investments themselves - investments that are deeply embedded in informal institutions of land access and water rights, dependent on intra-household organization, and connected to local and far-reaching exchange networks and farmers' livelihoods. Ignoring these inherently geographical dynamics in the agricultural investment policies is likely to produce disappointing results. The risk is that farmers are left behind, and that it will be difficult to actually get closer to meeting some of the Sustainable Development Goals, such as those on poverty, hunger and gender equality.

EPILOGUE: COVID-19 AND THE RESILIENCE OF FARMER-LED IRRIGATION DEVELOPMENT

Since the first cases of COVID-19 virus were confirmed in countries in sub-Saharan Africa in March 2020, governments in Africa have responded differently. Some countries, such as Mozambique, imposed a national lockdown, but others, such as Tanzania, did not. At the time of writing this chapter (September 2020), the true impact of COVID-19 is far from clear, but based on early reports from across the region, it is evident that two stories can be told. On the one hand, the number of deaths is much lower than expected in sub-Saharan Africa compared to other regions in the world (Europe, the US). Scientists are struggling to explain why, but the

pandemic appears to have spared Africa so far (Nordling, 2020). On the other hand, state-imposed lockdowns, such as in Mozambique, have made people's already vulnerable livelihoods more precarious, with them having to stay at home and not being allowed go out and raise an income; and in certain areas, the imposition of the lockdown – not COVID-19 per se – directly resulted in situations of food shortage. This happened, for instance, in the resettlement areas of Buzi District, Sofala Province, a district that is located in the BAGC and an area that already was severely hit by Cyclone Idai in March 2019 (Campos, 2020).

Since the outbreak of COVID-19, facing travel restrictions and rules of social distancing in both Africa and Europe, we have not been able to fully assess the situation in our research areas in Mozambique and Tanzania, but there are reasons to believe that food systems based on farmer-led irrigation development are more resilient to crisis than food systems that have the characteristics of globally promoted models of corporate trade and agriculture. As we have described in this chapter, farmer-led irrigation development is characterized by heterogeneity and translocal exchange networks (customary rights, local markets, migrants bringing new irrigation methods to an area), but generally it does not rely on long-distance transport of inputs and outputs; it does not rely on 'external' management (of the government, companies or non-governmental organizations); and it is not dependent on international trade (import and export). Early reports from our partners in the field indicate that farmers have continued cultivating and selling (some of) their crops.

These early reports stand in contrast to the alarming tone of the development debate on agriculture, irrigation and food, and the impact of COVID-19. Notably, the 2020 Global Food Policy Report, published by the International Food Policy Research Institute (IFPRI), was written before the outbreak of COVID-19, but at its virtual launch event (7 April 2020) an alarming foresight was raised for Africa. At the presentation of the Report, the view was that 'Corona is causing major food systems disruptions', and 'causes systems to collapse' due to 'extreme constraints on key inputs'. The view was also that 'poor people are disproportionally affected', especially women and girls because they make up a substantial portion of agriculture producers, and they tend to be over-represented in informal economic sectors. By and large, this view is probably correct, but it also illustrates the bias and focus in a policy debate in which farmers' initiatives in developing irrigation and translocal food systems continue to be grossly overlooked and underestimated.

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NOTES

- 1. This realization is now perceived as the accepted view in development. A recent assessment has argued, for instance, that the 'reduction of government agricultural programmes in the context of a focus on private sector taking over such activities (...) set back agricultural transformation in Africa about three decades' (AGRA, 2018: 10–11).
- 2. The view that African agriculture is stagnant, undisturbed by 'external' linkages, and that sub-Saharan Africa farmers use few modern inputs, is at best a persistent myth (see, for instance, Christiaensen, 2017; Sheahan and Barrett, 2017).
- 3. These organizations were: the African Development Bank, Food and Agriculture Organization, International Fund for Agricultural Development, International Water Management Institute and World Bank.
- 4. Original quote was already translated in English during field work.

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SUGGESTED FURTHER READING

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8. Land investment flows and translocal development chains of 'impairing destruction'¹

Alberto Alonso-Fradejas

1. INTRODUCTION

Crops like soybean and oil palm and trees like eucalyptus and pine, with newer, ever-growing and flexibly interchangeable uses as carbon sinks and sources of bioenergy and biomaterials, are praised as climate stewards and vehicles of transition to sustainable development amid the convergence of social and ecological crises of our time.² As a result, 'flex crops and commodities complexes' (Borras et al., 2016) consolidate within former strongholds and set off to new territories to take down today's crises. This is largely behind a new land and resource rush since the mid-2000s which is driving major changes in natural resource use, access and control in many parts of the world, with many and diverse implications for society and nature (Franco et al., 2013; Kaag and Zoomers, 2014).

So far there have been two main and broad trajectories of the current global land and resource rush, as Tania Li (2011) explains: when the land/resource has been needed but the people have been not, it has been likely that the latter have been forcefully expelled from the land. But not all the land, water and forest deals which have resulted from the global resource rush have required and/or led to the expulsion of people from the land. Some people have been incorporated into the emerging business or conservation initiatives; for instance, as contract farmers or workers in plantations or nature conservation parks. In addition to understanding who is 'in' and who is 'out' of the land deal-willingly or otherwise-it is also important to examine the 'terms of incorporation' (for example, as contract farmers or workers), which may range from advantageous to adverse (Du Toit, 2004). Whether expelled, threatened with expulsion or incorporated under different terms and conditions, when working people's access to land, forest and water resources change, and when their job opportunities and working conditions, and/or their living landscape and ecosystem are altered, so are their lives and livelihoods in profound, expected and unexpected ways (Zoomers and Otsuki, 2017; Borras et al., 2018). Moreover, in today's increasingly interconnected world, not least through webs of commodity chains like those the flex crops and commodities complexes represent, 'local development opportunities are very much determined by what is happening in other places-sometimes directly, as a result of flows of capital, goods, people and information' (Zoomers and Van Westen 2011, p. 377). Hence, Zoomers and Van Westen argue that 'local development is increasingly played out in a matrix of links that connect people and places with other places and people elsewhere' (2011, p. 379), and thereby that 'rather than producing trans*national* communities and spaces, globalisation is resulting in trans*local* patterns of development' (ibid, p. 377, emphasis in original).

My analysis of the implications of the flex crop-driven land and resource rush in Guatemala during 2005-2014 for jobs, labor regimes and socioecological reproduction more broadly offers various insights on translocal development trajectories in sustainability transitions that may resonate elsewhere in the world.³ Specifically, (sugar) cane and (oil) palm plantations and processing plants spread like wildfire since 2005 in Guatemala and the small Central American country became a leading world producer and exporter of multiple cane and palm commodities (Alonso-Fradejas, 2013). In what follows I first describe the (sugar) cane and (oil) palm fever in Guatemala in the early 21st century. Then I analyze the making of a flex crops development corridor in the Guatemalan northern lowlands region. This is followed by the examination of the translocal development chains that are greased with the land, labor and ecological relations of production in the flex crops development corridor. I conclude with a reflection on the broader implications of the flex crops-led corporate order for socioecological reproduction, climate stewardship and sustainable development, as well as on the political responses that this order has received thus far.

2. A 'GREEN GOLD' PANDEMIC IN GUATEMALA IN THE 21ST CENTURY

In the convergent global crises conjuncture from 2007/8 onward, (sugar) cane and (oil) palm have advanced into two leading global flex crops with multiple and flexibly interchangeable uses for biomaterials, renewable energy, food, feed, fiber, fuel, and so on (Alonso-Fradejas et al., 2016; McKay et al., 2016). The global flex cane and palm complexes hype spread through Guatemala in the form of a green gold fever for cane and palm commodities that quickly became pandemic. Already by 2016 Guatemala was the fourth largest Latin American palm oil producer and the tenth worldwide, as well as the largest palm oil exporter in Latin America and the fifth in the world (USDA, 2016). Also by 2016 Guatemala was the third largest sugar producer in Latin America, after Brazil and Mexico but ahead of Colombia, and the ninth worldwide (ibid.). It was also the second largest sugar exporter in Latin America after Brazil, and the world's fourth (ibid.).

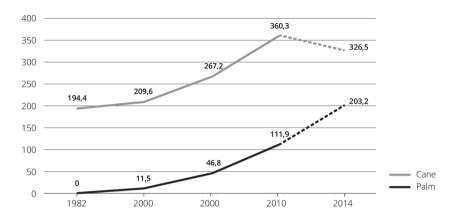
Involvement of transnational financiers and investors notwithstanding, the main vector of this green gold pandemic has been the mighty Guatemalan oligarchy.⁴ Hence, the flex cane and palm complexes are embedded in oligarchic family business groups. These groups include legally independent companies over which one or various (that is, through intermarriage) oligarchic families exert control through the participation of their members in the board of directors of the different companies. The horizontally integrated business group structure allows for a combination of

plantations with financial services, agro-inputs and farm machinery upstream, with processing and consumer goods manufacturing downstream the various cane and palm commodity chains. Not surprisingly this corporate structure is prone to cartelization. In 2012 there were twelve active cane companies in Guatemala owned by ten corporate groups and under control of the same number of oligarchic families. Since 1957 the cane complex has been organized through the Asociación de Azucareros de Guatemala (Guatemalan Sugar Producers Association, ASAZGUA). This is part of the Cámara del Agro (Chamber of Agriculture, CAMAGRO), which is in turn a member of the powerful trade and political organization of the Guatemalan oligarchy: the Coordinating Committee of Financial, Industrial, Commercial and Agricultural Chambers (CACIF). Conversely five oligarchic family business groups, one of which also owns a major cane company, controlled the six palm companies active in the country by 2014. One of them was originally established in 2008 by U.S. biodiesel producer Green Earth Fuels. But Green Earth Fuels withdrew in 2011 and Guatemalan palm company Naturaceites took over its mill and plantations (Alonso-Fradejas, 2013). Since 2008 palm companies have also been organized as a business cartel through the Gremial de Palmicultores de Guatemala (Guatemalan Palm Growers Guild, GREPALMA).⁵ GREPALMA is part of the Chamber of Industry, and like ASAZGUA it is also member of CAMAGRO and CACIF.

As a result of their economic weight and political influence cane and palm companies have gathered much support from some social organizations and (trans) national non-governmental organizations, private Guatemalan universities, mass media outlets and state actors. In 2008 the Government of Guatemala claimed that 1,101,604 hectares (or 57 percent of the country's farmland) were suitable for cane and palm cultivation. By 2014 the area under cane and palm was already 592,612 hectares. But whereas in 2014 cane cultivation figures already amounted to 84 percent of the total suitable land targeted by the government, palm cultivation only amounted to 28 percent. Put simply, there was still a large potential for palm plantations to expand. Figure 8.1 shortly shows how whereas cane plantations increased by 3,163 hectares/year on average in 1982–2005, they grew in 6,586 hectares/year in 2006-2014 (despite a downfall in 2010-2014). The case of palm is even more extreme. Whereas palm plantations increased by 2,036 hectares/year on average in 1982-2005, they did so by 17,370 hectares/year in 2006-2014. This means cane and palm plantations in 2006–2014 expanded at a yearly pace that is two- and eight-fold greater, respectively, than in 1982–2005.

3. THE RISE OF A FLEX CROPS DEVELOPMENT CORRIDOR IN THE GUATEMALAN NORTHERN LOWLANDS

National trends notwithstanding, it is in the northern lowlands region that new flex cane and especially palm complexes have burgeoned. Depicted in Map 8.1, this region includes almost half of the country's territory and is mainly inhabited by



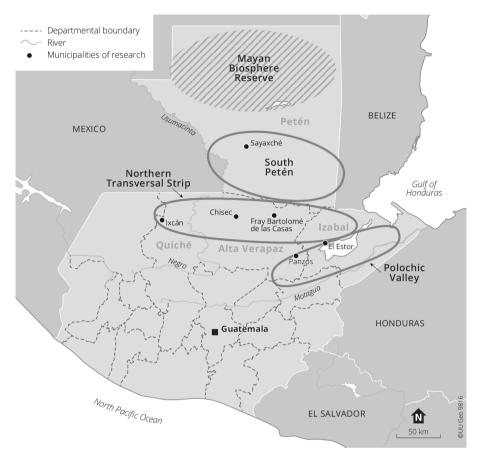
Source: Author elaboration from: i) 1982, 2000, 2005, and 2010 national land use maps (IGN 1983, MAGA 2001, 2006, and 2014), and; ii) 2014 National Agriculture Survey (INE 2014). Striped 2010-2014 trend lines show 2014 figures are from a different, less accurate-yet-offcial source.

Figure 8.1 Land under cane and palm cultivation in Guatemala, 1982–2014

the Maya-Q'eqchi' indigenous peoples. The 1.6 million-hectare Mayan Biosphere Reserve in this region marks the agrarian frontier for thousands of (Maya-Q'eqchi') shifting cultivators, a few owners of traditional haciendas and ranches, and a bunch of cane and palm companies from 2005 onward. The latter have been expanding in the South Petén, Northern Transversal Strip and Polochic sub-regions in the northern lowlands.⁶

Therefore the northern lowlands have witnessed the rise of a vibrant flex crops 'development corridor'. Zoomers and Van Westen understand 'development corridors as the *materialisation* and *institutionalisation* of development along certain routes as the consequence of repeated (on a regular basis) mobility of people, goods, capital or information' (2011, p. 381, emphasis added). On one hand, the flex crops development corridor *materialized* landscape-wise: 56,522 hectares of land turned into palm plantations in the northern lowlands only between 2005 and 2010. The Chabil Utzaj cane company in the Polochic Valley sub-region has controlled 5,400 hectares of land since 2005. As a result, land and waterscapes experienced a major restructuring. Table 8.1 shows the outcomes of my geographic information system (GIS) analysis of the direct land-use changes associated with cane expansion in 2000–2010. Specifically, Table 8.1 indicates the different land uses in the year 2000 for the 5,400 and 150,712 new hectares of land under cane plantations by 2010 in the Polochic Valley, cane plantations displaced staple food crops and cattle pastures.

Table 8.2 depicts the direct land-use in the year 2005 for the 56,522 and 65,121 new hectares of land under palm plantations by 2010 in the northern lowlands and the whole of Guatemala, respectively. In both cases palm mainly substituted forest,



Source: Elaboration by Margot Stoete, Utrecht University.

Map 8.1 Guatemala with sub-regions, departments and municipalities of research

staple food crops, pastures and especially scrublands. It is worth mentioning that land officially classified as 'scrubland' in the northern lowlands includes the fallows of (Maya-Q'eqchi') shifting cultivators and the landlords' idle or underused hacienda or ranch land.

The expansion of cane and palm plantations also triggered two indirect land-use changes with important translocal implications. First, displaced cattle ranchers who aimed to remain in business searched for new grazing lands in and beyond the Guatemalan agrarian frontier, including in the Mayan Biosphere Reserve and Nicaragua. Second, through different means I discuss further on, expanding cane and palm plantations constrained the abilities of shifting cultivators to leave land fallow

	Land-use changes through cane expansion	
Land use (2000)	Guatemala in 2000–2010	Northern lowlands (Polochic) in 2005-2010
Forest	1.0%	1.0%
Staple food crops	44.0%	60.0%
Coffee plantations	1.0%	
Cultivated pastures	34.0%	38.0%
Natural grasslands	7.0%	
Wetlands	0.4%	
Scrublands	0.3%	0.4%
Other uses	0.4%	

Table 8.1Land use in 2000 in the land converted to cane plantations between
2000 and 2010

Source: Author elaboration from GIS analysis.

Table 8.2Land use in 2005 in the land converted to palm plantations between
2005 and 2010

	Land-use changes through palm expansion in 2005-2010		
Land use (2005)	Total Guatemala	Northern lowlands research zones	
Forest	22.0%	29.0%	
Staple food crops	13.0%	14.0%	
Mango plantations	1.0%		
Banana plantations	2.0%	1.3%	
Coffee plantations	0.7%		
Cane plantations	6.0%		
Rubber plantations	0.8%	0.1%	
Teak plantations	0.6%	0.7%	
Cultivated pastures	17.0%	12.0%	
Natural grasslands	8.0%	8.0%	
Wetlands	1.3%	1.0%	
Scrubland	27.0%	34.0%	

Source: Author elaboration from GIS analysis.

and the possibilities for the landless to farm the land leased from (underutilized) large estates.

On the other hand, the institutionalization of a flex crops development corridor reshaped the policy structure behind the necessary general conditions of cane and palm farming and processing in the northern lowlands.⁷ Particularly the Guatemalan government's 2005–2015 and 2012–2021 National Competitiveness Agendas, as well as its Territorial Development Plans and General Policy Framework for the Promotion of Private Investment in Rural Territories, all include the infrastructure development mega-projects that the flex crops development corridor requires. Additionally cane and palm companies benefit from a variety of subsidies and tax incentives and exemptions. These include: first, the Value Added Tax return for exporters in force since 1992; second, the benefits of registering as assembly/

manufacturing companies in special economic zones which are otherwise reserved for foreign companies; third, the subsidies included in the 2003 Renewable Energy Projects Development Incentives Law; fourth, the reduction of the Corporate Tax rate from 31 to 25 percent following tax reforms in 2009 and 2012; and fifth, different payments for environmental services, including compliance and voluntary carbon-offset mechanisms.

However, the materialization and institutionalization of a flex crops development corridor in the Guatemalan northern lowlands has gone far beyond the previous landscape and policy changes. It has also deeply restructured human and non-human life in the production areas and beyond. As a first step towards the analysis of these changes, I next discuss the land-control mechanisms, labor regime and social metabolism of the flex cane and palm complexes.

3.1 Land Control Mechanisms by Cane and Palm Companies

Cane and palm companies have been expanding through four main land-control mechanisms. First is the conversion into cane or palm plantations of land they already owned but was either idle or under other land use (e.g. tree plantations). Second are contract-farming arrangements. Third are long-term land leases. And the fourth are land purchases. Among the four of them land purchases have continued to be predominant, followed by long-term land leases.

Land deals carried out by cane and palm companies with non-indigenous owners of haciendas and ranches have fueled reconcentration of landed property into even fewer hands. These are deals to which both parties usually consent. But there have been cases in which members of these traditionally dominant agrarian classes are subject to distressed and even forced sales. These are all cases somehow related to drug-traffickers' money laundering. Additionally, palm companies in particular have fueled land concentration through their land deals with Maya-Q'eqchi' land-owning working people. These have been officially recorded as voluntary market transactions. But rather than taking this at face value it is worth discussing to whom, how, why (and why not) working people sold their land.

The main buyers of these small-scale proprietors' land included in order of relevance land brokers, palm companies, and landless or land-scarce fellow cultivators. Land sales occurred mostly after purchase bids, but the bids were initially often refused by subordinate-class landowners. The main reasons for rejecting a land bid revolved around the Maya-Q'eqchi' people's traditional understanding of land as a means of production, but also as living nature and political territory. Rejecting a bid was and remains dangerous though: my household survey outcomes show that 4 out of 10 land deals involving landed subordinate classes were forced deals. In the best of cases these involved trickery or intimidation. In the worst cases threats were fulfilled and villagers unwilling to sell their land were subject to violence, sometimes deadly.⁸

When the bids succeeded subordinate-class landowners sold land to fellow cultivators and non-fellow village outsiders. In the case of deals with fellow cultivators, 7 percent involved 'purely commercial' voluntary and willful deals, and another 7 percent 'distressed' voluntary-yet-unwilful land sales. The remaining 86 percent were 'moral economy' willful deals. However, as many as 50 percent of the land deals with non-fellow village outsiders were reported as 'forced' land sales. The other 50 percent were reported as 'voluntary-yet-unwilful' deals (39 percent 'distressed' and 11 percent 'exhausted land' sales), which can hardly be considered win-win land market reallocations.

3.2 The Plantation Labor Regime

Labor regimes are the 'specific methods of mobilizing labour and organizing it in production, and their particular social, economic and political conditions' (Bernstein, 1988, pp. 31–32). The expansion of cane and palm companies in the Guatemalan northern lowlands from 2005 onward initially made employment numbers in plantations grow. But these shrunk after the companies achieved world-record productivity gains from 2012 onward.⁹ Higher labor productivity means fewer workers are needed. For instance, the number of cane cutters fell from 65,000 in 1990 to 35,000 in 2012, even though the area under cane cultivation doubled during the same period (ASAZGUA, 2012). Higher labor productivity was the outcome of a corporate labor regime fix that swapped better salaries, and to a lesser extent improved working conditions, for harder, longer and more casual working days. Since mechanization of cane and palm farming tends to be costly, unfeasible, or both, companies have depended on the extension and intensification of the working day to hike labor productivity. Hence, plantation labor productivity increases have been relying on a flexible and piecemeal labor regime.

Despite or rather because of the 2012 plantation labor regime fix, risky and strenuous work on cane and palm plantations can have a serious and sometimes fatal effect on the health of workers—especially when wages are tied to working more and faster.¹⁰ Palm harvesting entails chopping down palm fruit bunches that weigh up to 40 kilograms and letting them free-fall from 15 to 25 meters. Reports of workers hit by falling palm fruit bunches are common. Fruit bunches are then loaded into water-buffalo carts and transported to the roads where trucks heading for the mill await. A truck can carry about 3,000 fruit bunches that need to be uploaded manually from the water-buffalo carts. Bruises and sprains are routine injuries for those charged with this task. In other cases workers are asked to apply between 15 and 20 sacks of fertilizer, each one weighing around 50 kilos. Even the most experienced workers report eye and respiratory disorders and skin rashes following fertilizer application.

In addition to physical exhaustion from lifting heavy weights under demanding tropical conditions marked by heat and humidity there are the risks of cuts from thorny fronds and snakebites while walking around in the underbrush on the palm but also cane plantations. In fact, harsh work characterizes cane harvesting too. 'A worker cutting 6 tonnes of cane a day in a 200-by-6 metre area walks approximately for 4.4 km and is required to make around 66,666 machete hits and body flexions' (Alves, 2006, pp. 94–95). Dehydration-related disorders are also reported

by palm plantation workers though these seem to be less severe than those affecting cane cutters. Initially documented in Nicaragua, a fatal dehydration-related chronic kidney disease ('Mesoamerican nephropathy') is killing cane cutters by the hundreds in Central America (Elinder and Wernerson, 2019).

3.3 The Social Metabolism of Cane and Palm Farming and Processing

Social metabolism refers to 'the manner in which human societies organize their growing exchanges of energy and materials with the environment' (Martínez-Alier et al., 2010, p. 1).¹¹ The transformation of nature into cane and palm commodities requires large amounts of energy and materials from within and outside the agro-ecosystem. The land-use changes associated with a total clearing of land to pave the way for cane and palm plantations involve a major appropriation of environmental resources and services. Cane and palm farming and transformation similarly require extremely large quantities of soil and water nutrients. Hence, in addition to stockpiling those nutrients that exist in a plantation's agroecosystem chemical fertilizers are applied to the soil, while streams are diverted and underground water pumped into cane and palm fields for irrigation.

Additionally the brunt of waste and pollutants generated throughout the process of cane and palm commodity production is transferred at zero cost, and usually with impunity, to the ecosystem and its human and non-human population in the operating areas and beyond. Most often the land-use changes to cane and palm plantations discussed earlier limit the capacity of the (agro)ecosystems to perform as carbon sinks (for example through deforestation and peatland drainage) and leads to higher carbon-dioxide emissions.

Cane and palm farming and processing are also waste- and contaminant-heavy processes. The soil itself serves as a dumping site and among other forms of waste and pollutants it absorbs those resulting from agrochemical input use are striking, according to this research's soil analysis outcomes. Cane leaves and stems and palm fronds are increasingly left in the soil after harvest or pruning for bio-fertilization purposes. But the trade-off is clear: if excessive materials are used as feedstock for off-grid energy production in the cane and palm transformation plants then there is the need to increase the use of external fertilizers in the plantations. Freshwater bodies likewise act as carriers and depositories of waste and pollutants when cane and palm are farmed and processed. Outcomes of water analysis carried out as part of this research in freshwater bodies flowing through plantations and wastewater from palm oil mills clearly show low levels of water oxygen and oxidation-reduction potential and high levels of water PH acidity and temperature.

4. TRANSLOCAL CHAINS OF 'IMPAIRING DESTRUCTION'

The rise of a flex cane and palm complexes' development corridor in the Guatemalan northern lowlands has benefitted mainly the few who have managed to capitalize on land sales or leases and/or to get a relatively stable and remunerative job (for example as non-manual plantation workers or in processing plants). But overall, the expansion of cane and palm companies has had adverse consequences for most of human and non-human nature in the companies' operating areas and beyond. This resonates with Zoomers and Van Westen's explanation about how 'development creates a chain of impacts that will travel in space according to a certain sequence' (2011, p. 383). Hence, they bring into the analysis of translocal development dynamics the notion of '*development chains* to stress the importance of a systems approach, a comprehensive view on the dynamics of development in different fields and localities' (ibid., p. 381, emphasis added).

Indeed, the rise of the flex cane and palm complexes has undermined (self-) employment and ecological and social reproduction regardless of whether the latter is subsistence- or business-oriented. Rather than through the macroeconomic conditions posed by the 'Dutch Disease' and 'Resource Curse' theses,¹² these adverse effects on jobs, labor conditions and socioecological reproduction are best explained by the consideration of cane and palm companies' expansion as a process of 'impairing destruction'. This concept revisits the claim that capitalism is an endless and organic process of 'creative destruction', popularized by Schumpeter. For him capitalism involves an 'evolutionary process [...] that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one' (Schumpeter, 1952 [1943], pp. 82, 83). Hence, my notion of impairing destruction applies to situations in which a new socioecological order destroys the old one at the same time that it constrains or eliminates its very own socioecological conditions of possibility. These are cases in which the efforts that highly predatory capital makes to save itself from itself result in an exclusive, unfair and toxic socioecological order that threatens its own reproduction, let alone the reproduction of alternative life projects.

Particularly, flex crop-led impairing destruction in Guatemala has involved a job-poor, culturally insensitive, toilsome and unpaid labor-based 'productive' model, as well as the manufacturing of environmentally and socially toxic landscapes. These impairing destruction outcomes have been the result of three interlinked translocal chains of impairing destruction that have been greased with the land, labor and ecological relations of production in the flex crops development corridor.

4.1 The Land-and-resource-access-impairing Destruction Chain

Following Ribot and Peluso we can understand land and resource access broadly as the 'ability to benefit' (2003, p. 154) from that land/resource, and 'ability as akin to power' (ibid., p. 155). This perspective is useful to analyze the abilities of different

groups and/or individuals to gain, maintain and control land and resource access. Gaining access concerns 'the more general process by which access is established' (Ribot and Peluso, 2003, p. 159). Access maintenance 'requires [...] expending resources or powers to keep a particular sort of resource access open' (ibid.). And access control involves 'the ability to mediate others' access' (ibid., p. 158).

In the case of the Guatemalan northern lowlands' flex crops development corridor, land-control grabbing by cane and palm companies since 2005 has overlapped with a formerly skewed land-property regime and mushrooming green enclosures to result in soaring land prices. This has adversely affected the abilities to gain (regain and/or expand) access to land and other resources through the market of everyone, including of the cane and palm companies. But working people have been hit the worst and often regardless of whether they were located on the buyer's or the seller's end of the deal. My examination of changes in the land property regime for landowning working families in the northern lowlands during 2010–2014 reveals a two-fold increase in the number of landless households between those years, although the landed households still outnumbered the landless.

Other interesting features stem from land-ownership dynamics following age and class divisions. First, landlessness has grown for all age groups except for the 25 years old and younger. This group includes the third generation of the original beneficiaries of the agrarian colonization of the northern lowlands from the 1960s on, meaning especially that the second generation has been mostly selling land. Second, while rural workers have seen the highest rate of landlessness, this has also affected family farmers and farmers who hire external labor. Paradoxically, whereas landlessness has increased over time for the latter two groups of farmers, it has decreased for the workers. This suggests that proletarianization has proceeded without (complete) land dispossession. And this means that rural workers, including in cane and palm plantations, have been increasingly subsidizing their wages with farming to make ends meet. Moreover, lack of land ownership has not precluded many working families from accessing land on a leasehold basis. Interestingly enough, while soaring land prices have meant higher leasing costs for everyone, two out of ten land leases from and to working families have taken place for free.

On the other hand, land leases and contract-farming arrangements have kept land ownership unchanged. And yet these land-control-grabbing mechanisms by cane and palm companies have compromised everyone's abilities to *maintain and control* land access. Non-indigenous, upper-class cane and palm outgrowers have seen their abilities to maintain and control access to their estates constrained. This is the outcome of an economically adverse incorporation into the flex cane and palm complexes, climate- and human-led crop disruptions, and the costly and lengthy process of recovering soils after decades of intensive cane and palm farming. For subordinate classes, the conversion of haciendas and ranches into intensively cultivated cane and palm plantations has limited the possibilities for the landless and land-scarce to lease land for seasonal farming.

The generalized perception of land scarcity that followed the rise of the flex crops development corridor has triggered two important land and resource governance dynamics among working people in particular. First, villagers have turned to self-regulating land deals in a restrictive fashion. This has especially been the case regarding land deals with non-fellow village outsiders. But land sales and leases have also been banned with fellow (Maya-Q'eqchi') cultivators known to have sold their land previously, even if exceptions have been made in cases of forced and voluntary-yet-unwilful land sales. Second, fearing dispossession, thousands of land-owning working families without official land titles have tried to boost their abilities to maintain and control land access by jumping onto the land-registration bandwagon. Nonetheless, the generalization of individual freehold land title deeds that followed has transformed the formalize land and resource tenure rights, the individual alization of the power to decide on the use and transfer of land property rights has enabled land dispossession through perfectly legal means, including through forced and voluntary-yet-unwilful land sales.

Additionally, individual freehold land ownership has damaged traditional shifting cultivation systems based on the communal government of village land under a farmland–fallows–forest land-use rationale through the imposition of an 'all-in-one' fixed-family-plot logic. As a result many Maya-Q'eqchi' shifting cultivators have been trapped in a knowledge rift between traditional and familiar extensive farming practices and more recent and stranger intensive ones. Analytically, the previous land and resource governance dynamics resonate with Zoomers, Leung and Van Westen's argument about how 'local development is increasingly a matter of dealing with "outsiders", having the capacity to negotiate, being capable of consensus building and forcing outsiders to fulfil promises and expectations' (2016, p. 63).

4.2 The Jobs-and-fair-work-impairing Destruction Chain

As I flagged earlier higher labor productivity means fewer jobs in the flex crop complexes. On top of this, cane and palm are far less labor intensive than the crops commonly farmed by working people. In the Guatemalan northern lowlands cane and palm require just 36 and 52 workdays per hectare/year, respectively, whereas maize, for instance, demands 112 and chili 184 workdays per hectare/year (Dürr, 2015).

Furthermore, the flexible and piecemeal-based labor regime behind the heightened plantation labor productivity has increased the corporate appropriation for free of productive and reproductive labor of the plantation workers' families. On one hand, cane and palm companies appropriate the unpaid 'productive' labor of children and women assisting wage-earning adult men in plantation work. This is nothing new to the sexual and generational divisions of labor in the Guatemalan northern lowlands. But there are meaningful differences with respect to how this used to work under a time-rate wage system. For instance, unpaid family labor would traditionally support wage-earning men to finish their daily job assignments faster so they could dedicate the remaining part of the workday to the family farm. Children's labor would be devoted mainly to 'reproductive' tasks, often including tending an orchard at home.

But in current cane and palm plantation work under piecemeal wage systems for many men unpaid family labor becomes essential to achieve the equivalent of a legal minimum wage. Were it not for the support of their partners and children, plantation wage-workers would have either had to allocate extra time for their duties or hire an assistant. This is why many children quit school during the periods their fathers work for cane and palm companies.

On the other hand, companies can keep piece rates low thanks to the unpaid productive and reproductive labor of women, children and elders in the male adult plantation workers' households. In families whose male adult members migrate for plantation work, or stay but are employed in jobs demanding long working days, adult women have taken over family farming tasks and responsibilities. For many women this means having to extend already long and overloaded working days. In the Polochic research area 'households working in oil palm plantations, and particularly women, have no time for community activities, personal care or resting, even when they desire so, since they prefer saturating their time than abandoning or significantly reducing maize cultivation' (Mingorría et al., 2014, p. 863). Children wake up at 4 a.m. to fetch water and collect firewood so women can prepare coffee and tortillas before men head to the plantation by 5 a.m. And especially when head-of-household women need to take over the family farm work, household elders keep working until their last breath in a diversity of tasks such as tending the home orchard, water and firewood collection, cooking, cleaning, and taking care of children, the sick and the injured.

4.3 The Clean-healthy-and-safe-environment-impairing Destruction Chain

The flex cane and palm complexes produce environmentally and socially toxic landscapes (and waterscapes). On one side, the land-use changes associated with expanding plantations and the hyper-intensive forms of cane and palm farming and processing shape the weather (for example, rain and rainfall), and constrain the abilities of the plantation agroecosystem to renew its stocks of energy and materials (for example, soil nutrients). Hence, cane and palm companies search for ways to increase their resilience to extreme weather events (for example, droughts and floods) and environmental disruption while simultaneously increasing yields and reducing costs so they can stay in business and remain successful. To this end they implement the knowledge fix I noted earlier and adopt soil conservation, biological pest control and other so-called 'sustainable intensification' and 'climate-smart' production practices. Despite and often because of these acclimatization and greening efforts, cane and palm companies trigger a series of environmental cost-shifting relations.¹³

I identify four environmental cost-shifting relations associated with four separate mechanisms of dumping waste and contaminants into the soil. First, aerial spraying of agrochemicals over cane plantations adversely affects people, crops, livestock and forests. Second, the use of glyphosate-based herbicide in plantations negatively impacts the health of workers, villagers and non-human species as a broad-spectrum pesticide. Third, sustainable intensification farming practices, such as biological

pest control and the use of superfluous cane and palm biomass and mill residues for soil fertilization, still involve the transfer of environmental burdens (for example, proliferation of snakes and flies, respectively, which adversely affect people and cattle). Fourth, the costly and lengthy process of recovering the soil's fertility after decades of intensive farming, which for palm plantations includes the uprooting of deep-growing and intertwining palms' roots, often results in exhausted plantations simply left idle.

Additionally, water flowing through plantations and from processing plants filters into underground aquifers and/or is released into rivers and streams unleashing two more environmental cost-shifting relations. The first one concerns the adverse implications on aquatic life and biodiversity. These have been labeled by the United Nations in Guatemala as an 'ecocide' (OHCHR, 2015)¹⁴ and also damage the human use of water for farming, fishing and animal-rearing. The second is the negative implications of polluted water on human health (for example, when drinking or bathing). Herrera and Silva report a higher incidence of gastrointestinal pathologies, hair loss, skin rashes and eye disorders for villagers after land use changed to palm plantations in the northern lowlands (2014, p. 13).

On the other side, cane and palm companies contribute to the making of socially toxic landscapes by means of three severe social cost-shifting relations. First, the adverse effects of cane and palm farming and processing on human health and safety go beyond plantation workers. They are also felt by nearby and sometimes also faraway residents. Some main health issues include the illnesses associated with polluted aquifers, the plague of flies triggered by palm fronds and fruit bunches left to rot in the plantations after the kernel is extracted, and in the case of cane plantations, the aerial spraying of agrochemicals and smoke from burning cane fields during harvest.¹⁵

Second, the flex cane and palm complexes compromise local and national food security. Land-use-change-analysis outcomes show that the land transformed to cane production between 2005 and 2010 in the Polochic area had been used for staple food crops and pastures in 2000. New palm plantations in the whole of the northern lowlands between 2005 and 2010 substituted forest, staple food crops and the shift-ing cultivators' fallows. Food production is also compromised by the pest of flies, plantation agrochemicals and residues spilling over food farms and cattle ranches, and the exhausted plantation soils in which farming is not easy or feasible anymore. Increasingly scarce employment constrains working people's ability to buy increasingly more costly food. And the public–private small-scale palm contract-farming program (PROPALMA) is pumped with national food security funds and framed as a 'pro-poor policy to stop land grabbing'.¹⁶

Third, the head nurse of the government clinic in Panzós (Polochic area) explained in 2009 that 'since the cane company settled in brothels mushroomed and morbidity rates of sexually transmitted diseases skyrocketed [...] we are even witnessing the first HIV cases in the zone affecting migrant plantation-workers and their partners'. Similarly women sex-workers from Fray zone argued that 'before the palm companies came the few existing "bares" [brothels] and "chicas" [women sex-workers] were enough. With palm's arrival business is booming! Not only more bares opened, but also many buses packed with additional chicas arrive every fifteenth of the month when the palm lads get paid'.¹⁷ Indeed nightlife burgeons on pay days, not least with drunken fights and shootings. Alcohol abuse during pay-day celebrations results in or worsens violence against women and children. In the words of a Maya-Q'eqchi' woman from the Polochic area: 'Most of our men working for the cane and the palm companies get drunk every 15th and we receive them at home waiting for "the worst" to happen.'¹⁸

5. CONCLUSION

Seeing development outcomes 'as the sum of development chains affecting different fields and different locations simultaneously' (Zoomers and Van Westen, 2011, p. 383), it is clear that the recent rise of a flex crops corridor in the Guatemalan northern lowlands has resulted in exclusive, job-poor and environmentally unsustainable translocal development. This has not only left behind the majority of the local residents, turning a deaf ear to the 2030 Agenda for Sustainable Development's pledge to 'leave no one behind'. It has eroded also the ecological base, socioeconomic fabric and institutions that enable more equitable and environmentally sound life projects to blossom.

However, this does not mean that everyone in the northern lowlands or elsewhere where their effects have been felt has willingly consented to the chains of impairing destruction unleashed by the flex crops development corridor. Quite the contrary, cane and palm companies are facing strong opposition too. This is organized around accommodative and more challenging political standpoints, both of which include a heterogenous constituency in terms of class, ethnicity, gender and generational attributes. I discuss the politics behind the rise of the flex cane and palm complexes in detail elsewhere (Alonso-Fradejas, 2015, 2021), including the politics across non-indigenous dominant classes (for example, owners of cane and palm companies vs owners of banana, coffee or cattle haciendas). Suffice to say here that the most adamant challengers of the agro-extractivist purge frame their struggle for an alternative, transformative life project as 'defense of territory'. Aiming to 'move from practices of cultural resistance to the full exercise of collective rights in the living territory',¹⁹ defense of territory brings together two interrelated visions. One is for the self-determined government of land access and control relations, in which land and other natural resources are simultaneously understood as means of production, nature and political territory. The other is a territorialized vision of food sovereignty that aims to democratize, rejuvenate and decrease the social metabolism of the (re) productive activities in the living territory (Alonso-Fradejas, 2015).²⁰

Thus, the rise of the flex crops development corridor has not been a story foretold but rather the product of multiple and dynamic politics. The examined translocal development trajectories following the rise of the flex crops development corridor call into question business-as-usual, non-transformative-of-the-mainstream -socioecological-order climate stewardship and sustainable development initiatives that constrain the reproduction of fairer and more climate-proof, culturally sound and youth-friendly life projects.

EPILOGUE

In Guatemala and elsewhere, flex crop and commodities complexes consolidated, upgraded or emerged amid the convergence of social and ecological crises thriving since 2008. But none of these crises imposed the same type of restrictions on human mobility as the ensuing Covid-19 pandemic crisis. It is too early to discuss in detail the impacts of the pandemic on the flex crop complexes and their reliance on global flows of commodities, finance and knowledge. The pandemic badly hit the most vulnerable in Guatemala and the government declared a state of national calamity in March 2020. But migrant and local workers kept laboring in palm and cane plantations, the processing plants remained operational, and cane and palm commodities continued to circulate in domestic and foreign markets. Hence, beyond pressing public health issues like the high risk of contagion that migrant workers face in the dorms where they are crammed, it is also too early to tell about the ways in which the pandemic shapes the translocal chains of impairing destruction that the flex cane and palm complexes grease.

To this end, however, it is worth bearing in mind four elements. First, the narratives on which the flex cane and palm complexes have relied to legitimize their businesses resonate today stronger than ever before. The climate crisis these corporate complexes assert to fight against is only getting worse. And the economic, energy and food crises to which the cane and palm companies also claim to respond are expected to reach new heights during the pandemic and its aftermath. Second, it is either unfeasible or very costly to re-localize the web of global commodity chains which source from the cane and palm commodities produced in Guatemala (and elsewhere). Unless a biotechnological silver bullet proves it to be otherwise, palm and cane can only grow in the tropics. And a switch to alternative crops is likely to increase land grabbing, deforestation, or both. This is because oil palm and sugarcane are relatively very-high-yielding crops in terms of volume of produce (for example, oil or sugar) per hectare. Third, dissent and protest at the grassroots against the adverse sustainable development effects of the flex cane and palm complexes may constrain the circulation of cane and palm commodities as much as the Covid-19 pandemic restrictions, if not more. For instance, to avoid further reputational risks transnational corporate giant Cargill has put a hold on its sourcing from Guatemalan palm oil until its local suppliers achieve certification by the Roundtable on Sustainable Palm Oil (personal communication with a researcher from IDEAR Guatemala in September 2020; see also ActionAid, 2020, p. 43). And fourth, a powerful domestic oligarchy owns the flex cane and palm complexes in Guatemala. This buffers them to some extent against relocation elsewhere and ensures them a privileged market access in Guatemala and Central America if the extra-regional exports were to be limited by the pandemic.

NOTES

- 1. This contribution builds to a large extent on work published by the author in Alonso-Fradejas (2020, 2021).
- 2. Overlapping with the global COVID-19 pandemic more recently.
- 3. This is particularly relevant considering the centrality of renewables in the 2015 Paris Climate Agreement, and the 2030 Agenda for Sustainable Development's pledge to 'leave no one behind'.
- 4. Traditionally embodying the country's ruling bloc, this is a very compact and tight-knit group made up of white, European-descendant Guatemalans.
- 5. Despite this label GREPALMA includes only oil palm companies, not independent growers.
- 6. Thus this chapter relies on empirical material gathered in Guatemala and abroad, but especially on that collected through mixed-methods research involving around 700 research subjects in the Guatemalan northern lowlands region. My research methods included: (i) 111 individual and 49 group semi-structured interviews; (ii) participant observation and observed participation in a multitude of everyday and exceptional events; (iii) two waves of gender-differentiated household panel surveys in 2010 and 2014 (n = 586 × 2); (iv) geographic information system analysis of land-use changes; (v) secondary source analysis; (vi) soil analysis; (vii) water analysis; and (viii) two participatory documentary films.
- 7. For changes in the regulatory policy structure see Alonso-Fradejas et al. (2010), Alonso-Fradejas (2015) and Brent et al. (2018).
- 8. In 2014 alone 814 attacks were 'directed at human rights defenders who work in the main problems affecting the country's human rights, such as those dedicated to defending the rights of indigenous peoples, territory, land, and environment' (IACHR, 2015, 18).
- 9. Achieving 7 palm oil tons/hectare in Guatemala vs the 4 tons/hectare world average (GREPALMA, 2016). And according to the head of human resources of a large Guatemalan cane company, 'the most skilled of our cane cutters can harvest 15 tons of cane a day! These are well above world average figures of 2 or 3 tons' (interview in January 2014).
- 10. In 2015 the United Nations in Guatemala condemned 'the practice of conditioning salaries on reaching productivity goals imposed unilaterally by the [cane and palm] companies. As a result, overtime is not remunerated and workers' physical integrity and health have been affected' (UNHRC, 2015, p. 16).
- 11. This also includes labor dynamics. But considering the centrality of the labor question in sustainable development, and for explanatory purposes, I discuss labor dynamics separately.
- 12. Which discuss the effects of national currency appreciation following increased exports of commodities on the competitiveness of other domestic exports (Auty, 1993).
- 13. Martínez-Alier and O'Connor introduced the notion of 'ecological distribution' to refer to the 'social, spatial and temporal asymmetries or inequalities in the use by humans of environmental resources and services (whether traded or not), for example, in the depletion of natural resources [...] and in the burdens of pollution' (1999, p. 381). Hence, I understand the social relations of contaminants and waste transfer as environmental cost-shifting (distribution) relations.

- 14. In June 2015 millions of fish and other aquatic and amphibious animals floated dead through 150 kilometers of La Pasión River, flowing through northern Guatemala and Mexico. They suffocated due to malathion, a chemical component used in palm oil mill effluent oxidation lagoons, which spilled over into plantation drainages and the river (CMI, 2015).
- Interview with chief physician of the government clinic in Telemán (Polochic area), June 2009.
- 16. Interview with PROPALMA director, September 2009.
- 17. Interview in October 2013. Similar accounts were offered by women sex-workers in Panzós (April 2008), Sayaxché (June 2011) and Chisec (October 2013).
- 18. Group interview in March 2008. Similar issues were reported by women in Ixcán (June 2011), Chisec (December 2009 and June 2011) and Sayaxché (June 2011).
- 19. Statement by an influential Maya-Q'eqchi' ideologue, lawyer and Member of Congress during a workshop in Guatemala City, June 2013.
- 20. The Maya-Q'eqchi' refer to land in Spanish as 'trabajadero' (work-place) and in Q'eqchi' as 'li ch'och' (the Earth). Traditionally, they understand land as a living and life-giving entity that must be cared for and respected by them, Her children, the 'R'al Ch'och' (Children of the Earth). Life, human and otherwise, is guarded by the 'Tzuultaq'as', the Mountain Valley spirits which inhabit the territories where the Maya-Q'eqchi' reside.

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PART III

TRANSLOCAL DEVELOPMENT IN LANDSCAPES OF NATURE CONSERVATION AND WILDLIFE CONSERVATION

9. Global investment flows in land restoration and nature conservation

Marja Spierenburg

INTRODUCTION

The upsurge in investments in land since the beginning of this century, notably in the Global South, has received a lot of attention both in the press and in academia. Much attention has been devoted to investments in agriculture, including crop farming and biofuels (Borras and Franco, 2012). However, investments in land are made for many different purposes, including land in urban areas, land for lifestyle and leisure activities (for example, second houses and golf courses), and also for the purpose of nature conservation and land restoration (Zoomers, 2010). These investments have been dubbed 'green grabbing' by some scholars, in a growing body of critical literature (Corson and MacDonald, 2012; Fairhead et al., 2012). Others, however, present these investments – similar to those made in agricultural production – as win-win scenarios contributing to both nature conservation and (local) economic development (Langholz and Kerley, 2006), mainly through tourism development (Spierenburg and Brooks, 2014).

As wilderness areas are fast becoming a scarce and coveted good (Brockington et al., 2008), various forms of tourism and other ways of economically exploiting nature are being implemented which are altering relations of production in ways we are only beginning to understand (Ferguson 2013; Spierenburg and Brooks 2014). A growing market for tourism – more specifically, wilderness tourism – serves as an important global driver of the exploits, as does the never-ending search for new profitable financial products (Sullivan, 2013; Büscher and Fletcher, 2015). While investments in 'wilderness areas' are not only increasing in the Global South (Kay, 2018), the latter is an important target for investment due to its relatively higher concentration of 'biodiversity hotspots', the presence of characteristic mega-fauna (Brockington et al., 2008), and the availability of cheap conservation labour (Büscher and Fletcher, 2015). It is especially in this area that the 'environmentalists' paradox' becomes visible (Raudsepp-Hearne et al., 2010); that is, human wellbeing in areas with high rates of biodiversity is lower than in areas with degraded ecosystems. While premised on promises to increase human wellbeing, investments in nature conservation are reshaping spaces, creating new forms of enclosure and exclusion, privatizing nature and turning it into a commodity (Zoomers, 2010).

This chapter will discuss some of these trends, and will provide a historical background to them, as these new forms and processes build on earlier ones. To illustrate the impacts of investments in nature conservation, this chapter will briefly discuss the consequences of investments in wildlife ranching, or game farming as it is colloquially known, in South Africa.

NATURE CONSERVATION, DISPOSSESSION AND THE EMERGENCE OF THE CONCEPT OF 'PRISTINE' NATURE

While investments in nature take different forms, such as the trade in carbon dioxide emissions, many are land-based and involve the maintenance or creation of protected areas. These new forms of enclosure build on earlier ones, which have had (sometimes long-lasting) impacts on local perceptions of and responses to nature conservation. In Europe, the process of enclosing the commons, further fuelled by early industrialization processes, resulted in the privatization of nature and wildlife, turning wildlife into 'the King's game' (Runge and Defrancesco, 2006). The establishment of Yellowstone Park in the United States was an important milestone in nature conservation, but also the start of a global process of enclosing 'wilderness' areas and excluding local populations – who often had long histories of co-existence with wildlife. The Yellowstone model – exported and adapted to colonies in Africa and Asia – was based on a separation of humans and nature (Anderson and Grove, 1989).

Much has been written about the displacement and exclusion of local populations by colonial and post-colonial governments in Africa and Asia in the name of nature conservation (Agrawal and Redford, 2009). While European hunters were largely to blame for dwindling wildlife populations, the conservation measures proposed by these 'repentant butchers' (Beinart and Coates, 2002) were mainly directed at local populations. The ensuing 'fortress' conservation strategies had impacts on ideas and images of nature, as well as on those concerning local residents in areas adjacent to protected areas. Fencing nature in built on and further reinforced ideas about 'pristine nature'; that is, nature without people (Anderson and Grove, 1989; Brockington et al., 2008). The displacement of local residents, and their persistent exclusion from natural resource use in protected areas on which they often depended for their livelihood strategies, frequently resulted in negative attitudes towards nature conservation (Hulme and Murphree, 2001). At the same time, the exclusion built on but also further reinforced negative stereotypes about local residents, who were often divided into 'good natives' - those living simple lives 'in harmony' with nature, and 'bad natives' - those with aspirations beyond the simple life, and/or continuing to press for access to the natural resources they were no longer allowed to use (Neumann, 1997).

Early protected areas established in the early 20th century often served to protect trophy animals for hunting – which became ritualized as a 'noble sport' – rather than for consumption or commercial purposes (MacKenzie, 1997). With the introduction of the car, the prospects for tourism increased beyond hunting. Until the 1980s, protected areas were mainly managed by state, and so was tourism in those areas (Van der Duim, 2011). Tourism was identified as a development strategy that could especially help emerging nations in Africa to increase employment opportunities

and gross domestic product, attract foreign capital and promote a modern way of life based on Western values (Scheyvens, 2007). The emphasis was no longer on a small elite interested in trophy hunting, but attempts were made to develop 'mass tourism', where beach holidays and safaris were offered as all-inclusive packages (Van der Duim, 2011). In the late 1980s and early 1990s, both these forms of tourism as well as fortress conservation strategies became increasingly criticized, and more direct linkages between nature conservation and development were promoted.

SUSTAINABLE DEVELOPMENT, WILDERNESS TOURISM AND COMMUNITIES

From the 1980s onwards, attempts to link economic development and poverty alleviation within nature conservation became a dominant trend (Hulme and Murphree, 2001). The emergence of this 'sustainable development discourse', through the 1987 Brundtland Report and the ensuing 1992 Rio Earth Summit, has been extensively analysed and its links to neo-liberalization agendas pointed out numerous times (see, for example, Ferguson 2006). The main vehicles of this approach were Community-Based Natural Resource Management (CBNRM) programmes and People and Parks projects. The idea behind these programmes was to develop strategies for local communities to economically benefit from nature conservation, which would, it was hoped, secure their support for and involvement in conservation efforts. Since the Brundtland Report, nature conservation has increasingly sought salvation in these 'people-centred' approaches (Hulme and Murphree, 2001). Economic benefits were to be derived mainly from tourism – in some cases, hunting tourism – which was believed to create employment possibilities and revenue to be shared, while very little attention was paid to other ways for local residents to generate incomes from nature. This focus resulted in the introduction of private sector partners, as these were considered to be more knowledgeable in managing tourism operations. In the 1990s, a number of studies documented successes of CBNRM programmes outside of national parks in terms of community benefits as well as conservation outcomes (for a more recent overview, see Oldekop et al., 2016), while People and Parks programmes were much more limited in their contribution to local development (Brandon and Wells, 1992).

However, a growing body of critique has demonstrated that community-based approaches to conservation are often deeply problematic (Dressler et al., 2010; Holmes and Cavanagh, 2016). Questions arise whether the dual aims of nature conservation and community development can be fulfilled under a single banner. One argument is that nature conservation objectives become compromised in the process. Other critiques focus on the lack of benefits accruing to local residents, some suggesting that the dominant role assumed by the private sector allows it to gain control over resources hitherto inaccessible to it, at the expense of local residents' rights of access and use (Dzingirai 2003; Brockington et al., 2008). There is now a substantial literature showing how such programmes often end up effectively disenfranchising

local people, who lose control over natural resources while private sector partners involved in these programmes benefit (see, for example, Spierenburg et al., 2006).

MORE OPPORTUNITIES FOR INVESTMENTS IN NATURE

The idea that markets offer the most efficient ways of addressing environmental issues has resulted in many different investment schemes and opportunities. Yet, market failure also has an impact on investment strategies. Especially since the financial crisis in 2008, banks and private investors have been searching for other profitable investment opportunities than the real estate market, resulting in a host of new financial products, such as weather derivatives, catastrophe bonds and commodity index funds – to name but a few (Ouma et al., 2018).

Some financial instruments concern direct investments in land; others have indirect impacts on land use. Carbon emissions trading has been around for almost thirty years (for a discussion of its emergence, see Voß, 2007). Compensation schemes for carbon dioxide emissions include afforestation projects – made familiar through the options that many airlines offer to customers to compensate for the carbon footprint of their flights. The United Nations (UN) initiated a global programme on Reducing Emissions of Deforestation and Forest Degradation (REDD). This was later adapted to REDD+ to reduce some of the perverse incentives – which included, for instance, the payment of subsidies for planting oil palm trees after forests were destroyed to make way for oil palm plantations (Grainger et al., 2009). Through this programme, governments can receive payments for enhanced forest management, which contribute to carbon sequestration. Many of these initiatives take place in the Global South, and governments are supposed to share benefits with communities whose livelihoods depend on the forests, and respect local land tenure. However, many scholars studying the schemes argue that these principles are regularly violated (Corbera and Schroeder, 2011; McDermott et al., 2012; Svarstad and Benjaminsen, 2017). Most of the funding for REDD+, however, comes from donor countries and UN organizations,¹ but some private sector partners are contributing as well. In addition, private sector parties can enter into agreements with governments to operate and manage REDD+ schemes. REDD+ programmes belong to a broader category of interventions referred to as Payments for Ecosystem Services (PES). PES schemes operate under similar conditions as the REDD+ programmes in terms of funding and operations, but extend to conservation issues beyond forest protection, such as fisheries (Bladon et al., 2016). There is a great variety in what benefits of ecosystems are targeted, as well as designs of programmes, but they all hinge on the idea that productive exploitation and extraction are foregone to protect ecosystems, as these fulfil functions and produce services (such as water retention and carbon sequestration) that are important to mankind. An analysis of 40 PES schemes in Latin America reveals that private sector organizations play a major part in these initiatives, sometimes in partnership with government, mainly in operating the schemes (Grima et al., 2016). Similar criticism has been levelled against PES schemes as against the REDD+

schemes. In a review of PES schemes in the Global South, Calvet-Mir et al. (2015) conclude that while PES schemes may be environmentally effective, they are often unfair. Many of the initiatives reviewed have quite negative impacts on the livelihoods of local residents, and little attention is paid in designs to equitable benefit sharing, while local residents often bear the brunt of conservation costs. Büscher and Fletcher (2015) argue that this may be related to the fact that payments for ecosystem services hardly ever surpass the value of the exploitation of nature combined with the externalization of environmental costs. This results in attempts by private sector organizations to capture the benefits of their participation in these schemes to ensure profitability, at the expense of local residents.

Privately owned land is increasingly incorporated into nature conservation as well. Acquisition of land by conservation authorities or environmental non-governmental organizations (NGOs) is one way to accomplish that, but governments and NGOs increasingly rely on voluntary agreements with landowners that respect private property rights. Conservation easements - that is, payments to landowners to compensate for restrictions on production on the land – or tax breaks are popular measures, especially in the United States. In recent years, these policies have also spread to a number of Latin American countries (Fishburn et al., 2009). Without including privately owned land, the increasingly ambitious goals set by, for instance, the Convention on Biological Diversity to substantially increase protected areas to combat biodiversity losses are difficult to meet. In southern Africa, conservation authorities increasingly seek cooperation with private landowners - but also with communities living on communally managed lands - to expand conservation beyond the boundaries of national parks and nature reserves. At the same time, a growing number of landowners and investors seek to benefit from nature-based tourism, and invest in the establishment of private wildlife reserves (Hora et al., 2018).

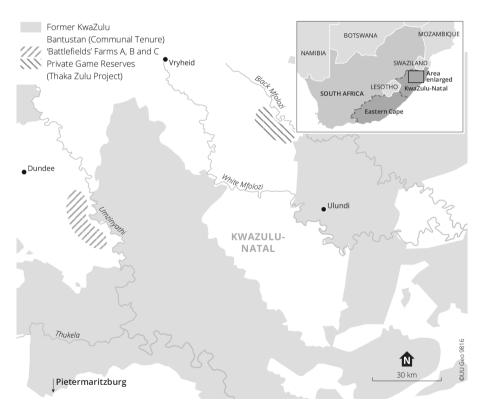
What all of the above-discussed investments in nature have in common is that they depend on an ontological reconfiguration through which the qualities of nature are translated into a financial value that can be traded in specialized markets (Ouma et al., 2018). David Hughes (2005) usefully employs the phrase 'third nature' to capture this kind of reconfiguration, which derives from the Hegelian and later Marxist concept of 'first nature', used to refer to the 'original' physical environment of the earth, untransformed by people. 'Second nature' is then produced through the application of human labour. As Hughes (2005, p. 158) remarks in the context of southern Africa's transfrontier parks, third nature is produced through 'speculation, rather than exploitation'. Brockington et al. (2008, p. 192) further argue that the value of nature as commodities depends on 'sophisticated and deceptive representations of the world', a simulation of the world as coherent and bounded in ways that the real world can never be. This 'hyperreality' - a term borrowed from Baudrillard - obscures the influence of capitalism, even though it involves a (re-)shaping of the boundaries between nature, the market and the state, allowing for the privatization and marketing of nature-society relations. It also impacts directly on how nature and human-nature relations are impacted and enacted: through, for instance, the removal of (certain) residents to 'recreate' 'pristine' nature, the selection and translocation of species

which are popular with tourists, and even the breeding of species with certain traits using advanced technologies such as embryo flushing (Snijders, 2012).

PRIVATE WILDLIFE CONSERVATION AS A HIDDEN GREEN GRAB

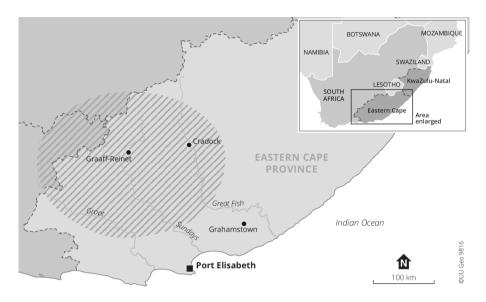
Nevertheless, the increase in private conservation areas is often interpreted as a positive contribution to conservation, through the expansion of (wildlife) habitat. In addition, there is a strong belief that this trend will result in economic development and poverty alleviation in developing countries (Suich et al., 2012). These claims are based on assumptions that private wildlife conservation will indeed generate employment opportunities and, equally, that employment equals development.

In this section I will present the socio-economic impacts of conversions to wildlife ranching, or game farming, in South Africa (see Maps 9.1 and 9.2). While these conversions take place on privately owned lands, they do impact severely on the land rights of and access to natural resources by share-croppers, labour tenants and



Map 9.1 KwaZulu in South Africa

farm labourers affected by private wildlife conservation (Spierenburg and Brooks, 2014). These consequences do not inform policies concerning game farming in South Africa; neither is there much discussion on the impacts that conversions have on increasing land prices, which in turn may have negative impacts on land reform and restitution processes in a country where landownership is still heavily racially skewed (Cousins, 2016).



Map 9.2 Eastern Cape in South Africa

Since the early 1990s, the number of (mainly white-owned) farms shifting from 'conventional' agriculture to wildlife-based production, or game farming as it is colloquially known, has increased significantly in South Africa. Official figures are hard to obtain, as not all changes of land use and ownership are registered with the government, or only with certain departments (Snijders, 2015). Nevertheless, recent estimates cite 9,000 wildlife ranches, but with an expanded area of 17.04 million hectares (Taylor et al., 2016), amounting to more than a quarter of all land available in South Africa for grazing.

The farm conversions take place in a context characterized by apartheid legacies, a de- and re-regulation of the agricultural sector – severe reductions of state support to agriculture, combined with attempts to improve labour legislation – a faltering land reform process, and increasing unemployment levels (Seekings and Nattrass, 2015). Game farming is presented by its proponents as a win-win strategy to foster both nature conservation and development; the latter mainly through an alleged

increase in employment opportunities related to tourism development (Langholz and Kerley, 2006).

A joint research project coordinated by the author² studied the 'win-win' narrative, focusing on the impacts of conversions on one of the most marginalized social groups in South Africa, so-called farm dwellers (see Spierenburg and Brooks 2014). Farm dwellers are those people who, despite large-scale land alienations during colonial and apartheid times, managed to hold on to some land on farms in what was classified as 'White South Africa', albeit in a precarious way, as farm workers or labour or rent-paying tenants (Bundy, 1988). They consider the commercial farms on which they live, but do not own their homes. Providing farm workers and tenants with access to land to supplement meagre incomes was an important strategy deployed by landowners to keep labour expenses in check, and continued despite attempts by apartheid governments to ban the practice (Platzky and Walker, 1985).

Farm dwellers depended – and depend – on informal arrangements with landowners for access to land (Brandt, 2013). In post-apartheid South Africa, the state has attempted to formalize farm dwellers' land rights through, for instance, the Extended Security of Tenure Act (ESTA) of 1997. Several authors, however, have argued that the introduction of the Act, in combination with the withdrawal of financial state support to agriculture, resulted in rather negative impacts on farm dwellers' abilities to access to land on commercial farms (Hall, 2007). At the same time, the heightened exposure of farmers to competition in global markets for agriculture produce, in combination with new labour legislation and land reform, resulted in anxiety among white landowners concerning their abilities to hold on to the land (Fraser, 2007; see also Brandt, 2013). Conversions to wildlife-based production constitute one response by landowners to the changes in the agricultural sector.

Wildlife ranching takes on different forms – hunting (both biltong hunting for the pot by local hunters, and trophy hunting) farms; 'eco'-tourism; and breeding for live sales or venison – which are sometimes combined on the same property, also occasionally in combination with more 'conventional' forms of agriculture. The type of wildlife production as well as the conversion process is influenced by the capital available to game farmers, either from their own sources of income or through enlisting investors (Andrew et al., 2013; Snijders, 2015). Some farmers gradually converted their farms, taking down internal fencing and stocking their land with wildlife. Over time, neighbouring farms were bought and amalgamated to create enough space for wildlife and tourism activities. Some also form conservancies: farmers retain ownership of their individual farms, but fencing between the properties is removed to allow wildlife to roam across vast stretches of land. Other farm owners mobilize investors to expand their properties and invest in wildlife and tourist accommodation. Some wildlife ranches are part of big international corporations controlling multiple properties (Andrew et al., 2013).

Interviews with local farmers and managers in the wildlife industry reveal a number of common motivations for farm conversions. At first sight, most of these focus on economic factors. Many argue that stock farming is no longer profitable due to global competition as well as stock theft. Some contradictions are notable in relation to labour costs. Many game farm owners and managers interviewed argue that new labour legislation is driving up production costs, and that game farming is an attractive alternative as it requires less labour – and hence fewer resident farm-dweller families. At the same time, the same interviewees claim that game farming creates more employment opportunities than conventional farming, and emphasize the contribution of game farming to conservation as well as development. Surveys conducted among managers of eco-tourism lodges seem to support the employment-generation claim (Langholz and Kerley, 2006). However, while Langholz and Kerley (2006) do note that most conversions include the amalgamation of, on average, five properties, they fail to take into account the total number of people employed on all these farms prior to conversion, and only ask the owner/manager – who often owned one of the properties included in the game farm – about the number of people employed pre- and post-conversion.

Labour demands, nevertheless, vary across different modes of game farming. The high-end 'eco-tourism' lodges do generate more employment than 'conventional' farming, especially for women. However, this is a rather fickle industry; during the first years after the 2007/2008 financial crisis, many of the high-end lodges witnessed a drastic reduction in the number of bookings, and many employees – especially in the lower ranks – lost their jobs or saw their working hours and pay significantly reduced. Most of the jobs created are seasonal and temporary, and former farm workers and dwellers often only have access to these insecure jobs in the lower ranks (Andrew et al., 2013). Other forms of game farming result mainly in the shedding, casualization and outsourcing of labour (Brandt and Spierenburg, 2014). In particular, hunting and breeding farms require far less labour. Only a few labourers are retained to maintain water points or as trackers, and some of the women manage to obtain jobs looking after the guests in the hunting lodges. More labour-intensive tasks, such as fencing and the maintenance of fences, are often outsourced (Brandt 2013).

Game farm owners and managers emphasize their love for and contribution to nature conservation. This is often phrased as undoing the damage caused by commercial farming, and 'returning the land to what it was like when our ancestors arrived here', conveniently forgetting the history of the black peasantry displaced by commercial farming. To return the land to its 'original' state, much of the farming infrastructure is removed. Internal fencing is removed, and sheds are taken down. Water points are often maintained, to control the movement of wildlife. Farm dwellers' shelters, especially those scattered across the farms, are either destroyed or turned into accommodation for tourists. The destruction of farming infrastructure results in contention with those farmers who still invest in crop or domestic livestock production, who are angry that infrastructure built with (apartheid) state subsidies is wasted. That same infrastructure used to symbolize the technological advancement of white farmers, which justified their control over vast stretches of land - now it is 'pristine' nature and game farmers' custodianship that is supposed to legitimize their hold on the land (Spierenburg and Brooks, 2014). The claims by game farmers that they contribute both to economic development through the generation of revenues

and employment, as well as to nature conservation, serve to legitimize their claims to land in post-apartheid South Africa.

In the process of converting their farms to game farms, a number of the farmers interviewed had worked hard to minimize the visibility of farm dwellers on their farms. In interviews, these actions were linked to assumptions about the desires of tourists. Much has been written about conservation ideologies and the marketing of images of 'pristine' nature, which is supposed to be devoid of people - except for tourists and their immediate hosts (Brockington et al., 2008). However, fears about land claims through the restitution and redistribution component of South Africa's land reform programme, or the possibilities of farm dwellers claiming parts of farms through ESTA may also have played a role. Hardly any interviewee explicitly linked the moving of farm dwellers to this fear, yet land reform was a topic often and vehemently discussed during interviews and informal conversations. While the property clause in the constitution prevents confiscation without compensation (Ntsebeza, 2011), occasional statements made by politicians in the press about the need to abolish the property clause to satisfy those constituents who are disappointed about the slow pace of land reform (see, for instance, Akinola, 2018) result in a growing anxiety among white landowners about the security of their title deeds. At the same time, however, the South African government is concerned about maintaining a positive investment climate (Seekings and Nattrass, 2015), and secure title deeds are very much part of that. This is especially pertinent in relation to game farming, as many game farms – especially the ones catering to a high-end clientele – are owned by domestic and international investors (Andrew et al., 2013).

Nevertheless, game farmers are keen to move farm dwellers to the edges of the game farms, as the visible presence of farm dwellers clashes with the wilderness experience they would like to offer to clients. Creating 'pristine wildernesses' turns out to be an effective mechanism to undermine farm dwellers' tenure security and undermine the official objectives of ESTA. Intentionally or unintentionally, such movements obstruct possibilities for farm dwellers to lodge tenant claims, as they have to prove that they and their families have been living on the same farm and plot for more than ten years. The common practice of merging several properties into one game farm also allows landowners to evict farm dwellers in accordance with the conditions laid down in ESTA. Visits to the Department of Agriculture district offices in the Eastern Cape revealed that not all of these mergers are registered, and if they are, often both the merged game farm as well as the individual properties still appear in the registers, making it easy for landowners to prove that farm dwellers have moved from one farm to another, and hence no longer qualify for a tenant claim.

Government's responses to the increase in game farming have been diverse and contradictory. To a large extent, the narrative of game farming creating jobs appears to be quite dominant among government officials, both at national and local level. Nevertheless, relations between game farmers, their organizations and the state fluctuate, and game farmers have demonstrated shifts in their allegiance to certain ministries and departments. The position of farm dwellers, however, rarely features in the debates about game farming. State conservation organizations in South Africa, such as SANParks, generally are supportive of the expansion of wildlife habitat through farm conversions, and increasingly seek to cooperate with game ranchers or even devolve conservation tasks to private landowners (Crane, 2006). Some questions, however, have been raised about game farmers' wildlife production strategies. Concerns have been raised about the stocking practices, which focus on those species that are popular with tourists for game viewing and hunting. The intensive breeding of trophy animals raises questions about the 'wildness' of some of the wildlife on private wildlife reserves and game ranches, and concerns about the contamination of wild populations by animals escaping from these areas (Snijders, 2015).

In relation to agriculture and land reform, responses are mixed. The controversy about the record price of one billion South African rand paid to the owners of Mala Mala game farm in Mpumalanga Province by government to buy back the land and return it to communities that had been evicted from it in 1923 sparked fierce debates on the impacts of farm conversions on land reform. The associated increase in the value of land poses difficulties given that land for land reform has to be bought on a willing-seller, willing-buyer basis, for current market values, and in 2016 the Land Claims Court overturned the deal (Ramutsindela et al., 2016). In the Eastern Cape, however, local government officials demonstrated great reluctance to target game farms for land reform (Andrew et al., 2013). In KwaZulu-Natal, game farms have been the subjects of land claims. In some cases claims were settled through the allocation of alternative land, in other cases land was returned, and the land reform beneficiaries were strongly advised to continue with this new form of land use, with little success as it requires quite a lot of running capital (Ngubane and Brooks, 2013).

The Department of Agriculture (DoA) holds an equally ambiguous position. Department staff at both national and local level appear to endorse game farming as a profitable form of land use, and have sometimes sided with game farmers in their critique of stringent environmental legislation. Some DoA officials, however, share the fears expressed by some commercial farmers about negative impacts on national food production and the spreading of diseases and increase of predator populations (Snijders, 2015).

Nonetheless, no policy has curbed game farming as yet, and given that the new President of South Africa, Cyril Ramaphosa, is a wealthy game farmer who has repeatedly promoted the win-win narrative on game farming in the media, claiming that 'Game farmers create jobs' (Fin24, 2014), this is not likely to happen anytime in the near future. The state is benefitting from increasing revenues, and the Department of Environmental Affairs has mainly facilitated the growth of the wildlife industry.

DISCUSSION AND REFLECTIONS

This chapter has discussed various trends in and modes of investments in nature conservation and land restoration. Some of these are more complex and indirect, others involve direct connections with and transformation of land and other natural

resources. However, all are based on the idea that nature can – or needs to – be viewed as a commodity, and that the value of nature can be translated into economic value. These ideas are also valuable in the resurgence of the concept of natural capital, endorsed by Future Earth, the global sustainability sciences network.³ All these approaches share the idea that the market is regarded as the most efficient way of addressing environmental problems, and that it is possible to create win-win solutions. Win-win either in terms of generating financial profits and environmental benefits, or even a 'triple bottom line' that includes benefits to development. In other words, these investments are not only believed to contribute to the so-called earth-system Sustainable Development Goals (SDGs) – in particular SDGs 13, 14 and 15 (climate action, life below sea and life on land) – but often also to reducing poverty and hunger (SDGs 1 and 2), notably through a contribution to SDG 8, decent work and economic growth.

While research on the impacts of complex financial products like weather derivatives and catastrophe bonds is only just starting, research on more direct investments in land for conservation and restoration shows a much more nuanced picture of the contributions to the SDGs. While the investments of tourism companies in CBNRM projects have had positive impacts in some cases, the notion of 'pristine nature' as part of the marketing of nature experiences also results in the further marginalization and exclusion of those residents who are supposed to benefit from these investments (Dressler et al., 2010; Holmes and Cavanagh, 2016). Power relations have an impact on how the latter are integrated in the value chain and networks related to tourism and conservation (cf. Zoomers and Van Westen, 2011), impacting on how benefits, costs and risks are distributed. As in the case of large-scale acquisitions of land for agriculture, acquisitions for nature conservation often come with the promise of job creation, which is supposed to compensate for the loss of access to natural resources. However, as many studies - and the case study on game farming in South Africa as well – have shown, often far fewer employment opportunities are created than needed, and quite often under adverse conditions (Li, 2011).

The contributions to nature conservation are sometimes questionable as well. To attract tourism, the focus is often on what Brockington et al. (2008) have termed 'characteristic mega-fauna'; game farmers in South Africa have also been critiqued for their stocking and breeding practices. The search for profits may trump environmental objectives, as early abuse of the REDD programme showed, requiring significant changes in policies which resulted in the REDD+ programme – which is still shown to have sometimes damaging impacts on local residents, especially in the Global South.

The impacts of investments and nature conservation depend on connections between (domestic and international) investors, and national and local governments as well as global environmental governance, and on global economic relations. The creation of an 'investment friendly climate' may be to the advantage of some, but to the detriment of others. Studies on impacts need to take these translocal development connections into account (Zoomers and Van Westen, 2011). This is especially relevant given the rise of new, complex investment products, the impacts of which have not yet been studied thoroughly. Investors may operate in an increasingly 'borderless' world, moving their money around freely, but the impacts may be felt locally, without investors even being aware of the consequences of their actions.

NOTES

- 1. http://mptf.undp.org/factsheet/fund/CCF00, last consulted on 2019-10-11.
- 2. The project was funded by the Dutch national research foundation NWO-WOTRO, Science for Development (file number W 01.65.306.00), and the South Africa Netherlands Partnership for Alternatives in Development. I would like to thank my fellow project team members Harry Wels, Shirley Brooks and Lungsile Ntsebeza, as well as all the students involved in the project, for their contributions and support.
- 3. See https://futureearth.org/2016/01/14/natural-capital-symposium/, last consulted on December 8, 2019.

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Involuntary resettlement projects as a frontier of sustainable translocal development

Kei Otsuki

INTRODUCTION

According to Cernea and Maldonado (2018: 4), with the continual rise of global investments in new infrastructure building and extractivism, the number of people displaced by the investment projects is expected to increase twofold, from the current 10 million to more than 20 million people per year in this decade (2020–2030). While global goals for sustainability are generally meant to be achieved by 2030, it remains unclear what implications this increasing displacement has for the ideal of global sustainable development in general and for the investment projects in particular, partly underpinned by the global goals themselves.

One of the global goals that has been contributing to the rising trend of displacement is the increase of protected areas to up to 17 per cent of the Earth's terrestrial surface by 2030 (CBD, 2010). Although it is difficult to estimate the scale of displacement induced by the establishment of protected areas worldwide, the so-called "conservation displacement" is increasingly ubiquitous (Agrawal and Redford, 2009; Kabra, 2018). The scholars and activists have argued for avoiding the conservation displacement, and community-based conservation has been popularized. The community-based approach aimed to establish "double sustainability"; that is, sustainability both for the natural environment and for people residing in the protected area in terms of poverty alleviation and local development (Cernea and Schmidt-Soltau, 2006).

However, the community-based conservation as a development model has never replaced displacement. The international community has kept on presenting, revising and implementing guidelines and standards for involuntary resettlement projects, tacitly endorsing displacement (World Bank, 2017; IUCN, 2018). Today, development-induced resettlement projects, including conservation-induced ones, are presented as new opportunities for sustainable development of the protected area *and* the resettlement project area (Vanclay, 2017).¹

Kabra (2018) writes that the "double sustainability" originally envisioned in the community-based conservation now indicates sustainability of the protected area on the one hand and sustainability in the resettlement area on the other. Yet, little has been clarified about what sustainability means for resettled people, people who interact with the new settlers and the surrounding environment in the long term

(Satiroglu and Choi, 2015). The conventional focus has been placed on avoiding impoverishment risks, thereby establishing economic sustainability based on livelihood restoration (Cernea and McDowell, 2000); or social sustainability underpinned by the place-based observation of community rebuilding (Downing, 2002; Milgroom and Ribot, 2019). The wider ripple effects of resettlement projects over the economic, social *and* environmental sustainability in the area in which the projects are embedded or, indeed, the desired double sustainability over the wider landscape, remain unexplored.

This chapter proposes a framework to analyse resettlement projects as a frontier of infrastructure and potentially translocal development whose sustainability implications need to be examined. According to Zoomers and Van Westen (2011: 378), development is essentially "translocal", underpinned by movements of "capital, goods, people and information" between different localities. The movements are difficult to control, but at least they can be understood in terms of their effects for development possibilities in different localities. For example, the investment in protected areas leads to the movement of displaced people, which results in resettlement of the displaced people in new locations inhabited by others. A resettlement then creates a new built environment, embedded in the natural environment, and inevitably affects the context of sustainable development in the wider landscape or even global environment. This means that understanding the effects of investment flows in the form of an emerging frontier of built environment clarifies the relevance of the original intention to establish sustainability in the demarcated protected area.

In what follows, the chapter first reviews the process by which conservation displacement has been discussed in policy and scholarly debates in order to clarify what the focus on translocal development in the resettlement context seeks to address. It then explains the methodology of field research conducted between 2015 and 2019 in the district of Massingir, a part of Limpopo National Park (hereafter, LNP) in southwestern Mozambique. The park administers one of the largest and most protracted conservation-induced resettlement programmes of our time (Lunstrum, 2016). Scholars have focused on spatial and social implications of this programme (Lunstrum, 2014; Massé and Lunstrum, 2016; Milgroom and Ribot, 2019). Little attention has been paid to the resettlement project as a frontier of infrastructures, which incrementally affect sustainability of the LNP itself. The chapter elaborates on experiences of three resettlement projects, and examines their effects on the desired double sustainability or sustainable translocal development.

EXPANSION OF WILDLIFE AND RESETTLEMENT FRONTIERS

Wildlife Frontier and Ecological Corridor

Studies have long problematized conservation displacement due to the establishment of protected areas, drawing from various cases of fortress conservation, which led to the extraction of "humans from nature" (Redford and Sanderson, 2000). More recently, this process of human removal is analysed as an outcome of the arbitrary creation of "new wildlife frontiers" (Massé and Lunstrum, 2016). A "frontier" is a useful concept here, as it is conventionally conceptualized as "the meeting point between savagery and civilization" (Turner, 2008[1893]: 3). New flows of money and expertise have worked to create this frontier in which wildlife is reintroduced as a new commodity to be consumed by civilized, middle-class and elite consumers. In this process, the original inhabitants found in the frontier (often poor, indigenous populations) are excluded from this new civilization.

The process towards establishment of LNP in Mozambique typically represents this new globally articulated commodification of nature and displacement of the original inhabitants of the protected area. Originally a hunting concession known as Coutada 16 established by the Portuguese colonial administration (Lopes José, 2017), LNP was created as a part of the new Great Limpopo Transfrontier Park in 2001, which aimed to become "the globally preferred prime ecotourism" (Great Limpopo Transfrontier Park, 2019). The South African Peace Parks Foundation manage the park, which consists of Kruger National Park of South Africa, Gonarezhou National Park of Zimbabwe, and LNP, with ample financial support from Western European donors (Buscher, 2013).

From its inception in 2001, LNP was expected to follow the example of Kruger; that is, one of the first fortress conservation examples in southern Africa and one of the most developed safari tourist destinations in the world (Carruthers, 1995). The park management promoted the restoration of an ecological corridor for wild-life movements, free from human incursions and international borders, especially between Kruger and LNP. The ecological corridor was the centre of the new wildlife frontier, and it was meant to repopulate the LNP area with wildlife as a tourism resource, as the wildlife in Mozambique was generally decimated during the 20 years of civil wars that ended in 1992. Consequently, inhabitants in this newly designated ecological corridor suddenly started to encounter the wildlife. As human–wildlife conflicts became intense within LNP, the plan of displacement and resettlement of the inhabitants was hastily drawn by the park administration in collaboration with the district government that would receive the displaced people as their citizens outside the park.

From the Ecological Corridor to the Corridor of Displacement

After 2010, the creation of wildlife frontiers and the ecological corridors that induced displacement had become largely justified in the global promotion of biodiversity conservation and sustainability agendas (CBD, 2010; United Nations, 2015). Militarization of conservation became a new method during the 2010s in order to counter poaching, especially in Kruger and LNP, where the recent sharp spike in the price of rhino horns made poaching a lucrative livelihood option for LNP residents (Witter and Satterfield, 2019). The park rangers were armed and encouraged to shoot and kill poachers, who were mostly poor and young LNP residents. The militarization was criticized for intensifying "green violence", which would be counterproductive for the conservation objective as it undermined the local cooperation for conservation (Duffy et al., 2019).

However, the attention to green violence also worked to allow the park administrator and the donors to further legitimate displacement as a solution to the intensifying human–wildlife conflict and violence (Massé, 2016). In LNP, conservation displacement and resettlement of villages located in the ecological corridor started to take place in 2008 on a small scale (with 18 families); and then led to the removal of another 164 families in 2013, and 310 families in 2015. Larger villages of more than 1,000 families are still waiting to be removed at the time of this writing (2020).

This process has shown that the establishment of the ecological corridor due to the wildlife frontier expansion shaped a corridor of displacement of original inhabitants who are now considered to be "in the way of someone else's plans for [wildlife and tourism] development" (Oliver-Smith, 2010: 84). In order to justify the corridor, resettlement plans have been explained to the people to be resettled in consultation meetings. Meanwhile, the actual construction of the resettlement projects outside the park started in the mid-2000s, and the new physical structures – concrete houses and infrastructures – began to shape a new built environment embedded in the surrounding natural and social environments.

Despite the inherent implications of this new built environment along the frontier expansion of infrastructures, the sustainability of resettlement projects has so far received little attention both politically and academically. Generally, when resettlement projects are problematized, the problem is either definitional, technical or procedural. The questions include what "(in)voluntary resettlement" actually means (Schmidt-Soltau and Brockington, 2007; Milgroom and Spierenburg, 2008), or how to improve the existing resettlement guidelines and ensure public consultations, fair compensation and livelihood restorations (Cotula and Vermeulen, 2010; Vanclay, 2017; Cernea and Maldonado, 2018). In other words, resettlement projects remain to be considered as an end of the corridor of displacement, which had been shaped by the global investment flows, instead of the beginning of new lives for those who are displaced and for those who receive the new inhabitants among them. This is why many funding mechanisms and investments also allocate the budgets for resettlement as compensation (whether in cash or kind), rather than new investments themselves.

Resettlement with Development?

Resettlement projects are usually planned according to involuntary-resettlement guidelines, originally set up by the World Bank Group (World Bank, 2004). The guidelines are continually revised and oblige investors to assess their businesses' social and environmental impacts (World Bank, 2017). The guidelines emphasize the importance of public consultations when such impact assessments are conducted. In practice, in these consultations, the quality and quantity of compensation should be agreed to promote "resettlement with development" (Cernea and Maldonado, 2018: 3). Yet, the guidelines largely assume that the displaced people are often subsistence farmers who should be able to restore their livelihoods relatively easily if adequate initial capital and replacement land were provided in addition to basic housing and infrastructure (Koenig, 2001). The non-land-based and potentially translocal livelihoods are not always taken into account as what would constitute the future resettlement with development, including non-farm activities (such as trading, self-employment and natural resource extraction outside farms) and labour migration.

As a result, the grievances inevitably arise from the resettled people who aspire to develop *their* futures in but not confined to resettlement projects, even when the resettlement guidelines are relatively strictly followed and the people have discussed and eventually agreed on the terms of their resettlement (Otsuki et al., 2017). While grievances are discussed in terms of how they need to be *redressed*, the resettlement project managers and researchers seldom discuss them as the indication of potential ways that the displaced and resettled people start trying to sustain and develop their life in their new environment. The lack of attention to the resettlers' own development aspirations and practices consequently undermines their own engagement with sustainable development and is likely to induce unsustainable consequences that affect wider area.

Against this backdrop, the chapter presents a case study of experiences of three resettlement projects established by the LNP administration in the last decade. The case study reconstructs major grievance expressions recounted by the resettled people in order to identify effects of the resettlement experiences over multiple locations and a wider landscape.

METHODOLOGY

The resettlers' grievances that indicated effects of resettlement were collected on different occasions intermittently between 2015 and 2019 in three LNP resettlement projects built in the district of Massingir, Mozambique: Nanguene (18 families, resettled in 2009); Makavene-Tihovene (52 families, resettled in 2013) and Makavene-Banga (113 families, resettled in 2013). Makavene was originally a large village of 165 families within LNP, and it decided to resettle in two different locations in 2013. The locally-based Massingir Platform of Forum of NGOs (non-governmental

organizations), known as PLADISMA – a network of local groups and associations – prepared the initial focus group meetings in 2015 by asking each resettlement village leader to convene, on average, 10 men and 10 women. The discussions produced a wide range of grievances, but they invariably pointed to issues concerning the quality and size of housing, and undelivered promises of drinking water, electricity, and irrigation infrastructures.

In other words, the initial focus group discussions clarified that the grievances were mainly associated with the lack of quality and promised provision of infrastructure. Observing how infrastructures – houses, water boreholes, electricity cables and meters, and water pumps and tubes for irrigation – were provided and became sources of grievances led to a new set of questions about why the resettlement projects invariably had suffered from infrastructural problems, and what the sustainability consequences were. In June and November 2018 and February–March and July–August 2019, frequent visits were made to both LNP and the resettlement areas in order to conduct in-depth interviews with resettlement leaders who could further explain and analyse the grievances expressed by the members of the previously conducted focus group discussions (Otsuki, 2019). Informal conversations with resettled people and those who host them, and further observations of the environment, are also used to understand the context.

Based on the interviews, there are predominantly two infrastructures that affected the sustainability and effects that connected the resettlement projects to different locations: housing and irrigation infrastructure.

THE INFRASTRUCTURE OF RESETTLEMENT AND ITS SUSTAINABILITY

Housing

First of all, a resettlement project is typically materialized in rows of square concrete houses with corrugated zinc roofs. In Mozambique, typical resettlement houses are mostly white, but sometimes in different vivid colours depending on the donors and constructors – mostly red if the resettlement is constructed by Chinese contractors. In the case of LNP's earlier resettlement projects, each resettler household received a house designed by the National Institute of Disaster Management (known as INGC). The INGC specializes in temporary, emergency housing constructions. After a few years of living in them, the resettlers started to experience cracks in their houses' walls and floors, as well as falling roofs and windows. A gutter placed underneath the corrugated roof had been connected to a concrete water tank for the rainwater harvesting, but in the semi-arid region where rain is increasingly scarce, the plastic gutter dried up and cracked. The resettlers discussed how "money got eaten" by "those big people" in the government so that the resettlement houses had to be cheaply made.²

Exposed to the grievances from the earlier resettlers, the park administration brought in the Portuguese construction company in order to build permanent concrete housing of better quality for new, larger resettlement villages being prepared for nearly 1,000 families waiting in Mavodze and Bingo. Consequently, a construction boom came to Massingir. Some resettlers started to work for the construction company, acquired new building skills and repaired their own houses and others'. At the same time, new engineers, drivers and machine users moved from the capital Maputo and northern city of Nampula, where the company had earlier resettlement construction experiences. These newcomers started to rent houses from the existing resettlement project of Makavene-Tihovene, close to the district centre, as many resettlement houses in fact had become empty due to the increased labour migration, as we see below.

At the same time, the resettlement houses, both old and new, were considered to be too small for the families in the region. Polygamy is a common practice, and conventionally people build their own huts for each wife and her respective children, using the natural materials derived from the surrounding environment. When the children grow up, they also build their own houses. The resettlement project changes this conventional housing practice. The resettlers are constantly forced to negotiate with the park administration that decides on the materials, design and budgets for the housing materials. While people can work in construction when the projects are built, the houses themselves require maintenance and constant external intervention. The new materials for repairing also cost money, which further pushes people to engage in wage labour.

In short, resettlement projects become the centre of the new flows of materials, labour and technical experts brought in from outside. Without establishing the sense of sustainability of these houses, people interpret them as material burdens eventually since they can no longer control the design or the size. And this sense of unsustainability also leads to the increased migration from the resettlement projects.

Irrigation Infrastructure

The resettlers who were primarily farmers in the park often migrated to South Africa or rushed to become construction workers, not only because of their own housing conditions, but also because it took years before the promised land for farming could be acquired after intensive negotiations with the surrounding villages, or their host village, and the park administration. The land that the farmers received also turned out to be much smaller than the original land in the park, and the villages that ceded the land demanded compensation. The need to enhance the land productivity and compensation led the people to demand water pumps for irrigation, both for the resettlers and those in the surrounding villages.

At the end of 2015, the park administration delivered two water pumps to each resettlement leader so that they could start farming the reduced land. Nearly four years later, in 2019, water pumps were finally installed. The delays had already

caused grievances and *barulho*, or protests. However, even after the production could begin, the people encountered new problems.

Once water pipes were connected to the pumps set up by the river, and irrigation started in their much-reduced land, the resettlers realized that they needed technical assistance. They had only conducted rainfed agriculture of their staple crop (that is, maize) in much more extensive land within the park. The irrigation agriculture was meant for more intensive production of cash crops such as tomatoes and onions. These needed to be sold right after the harvest since they could not be dried and stored, unlike maize. The settlers also realized that they needed fuel for the water pumps after the initial supply ran out. They thus created associations to collectively save money to deal with the fuel supply.

This all means that until the new irrigation agriculture genuinely starts generating profits, the resettlers have to earn cash income from somewhere else. Therefore, men work in the construction of resettlement houses or migrate as casual labourers in South Africa. In some cases, women and children accompany the men in South Africa, and women engage in trading business, thereby renting out the resettlement houses to the newcomers. But in many cases, women are agricultural labourers on Massingir's better-off people's land for up to one dollar a day.

In the forested area, the women are largely engaged in charcoal production. Although no one has made the immediate connection between the charcoal production, widespread deforestation and increasing incidents of droughts experienced in the area, it was probably contributing to the intense heat in the dry season and less availability of water in general. The general lack of energy transition in Mozambique has also contributed to the steady demand for charcoal and fuelwoods, and depletion has continued throughout Massingir. Consequently, the rain is increasingly scarce, and failure of the staple maize crop is frequent throughout the district. Most recently, the district government had to provide its citizens, including resettlers, with food aid procured from the World Food Programme at the beginning of 2019, which was one of the driest rainy seasons in the recent years.

Translocal Effects of the Resettlement Infrastructures

The housing and irrigation infrastructures, as well as associated basic infrastructures such as water pipes, electricity poles and cables and extended roads connected to newly built resettlement projects, all represent the new built environment that transforms the surrounding natural and social environments. In addition to people's mobility, new capital flows and materials associated with the frontier expansion of the resettlement infrastructures, the infrastructures or lack thereof have mobilized grievances, which could threaten the sustainability of the protected area itself.

In 2019, Mavodze and Bingo, whose 1,000 families are still waiting to be resettled in 2021, officially declared that they did not agree with the ongoing resettlement plan and were thereby stopping their participation in consultation meetings organized by the park and district administrations. According to the leader of Mavodze: We want to move. But the park never consult us about the kind of houses we want. They never invite us [to see the construction site]. We want to move to those areas if they get enough land for our cattle and water boreholes [also for the cattle]. We don't want to suffer like Nanguene or Makavene. And, they have to compensate our cattle and young men that *their* animals had killed.³

The people in Mavodze and Bingo had been participating in public consultations since the beginning of the park demarcation in 2001. In particular, Mavodze is the only administrative post (that is, subdistrict of Massingir district) within LNP, and thus the leader's position is especially respected. At the same time, they were constantly accused of being poachers, and the gossip went that the lucrative business of poaching in fact retained them in the park.⁴ The park administration emphasized that they needed to be displaced as soon as possible for the establishment of the ecological corridor.

It is not easy to verify the linkage between poaching and the refusal to be displaced, considering that the poachers are also known to come from outside the park, and it is not self-evident that Mavodze refuses to move out because of their stake in poaching. It is more probable that the leader is telling the genuine feelings of the people who are judging, based on their observations of the earlier resettlement projects, that the resettlement projects and their infrastructures forced them to depend on cash income and thus lose control over their life. Consequently, the resettlement of people in Mavodze and Bingo was protracted, deepening the conflicts between them and wild-life that occasionally devoured their cattle. The people demanded compensation for their cattle, without which they refused to negotiate their terms of resettlement with the park administration.

People in the park generally comply with the prohibition on hunting wildlife, which was imposed as their living area became the national park. This was the outcome of the militarization that took place following the criminalization and persecution of illegal hunters. However, their insistence on staying in the park also undermined the objective of establishing the ecological corridor, as people continued farming in the protected area and, though never officially admitted, continued to participate in poaching for the lack of more profitable livelihood opportunities.

Of course, if all the villages were displaced and resettled at the same time from the ecological corridor, this kind of translocal effect of earlier resettlement projects in other locations could be avoided. However, as large-scale investment projects usually involve displacement and resettlement of multiple groups of people from different locations to other locations following some time sequences, these translocal effects can be easily anticipated. In addition, each resettlement project requires new productive spaces to be opened, such as spaces of housing constructions or irrigation farms, or extraction of woods for charcoal-making outside the immediate resettlement project areas. Therefore, it is important to follow up what kind of new spaces are opened in the process of resettlement project implementation and to understand their impacts on sustainability and development in the wider landscape.

DISCUSSION

The process by which the resettlement infrastructures create new situations and effects over multiple locations indicate that resettlement projects are not simply about relocation of one group of people from one place to another. The infrastructures initially serve as an incentive to justify the relocation, but they are easily contested to influence the relocation incentives for other people to be displaced due to large-scale development or conservation projects. In other words, they shape a new frontier of built environment where "unpredictability" unfolds (Tsing, 1994) and where a new society emerges to affect the sustainability context in multiple locations and a wider landscape. Those who firstly plan and implement resettlement projects as a remedy for the displacement need to realize that they are committing to this new society-making, instead of redressing grievances with ad hoc material fixes. And, the investment flows need to readily allocate necessary investments into this society-building.

Theoretically, this phenomenon can be understood as "development chains" or ripple effects of one place-based intervention over a wider area or multiple locations that start generating new situations for intervention (Zoomers and Van Westen, 2011). Anticipating the spread of chains, in practice, means that people to be displaced and resettled should be fully involved in housing design from the beginning, or technical and financial support should be given to district extension workers to assist the resettlers with irrigation agriculture with the new infrastructure. If the basic support existed, migrant labourers could also reinvest their cash in their farming activities once the agriculture took off, and the charcoal production or other extractive and unsustainable practices, including poaching, could have been curtailed.

In short, the resettlement infrastructures are not only compensations, and they do not automatically restore people's lives. They transform the natural and built environments and their sustainability to a much larger extent than currently assumed. Thus, many more human and financial resources should be allocated in order to keep on evaluating the transformative effects and engage in generative planning.

Nevertheless, in August 2019 the park administration had only one resettlement officer and another livelihood reconstruction officer, recruited from Zimbabwe, who did not have any local knowledge. They were seldom seen in any of these locations where the resettlement infrastructures continually generated grievances and thus kept on sending signals to the people in the park that the resettlement would not be a solution for their displacement. The district government and its relevant departments for resettlement projects such as agricultural technical assistance or planning were severely underfunded, and its officers could hardly afford the fuel for their vehicles to visit the resettlers even when they were asked for technical assistance for the irrigation agriculture. The international donors that support the Peace Parks Foundation occasionally sent international consultants giving ad hoc advices in short-term assignments.⁵

The lack of resources indicates the lack of both political will and expertise needed for integrating resettlement projects into the larger area planning. And, this is rooted in the certain framing of "resettlement project" as a space-bounded solution to the relocated set of people who are supposed to comply with the boundary to go along with the agenda of "resettlement with development". The experiences of the LNP resettlement project and its frontier of infrastructures have shown the importance of establishing the agenda of resettlement *for* development and sustainability of people's lives, livelihoods and places beyond houses and farms allocated in resettlement project areas.

CONCLUSIONS

The chapter has argued that a new framework is needed to reframe a resettlement project induced by global investment flows from a place-based solution for displacement to a new frontier of resettlement infrastructures that generate new mobilities and opportunities for sustainable development in different locations. In this sense, it is not *double* sustainability that the conservation displacement or in fact any development and investment projects that are promoted under the banner of sustainable development should be aiming at: it is translocal sustainable development that the investment-induced displacement and resettlement must envision. The new focus on transformative effects of resettlement projects urges the planners, donors and development professionals and academic researchers to rethink their timeframes and scales of commitments with resettlement projects.

So far, the promise of infrastructure as compensation has apparently worked to attract people to agree to resettle in a short term, because these people are most likely those who have been historically and structurally marginalized citizens whose access to modern infrastructure and benefits of global investment projects is limited at best. These people have been considered to be easily moved around, criminalized, tamed and dominated. However, as the grievances and contestations have shown in LNP's case, the resettlement projects generate new effects and communication among the citizens in multiple locations, thereby requiring long-term observation, conversation and sustainable development planning of the region beyond immediate resettlement project areas. Obviously, this entails much longer and firmer commitments of the involved actors that require significant change in allocation of financial, human and political resources.

To direct this change, this chapter has at least methodologically suggested that following physically, socially and institutionally a particular resettlement infrastructure – such as housing and irrigation infrastructure – might be helpful. The seemingly mundane, material problems of cracked walls and floors, dry boreholes or fuel for water pumps (or the lack thereof) allow the researchers and development practitioners to follow development chains and identify wider institutional and political contexts in which these problems occur and sustainability implications arise beyond where the infrastructure is physically implemented.

POST-SCRIPT – JANUARY 2021

COVID-19 hit Mozambique hard, and lockdown measures as well as restrictions to domestic mobility were imposed in April 2020. At the same time, in Massingir district, which borders South Africa, the citizens themselves took initiatives to wear masks and wash their hands, limiting themselves to group in a large number only when absolutely necessary. Thanks to this, no case has been reported so far. Yet, resettlement constructions and actual displacement of larger communities such as Mavodze and Bingo stalled. Meanwhile, already-built but empty resettlement houses started to degrade, and the park administration was forced to repair the houses to keep on promising the possibilities of a good life after resettlement. In October 2020, the civil society organizations re-convened the meetings between the future resettlers, actual resettlers, the park administration and the local government's authority in order to discuss the latest delays and associated problems in resettlement projects. At the time of this writing in the beginning of 2021, it is unclear when the rest of the planned resettlement would take place, and how existing grievances from already resettled communities would be addressed.

NOTES

- For example, the slogan presented at the National Conference on Resettlement, organized by the Ministry of Land, Environment and Rural Development of Mozambique in 2019, was: "For the Process of Inclusive, Secure, Resilient, and Sustainable Resettlement" (30 October to 1 November, 2019, Chibuto, Gaza Province).
- 2. Interview, 28 February 2019, Massingir.
- 3. Interview, 3 August 2019, Mavodze.
- "Mozambique: the increase in poaching (a news report in Portugeuse)", 5 December, 2018: www.dw.com/pt-002/mo%C3%A7ambique-aumenta-a-ca%C3%A7a-furtiva-no -parque-do-limpopo/a-46596774.
- 5. Interview with the resettlement officer from MITADER, March 2019, Massingir.

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PART IV

TRANSLOCAL DEVELOPMENT IN LANDSCAPES OF LARGE-SCALE MINING

11. The mining sector in sub-Saharan Africa: flows of capital and people in large-scale mining and artisanal and small-scale mining

Chris Huggins

INTRODUCTION

Minerals and other sub-surface resources (including some gemstones such as industrial diamonds) are very significant within the contemporary manufacturing sectors. The high-tech sector, associated with a shift towards 'paperless' and 'virtual' forms of work and social interaction, is highly dependent on minerals and other resources with a very visible materiality, involving major changes to landscapes and movements of water, soil, bedrock and other materials. It also appears paradoxical that the move towards electric vehicles in the interests of de-carbonization, an objective largely founded on principles of global environmental justice and human rights, is currently based on the use of minerals such as cobalt. At the current time, cobalt production is largely based in the Democratic Republic of Congo (DRC), and is characterized by major challenges in terms of labour practices (notably the use of child labour) and localized environmental impacts.

Therefore, the mining sector remains economically and politically important in many parts of the world, and is arguably key to the global economy. The rise of the Chinese economy, as well as other economic and political factors, led to a boom in the price of minerals in the early 2000s, indicating the ways in which the mining industry is globally connected through complex international relations of supply and demand. As will be demonstrated in this chapter, the mining sector is manifested through flows of materials, capital, people and knowledge at various scales. There are significant efforts underway to reform governance of the mining sector, including corporate social responsibility (CSR) frameworks, binding due diligence regulations and transnational multi-stakeholder initiatives that can provide or withhold legitimacy to particular mining operations. There have also been unilateral efforts by some states to strengthen regulation of the mining sector in order to increase its contributions to national- or local-level economic development. Such efforts, often reflecting a 'resource nationalism' approach, include policies to increase the amount of local content (for example, goods and services) being purchased by multinational mining companies. This chapter uses empirical data from the DRC and Tanzania, and from the large-scale mining (LSM) and artisanal and small-scale mining (ASM) sectors, to illustrate these points.

LARGE-SCALE MINING

LSM, also known as industrial mining, is dominated by a relatively small number of multinational companies operating in a relatively small number of mine sites. The focalization of activities within these sites has led to them being conceived of as enclaves, separate from the broader economies of the communities and nations in which they are located. James Ferguson has used the example of the mining sector in Africa to argue that despite a dominant view of a free-flowing capitalism, 'the movement of capital that is entailed in such enterprises is "global" in the sense that it crosses the globe, but it does not encompass or cover contiguous geographic space. The movements of capital cross national borders, but they jump point to point, and huge areas are simply bypassed' (Ferguson, 2005: 379). Ferguson argues that capital does not flow smoothly around the world, but rather 'hops' (ibid.) directly to enclaves of extractive opportunity, bypassing areas designated as less commercially viable. This is a challenge to our concepts of flows and should be taken seriously. Moreover, unlike the 'investment/settlement hubs' discussed in this volume, many mining sites are located in geographically remote areas, which have not been settled and often lack basic transport infrastructure (such as roads) connecting them to other settlements. Their role as hubs may therefore be minimal, though this is a context-dependent question.

Industrial mining is a capital-intensive industry, dependent on very expensive, specialized equipment as well as economies of scale. LSM firms may invest in mine sites for many years before making a profit, and may have to continue to invest in the site (for example, in remediation and reclamation activities) for years after operations cease. The timescales, as well as the scale, of capital flows are therefore significant. Partly because of these long timescales, mining firms try to find ways to minimize political risk and seek guarantees from governments in the countries in which they mine ('host countries'), such as 'stabilization clauses' that provide long-term guarantees over key aspects of contracts.¹ The flows of capital generated by mining operations - profits, taxes, royalties, fees, and so on - are often highly complex. Multinational mining firms operate through complex networks of contractors and subsidiary companies, meaning that money flows through many accounts in many countries before being accounted for as 'net profit'. In some cases, multinational firms have been accused of using these complex networks to significantly reduce the amounts that are recorded as profit, in order to minimize taxes and payments to host country governments. For example, where a mining company also owns a different firm that is providing goods and services to the mine, the value of those goods and services can be artificially inflated in order to reduce the overall profits from the mine. Multinational companies can use their legal, financial and technical capacities, as well as their political connections, to minimize their payments to host country governments. When combined with accusations of high-level corruption within the mining sector in some places, this complexity means that capital flows within the LSM sector are not always very visible or transparent. In addition, host country states often argue that taxes and fees from mining are insufficient, compared to the

massive profits made by mining companies when commodity prices are high. These phenomena also reflect the concept of capital 'hopping' rather than flowing: money may move without full transparency, appearing and disappearing from accounts without an easily visible trail.

While flows of capital within LSM are huge, flows of people are not necessarily as significant. In terms of employment opportunities, LSM does not typically employ large numbers of people.² Rather, the industry depends on a relatively small number of specialized technical and managerial personnel, who are mobile globally or within their countries of citizenship.³ Such personnel often live within the highly secured 'enclave' of the mine site, and they may therefore have limited interactions with local communities. The number of non-specialist job opportunities are few. Very often, a mine may be located in a remote rural area, but most employees will originate from other countries or will relocate from major cities. Local communities around the mine site may not find many options for employment. Local communities may, however, find themselves being displaced from their homes and resettled away from the mining concession. Historically, displacement due to industrial mining has been a major source of conflict between rural communities, mining firms and states. Over the past few decades, major organizations such as the World Bank have developed principles, voluntary guidelines and other mechanisms around consultation, compensation and resettlement. There have also been efforts on the part of different actors such as international non-governmental organizations (INGOs), firms and states, to popularize CSR approaches, through which communities might benefit from infrastructure or services. Nevertheless, in practice, local residents often experience various forms of injustice due to resettlement, and for which CSR and compensation seem inadequate forms of mitigation.

Within the LSM sector, flows of knowledge are heavily restricted. The technologies used in the industry are constantly being updated, and technological development is centred in the wealthier metropolitan parts of the world. Geological information, for example, is generated using expensive and specialized technologies including, increasingly, remote sensing techniques. Geological information tends to be produced and controlled by mining firms, as well as governments of high-income countries such as the United States, which publishes some information produced by the US Geological Survey. The governments of low-income countries, by contrast, have little capacity to produce geological information. The Geological Survey of Tanzania, for example, has limited state funding or human resource capacity, and depends on intermittent project funding (Huggins and Kinyondo, 2019). This means that the mining sector is characterized by severe information asymmetries, as LSM corporations tend to control information while host country states are forced to make policy decisions without an adequate knowledge base. There are intersections between flows of knowledge, capital and persons (as professional training often requires access to expensive specialized equipment and proprietary knowledge) which make the transfer of skills and technologies from multinationals to locally owned businesses very challenging in the LSM sector. Once again, the concept of enclaves – in this case, protected private databases – may be important to understand the ways that flows of information are controlled in the mining industry.

The flows of minerals, metals, gemstones and other materials originating from the LSM sector have historically driven state investments in transport infrastructure, such as roads, railways and ports. For example, the company that now controls the large Bisie cassiterite mine in the DRC has invested in an access road while other actors have improved the longer road between Goma and Kisangani. Colonial legacies of mineral flows can be seen today, particularly in the geographical location of key points in the commodity chain. Currently, key policy documents and agencies such as the United Nations Development Program have called for mining projects to align themselves with multi-use 'resource corridors' or 'investment corridors' (Enns et al., 2020). Such corridors combine transport infrastructure (road and/or rail) with pipelines for oil or gas and tend to be collaborative projects involving the state and various private-sector actors, and may be transnational in nature. One African example is the Walvis Bay Corridor, which links the Central African Copperbelt (in Angola, Zambia and the DRC) to the Port of Walvis Bay in Namibia (Enns et al., 2020). These are often seen as providing useful spill-over effects to adjacent communities and are thus promoted as 'development corridors' which can diversify the benefits of resource extraction.

Across sub-Saharan Africa, minerals tend to be exported in raw form, and processed in second countries, before being transported further to third or fourth countries for eventual sale. For example, colombite-tantalite (commonly known as coltan), which is used in cellphones and other high-tech devices, is largely produced in the Eastern DRC; but it is exported in a raw form (after some simple forms of separation from the sandy soils in which it is found) and smelted in facilities in Europe, Asia and North America before being purchased by firms such as Apple. Until recently, large-scale smelting systems have not existed in Eastern Africa, but refineries for gold and tin now exist in Rwanda and a gold refinery is under construction in Tanzania. Similarly, gemstones such as rubies and tanzanite have often been exported as rough stones, and cut and polished in countries such as India, Sri Lanka and Thailand. While some investment has been made in equipment and training in value-addition for gemstones in Tanzania, for example, it can take many years for sufficient capacity to be built in this highly specialized occupation (Huggins and Kinyondo, 2019). This limits the spill-over effects of mining to the local economy.

ARTISANAL AND SMALL-SCALE MINING

ASM involves less expensive forms of technology, such as picks, shovels, buckets and diesel generators (for water pumps) in artisanal mining; and ventilation equipment, excavators and rudimentary processing machines in small-scale mining. It is often practiced 'informally', without full legal status, and ASM actors may not necessarily pay all the required taxes and royalties on minerals; at the same time, they may pay 'informal' fees to local community leaders, police and others. While there are skilled professionals operating in the ASM sector (such as mechanics, electricians and excavations experts), there are also many opportunities for less specialized forms of labour. While many of those working underground (often known as 'diggers') tend to be men, there is increasing awareness that ASM provides economic opportunities for women as well (Buss et al., 2017). It is a relatively accessible livelihood and therefore represents a major source of income for an estimated 12 million people across sub-Saharan Africa. A much larger number of people indirectly derive an income from ASM, such as those providing food, rental housing and other services to miners.

Flows of capital within ASM are often nebulous and difficult to trace but can nevertheless be sophisticated and well organized. While ASM is, as described above, a more accessible form of labour for rural Africans than LSM, it requires some capital investment. Payments are made (for example, to central government agencies, local authorities, customary leaders or private landowners) to access mineral-rich areas; equipment must be purchased; supplies of food and water provided to miners, as well as shelter, especially if the mine site is in a remote area. In many cases, it may be many weeks or months before a mine site starts to produce minerals. Although organizational structures vary according to the mineral being mined, as well as geographical and cultural factors. ASM operations often depend upon one or several financial backers, who are essentially the 'owners' of the operation, and provide pre-financing. Such financiers usually provide salaries to a small number of employees, typically including a pit manager, who organizes the labour force. Some other workers are paid an hourly rate or, more often, on a piecemeal basis (that is, per bag of material transported from the mine to be washed or separated, for example). However, many artisanal miners are not paid. They receive only food and shelter (as well as the occasional miscellaneous payment; for medical emergencies, for example) until a discovery is made. At that time, according to informal contracts, the workers receive a pre-determined share of the mineral discovery. This means that most miners have an incentive to work long hours in order to be more likely to make a discovery. Because of a lack of geological information, and also because ASM is often relegated to relatively marginal areas of mineral production (with mineral-rich sites reserved for industrial mining), the business is highly uncertain.

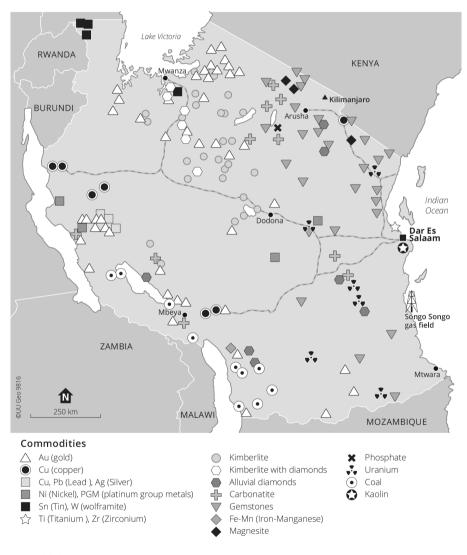
It can therefore be seen that, given the involvement of large numbers of people in ASM, including small-scale buyers, flows of capital are highly dispersed (with many people making relatively modest profits at the local level), and the sector supports many households. Nevertheless, greater profits are made higher up the commodity chain, especially through value-addition. Profits may be captured particularly by local political and economic elites. Because minerals from ASM are often sold 'informally' (without payment of taxes and fees, or attention to the ethics of production) flows of capital tend to be difficult to monitor. The low wages and poor working conditions in the ASM sector have led to systems being put in place for 'ethical' or 'fair' mining (Impact, 2018). In some cases, the dispersed nature of capital flows leads state agencies and other observers to complain that the profits of ASM do not translate into visible, permanent material benefits in the adjacent communities. At

times, ASM associations may invest in public infrastructure (such as an access road to a coltan mine in Rubaya, DRC, constructed by the ASM cooperative) but this is relatively rare. It is possible that capital accumulation from ASM contributes to translocal forms of development, as money from mining is invested by a miner in his home village, for example. There is some debate in the academic literature over whether artisanal miners are able to accumulate significant capital through mining, or whether ASM should be viewed primarily as a poverty-driven activity, which provides a livelihood but does not drive economic development. ASM sites may generate intense economic activity, including construction of housing, shops, restaurants and bars, but sometimes these settlements are rather temporary, and quickly shrink if an initial minerals 'boom' ends.

The flows of minerals, metals, gemstones and other materials originating from the ASM sector are often challenging for states to control. Once minerals are discovered, they enter into what may be long and complex commodity chains. Minimal processing may be done locally: for example, mercury is often used to amalgamate small quantities of gold discovered in alluvial gold operations (despite the health and environmental risks associated with it), and magnets are used to separate coltan from soil material soon after it is mined. Local small-scale buyers or brokers then sell to larger dealers; sometimes artisanally-produced minerals are purchased by LSM companies and enter into formal commodity chains. Many small-scale dealers operate on thin and uncertain profit margins, and cannot easily afford to pay the taxes, fees and permits associated with formalization of the sector (Huggins and Kinyondo, 2019). As noted above, for many minerals flows are difficult to trace: for example, an estimated 97 per cent of the gold production of the DRC is informally traded and exported (Blore, 2015). In addition, because flows are informal, they may provide opportunities for criminal networks. Links to armed groups have led to 'conflict-free minerals' schemes such as the Kimberley Process (for diamonds) and the ITRI Tin Supply Chain Initiative (Vogel 2018). Because flows of minerals from ASM are global, such efforts need to also be transnational in nature. Some efforts to regulate 'conflict minerals', such as the Kimberley Process, have been criticized for focusing on non-state actors and failing to adequately account for injustices and violence perpetrated by state agencies.

Flows of people within the ASM sector tend to occur within national borders. ASM is often restricted, by law, to citizens of the country where minerals are located. Sometimes ASM workers originate close to the mines where they work; in such cases they may work on a seasonal basis, interspersing mine work with farming or petty trade, for example. In other cases miners are more mobile, moving across the country to seek out promising mine sites, especially during a mining 'boom'. Sometimes this may lead to tensions between miners, who are seen as transient, and local communities, who feel that they should have greater rights over natural resources. Given the precarity of artisanal mining, movements of people in the ASM sector are presumably highly sensitive to seasonal dynamics (with miners returning to their farms during busy agricultural seasons, or ceasing mining during the rainy season when mines may flood) as well as patterns of mineral discovery at particular sites

(boom and bust cycles). However, despite attempts to regulate movements of miners (such as restricting their activities to specific mining zones), such movement tends to be poorly regulated or monitored by the state and other actors. While most flows of people in ASM are therefore 'local' or 'national', some people do cross national borders to mine, or to transport minerals. African artisanal miners who cross borders are often vulnerable to extortion, expulsion and other risks. In Ghana, there has been political concern that Chinese miners have engaged heavily in the ASM gold sector (Hilson et al., 2014). Chinese miners have used their financial capacity to bring



Map 11.1 Mining sites in Tanzania

heavy machinery into the ASM sector, which has resulted in greater productivity of mine sites, at the cost of serious environmental degradation (particularly siltation of rivers). In the Central African Republic (CAR), Russian citizens have taken control of some artisanal diamond mines following the provision of Russian military assistance to the CAR government. These events mirror broader patterns of emerging economies and in particular the BRICS states (Brazil, Russia, India, China and South Africa) investing across the African continent.

Flows of knowledge in ASM are the subject of interventions by international organizations and some governments. Skills in constructing mine shafts, using specialized equipment and understanding geology are important not only in maximizing the profitability and efficiency of ASM, but are also vital in reducing the frequency of accidents. There is also a great interest in facilitating miners to move from ASM to medium-scale mining, where some basic processing may be done and where mechanization allows for greater productivity. As will be described below, training schemes, demonstration centres and other projects have been established in some countries. While ASM was seen in the past as a poverty-driven occupation for the unskilled, researchers are now using life histories and other research tools to understand the professional trajectories of ASM actors, who may build capacities over time. NGOs and other actors are increasingly involved in making information about ASM (and mining more generally) publicly available, including for the purposes of building consumer confidence in 'ethical mining'. Examples include the efforts of Canadian NGO Impact to improve traceability of ethical gold production in the DRC,⁴ and a multi-stakeholder global platform for ASM data.⁵ Nevertheless, most ASM actors face major financial barriers in gaining new knowledge, skills and capacities.

CASE STUDY: RESOURCE NATIONALISM IN TANZANIA

Over the past 15 years, several African states have developed 'resource nationalist' policies on mining. Resource nationalism, motivated by perceptions that mining companies are profiting at the expense of 'host countries', can be defined as 'the maximization of public revenue; the assertion of strategic state control (ability to set a political or strategic direction to the development of the sector); and enhancement of developmental spillovers from extractive activity' (Haslam & Heidrich, 2016: 1). The government of the DRC, for example, recently reformed its Mining Act, substantially increasing government royalties on all minerals, classifying cobalt as a 'strategic mineral' which justifies even higher royalties, and introducing a 50 per cent 'super-profits tax' which will be imposed if commodity prices increase by 25 per cent above original official estimates. The new law also increases the state's free share in mining projects to 10 per cent. Rwanda, which is in the process of building its relatively small mining sector, has included some local content regulations in its legal framework, which require companies to purchase goods and services from Rwandan companies. Kenya has a local content bill which covers the mining sector

as well as the oil and gas industries. The nature of flows of capital within the mining sector significantly impacts the kinds of resource nationalist strategies available to governments. Countries with little existing mining activity risk 'scaring off' mining investors altogether, and therefore take a cautious approach; while those where foreign firms are already heavily invested may find it easier to take a more nationalist stance, as mining companies with expensive 'sunk assets' are in a weaker negotiating position.

The mining sector in Tanzania is quite well developed. There are several LSM operations, notably in the gold and diamond sectors. Since the 1990s, large-scale foreign mining companies have enjoyed a favourable regulatory framework that was put in place with the facilitation of the World Bank. There is also a large ASM sector for a wide range of minerals and gemstones, which employs over a million people. There are often conflicts between LSM firms and adjacent communities, especially where ASM is practiced near or within LSM mining concessions. These conflicts, in which local people have been killed, combined with the negative environmental impacts of LSM, and allegations of financial corruption and tax evasion, have led to widespread anti-LSM sentiment amongst Tanzanian citizens. The Tanzanian Mining Policy of 2009 and Mining Act of 2010 increased royalties on most minerals from 3 to 4 per cent. LSM companies were also required to be listed on the Dar es Salaam Stock Exchange, to make it more likely that LSM profits could contribute to the Tanzanian economy. President Magufuli, who was elected in 2015, intensified pressure on LSM companies. He initiated two presidential committees to investigate allegations of fraud in export of gold and copper concentrates by LSM companies. Both accused several major multinational companies of fraud; these companies were further accused in various speeches of under-declaring profits to avoid taxation. Hundreds of containers of metallic concentrates belonging to Acacia Mining and other multinational companies were seized by the government, on the basis that their mineral content had been under-reported (Norbook, 2019).

In July 2017 the parliament of Tanzania amended the Mining Act of 2010 through three pieces of legislation. First, the Natural Wealth and Resources (Permanent Sovereignty) Act 2017 emphasizes that any agreements for 'international cooperation' involving the extractive industries must 'further Tanzania's independence based upon respect for permanent sovereignty over natural wealth and resources'. It restricts export of raw minerals and requires that beneficiation facilities be established in Tanzania, requires companies to deposit their earnings in Tanzanian banks 'except where distributed profits are repatriated in accordance with the laws of Tanzania', and limits dispute resolution in the extractive sector to domestic arbitration processes (such as courts) rather than 'any foreign court or tribunal'. The Act also requires that the state has an 'equitable' stake in any extractive industries venture, with Tanzanian citizens also able to acquire stakes.

The Natural Wealth and Resources (Revenue and Re-Negotiation of Unconscionable Terms) Act 2017 requires government to re-examine and renegotiate agreements that parliament deems 'likely to jeopardise the interests of the People and the United Republic' (of Tanzania). The Act includes extremely broad definitions of what

may constitute 'Unconscionable Terms', and hence invalidates the stability clauses included in the Mining Act of 1998 that provided guarantees for foreign companies. Finally, the Written Laws (Miscellaneous Amendments) Act 2017 revises the Mining Act of 2010 by changing the institutional framework, establishing a Mining Commission, which essentially takes over responsibilities that were previously carried out by several different organizations. This is seen by some as centralizing control over the mining sector, and there have been concerns over potential conflicts of interest within the commission, which is responsible for, on the one hand, regulating the mining industry, and on the other hand, promoting and developing the sector, including through issuing mining licenses (Huggins and Kinyondo, 2019). The Act also increases royalty rates for various gemstones and metallic minerals, requires that mining companies are listed on the Dar es Salaam Stock Exchange, permits the government to own up to 50 per cent of the shares of any foreign mining company and requires that companies submit plans to source goods and services locally (that is, 'local content' plans).

Several other actions were taken against foreign mining companies at around the same time. President Magufuli has used public speeches to accuse LSM companies of practising 'economic sabotage', putting company employees under psychological and political pressure. The government demanded that Acacia Mining, which owns several gold mines, pay US\$190 billion in back-taxes and penalties. After negotiations, it was reported that Acacia (and/or Barrick Gold, its majority shareholder) would pay \$300 million to the government (Norbrook, 2019). Petra, a diamond mining company, had a \$15 million shipment of diamonds seized by the government, which also accused it of under-valuing the exports. In 2018, several employees of Acacia were arrested by the government on charges of money laundering and corruption. In 2019, Acacia's North Mara mine was fined and issued with an Environmental Protection Order on the basis that its tailings storage facilities were deficient (Reuters, 2019). Various other obstacles to LSM mining operations were put in place, impacting share prices of the companies effected. It should be noted that the government has also, since 2015, restricted the number of work permits issued to foreigners, though the impacts of this on the mining sector have not been fully documented.

The government has also moved towards beneficiation (value-addition). As noted above, in 2017 legislation banned the export of all raw minerals and gemstones. However, little capacity exists for value-addition in Tanzania today. For gemstones, for example, there is almost no capacity to cut small gemstones (for example, around a carat); while the government has some training schemes, these are small-scale. For example, the state-owned Tanzania Gemological Centre (TGC) had 18 TGC students being trained in lapidary (cutting and polishing) in late 2018, and courses at TGC are only 7 months long. As cutting can take years to master, there are concerns that inexperienced cutters will remove value from gemstones. It has become difficult for trading companies to bring foreign lapidary experts into Tanzania, due to restrictions on work permits. Recognizing these challenges, in early 2019 the government permitted exports of raw gemstones of up to 10 carats. In the metals sector, the government

ment has reportedly issued licenses to two Chinese firms to construct a smelter and a gold refining facility.

The government has also attempted to clamp down on the informal trade in gemstones, in order to maximize government revenues from royalties, taxes and fees. In early 2018, the government, using army labour, constructed a 24-kilometre wall around tanzanite production areas in Merelani, Simanjiro District: the so-called Great Wall of Merelani. Tanzanite is largely produced by ASM miners, though one LSM operation exists. Tanzanite is a blue gemstone found only in Tanzania, but which is largely cut and polished in Asia and Europe and which has hence profited other countries to a greater degree than Tanzania. The government built the wall, which is patrolled by the military, to restrict movement into and out of the area, and control smuggling of tanzanite into neighbouring Kenya. All tanzanite sales are meant to be done under government scrutiny within the walls or in specially organized auctions. Only workers with formal identification documents and contracts are meant to enter the wall, and everyone leaving is searched. The government intends that by holding auctions of tanzanite in Merelani, the profits of the tanzanite sector will benefit local development, rather than the economies of larger, established trading hubs such as Arusha town. The aim is to establish Merelani as a new investment/settlement hub. This major government intervention is therefore intended to control flows of people as well as flows of material and capital (that is, royalties, fees and taxes) in the tanzanite sector. The government claims that government revenues from tanzanite have increased dramatically since the wall was built, though mining firms complain that the restrictions have constrained their operations and may reduce tanzanite production. It seems that employment at ASM mining operations has declined, likely because of the increased overhead costs (particularly the need to pay salaries and taxes) associated with the wall. Some smuggling likely continues. The long-term impacts of the wall are therefore yet to be demonstrated.

In addition, mineral buying and trading centres, starting with centres for gold, have been established around the country. The intention is to encourage miners to sell through these hubs, where royalties, fees and taxes would be collected, and to reduce the informal trade (smuggling). In order to incentivize formal trade by ASM, special royalty rates for ASM-produced minerals were introduced in February 2019, which are lower than rates for LSM.

A further intervention in the ASM sector in Tanzania involves seven 'centres of excellence', also described as mineral processing centres, which have been commissioned by the government. They will provide training and other activities (such as experiential training in 'model mines' for miners). The 'centres of excellence' concept is based partly on ideas put forward in the World Bank-funded Sustainable Management of Mineral Resources Project. Interviews indicate that key stakeholders agree with the intention, but have questions over the financial sustainability of the centres (Kinyondo and Huggins, 2020).

Impacts of these Policies

How do these kinds of actions, which have been mirrored to some extent in the oil, gas and coal industries in Tanzania, impact flows of capital, flows of minerals, flows of people and flows of knowledge? To some extent, it is too early to reach firm conclusions, though we can draw tentative conclusions. For example, it was reported in 2019 that Barrick Gold had negotiated terms with the government that would bypass the government's laws regarding value-addition and international arbitration (HakiRasilimali, 2019). This suggests that governments may not be able to reconfigure flows in the mining sector even through the various assertive interventions described above: mining companies exert considerable power, and governments do not want mining activities to be suspended for long due to the negative impacts on revenue collection as well as potential negative impacts on foreign direct investment more generally, as foreign companies come to see the country as a risky destination. The capacity (and capitalization) of Tanzanian mining firms is at present insufficient to enable them to replace multinational mining companies.

In terms of flows of materials, the government has used punitive or security-oriented measures to reduce what it sees as smuggling (for example, seizing LSM containers of minerals for export, or building a wall around tanzanite mines). These seem to have been somewhat effective, but have given the government a reputation for unilaterally imposing policies rather than consulting with stakeholders first. It later, through negotiation and consultation, introduced incentives for LSM and ASM actors to reduce the alleged smuggling (that is, through reducing royalty rates for ASM minerals). It has also attempted to influence flows of materials through the beneficiation policies which restrict exports of raw materials or gemstones. However, the technical barriers to beneficiation, combined with the lack of capital in the ASM sector, have hindered the success of beneficiation policies: few Tanzanians have money to pay for training, and the necessary machinery is expensive. This situation illustrates the connections between flows of capital, flows of knowledge, flows of material and flows of people in the mining sector.

Another dynamic is the introduction of mineral trading centres, where ASM actors are encouraged to sell gold officially. There are 28 trading centres across the country. In addition to revenue collection, they are also intended to decentralize the official sale of minerals, hence helping to stimulate local development (for example, through links to the banking sector in small towns). The government currently reports high volumes of sales at these centres, though their long-term success will depend on their ability to match prices available on the black market.

In terms of flows of knowledge, the government has prioritized training for the ASM sector through demonstration centres, but the centres were not designed with much input from ASM stakeholders and it has yet to be proven that the centres will be able to provide state-of-the-art training. In particular, ASM actors prioritize geological knowledge, which is not provided by the demonstration centres. The government announced in 2019 that it would release details of mining contracts, as required by the Tanzanian Extractive Industries Transparency and Accountability Act (2015). Given

the history of corruption in the mining industry, this seems key to making flows of capital more easily regulated. However, other government decisions appear to have restricted transparency. In 2018 the government declared that contracts between mining companies and the government would be kept confidential and approved through the cabinet rather than through the mining ministry. Moreover, legislation in the mining sector has been rapidly passed under 'certificates of urgency' which limit opportunities for parliamentary debate. This is arguably part of a broader dynamic of centralization of decision-making in Tanzania.

CONCLUSIONS

Like several other governments, the government of Tanzania has explicitly set out to reconfigure the mining sector. There are political as well as economic motivations for this. President Magufuli has closely associated himself with key interventions, often using anti-imperialist language, arguing that increased government revenues from mining will be used to drive infrastructural improvements and development more generally. As noted, the state has put in place some measures to stimulate translocal development and catalyze investment/settlement hubs.

However, some analysts argue that the government's strategy is less radical than it may appear. Poncian (2019) argues that President Magufuli's intention is not to disrupt and restructure international flows of capital, but merely to maximize government revenues while maintaining the liberal economic order. Poncian argues that no Tanzanian companies have the capacities, at the moment, to replace multinational firms in the mining sector. In many cases, the government seems to have revised its initial positions. From this perspective, many of the government's initiatives can be seen as rhetorical or political positions intended to increase the state's leverage in negotiations, rather than literal statements of intent.

Regarding government regulation of the ASM sector, Huggins and Kinyondo (2019) argue that while the government is implementing major interventions, the emphasis is on 'legalization' of the ASM sector, and particularly on government revenue collection, rather than other aspects of ASM formalization (such as labour standards or environmental protection). If the state services offered to miners (such as the mineral trading centres and demonstration centres) focus too much on revenue collection, and fail to be flexible enough to follow changes in context (that is, shifting mineral market prices, and improved mining technologies), then the flexible flows of ASM capital and material will easily bypass government control.

From a local development perspective, the impacts of ASM interventions will depend on how revenues are re-invested by the government in infrastructure and public services. As noted above, ASM operators rarely invest in public infrastructure, so state investment (for example, in transport infrastructure, healthcare, security and other public goods) will be vital for fledgling investment/settlement hubs to thrive. Any further economic improvements would depend on government finding ways to facilitate transitions from small- to medium-scale mining operations, without preventing ASM actors from working.

This case study has focused particularly on state-led strategies to influence flows of knowledge, capital, people and materials. Other actors, such as the private sector, also play a role. In Tanzania, some LSM firms have provided limited support to ASM actors, such as a community- and ASM-development project involving the De Beers diamond company, a Small Mines Assistance Programme funded by a large-scale tanzanite mining firm, and capacity-building activities involving Barrick Gold. However, many such projects have ended when the mining companies sold their operations to other LSM companies. Such projects are often seen as only superficial, unless they are monitored and regulated by third parties and/or government. There may be ways in which the demonstration centres could benefit from collaboration with LSM, but to date this potential has been blocked due to state–LSM tensions.

Schoneveld et al. (2018) note that some foreign investors are investing in ASM, typically bringing mechanization and managerial expertise to mining operations, and in some cases providing limited technical training for Tanzanian miners. However, they are not 'achieving their full social, environmental and economic performance potential', such as ensuring more equitable flows of knowledge and capital. Schoneveld et al. suggest that governments 'implement policies disruptive to existing patronage structures' in order to unlock greater benefits for miners and local communities. At the same time, state policies should be cautious when intervening in flows of people, capital and materials, as demonstrated by the unintended consequences of the 'Great Wall of Merelani'. Assets within the LSM and ASM sectors often seem to 'hop' rather than flow, benefitting some rather than bringing broad-based development. The government could encourage more flow through openness and accountability in its own actions. While the mining sector is complex, and there are major differences between commodity chains for different minerals or gemstones, it is clear that successful interventions will be founded on collaboration between multiple actors, including companies, the informal or artisanal sector, and government.

EPILOGUE

The Covid-19 pandemic has greatly affected mining in sub-Saharan Africa, though impacts have differed across the continent and are different for ASM and for LSM. Miners are especially vulnerable to Covid-19 as they often work in poorly ventilated, crowded conditions in which physical distancing is difficult. Some miners have respiratory ailments due to long-term exposure to dust, diesel fumes and airborne toxins; these make them more vulnerable to serious Covid-19 symptoms. Unfortunately, there is little firm data on how many miners in Africa have contracted Covid-19. In the ASM sector, which often involves work in remote rural areas, testing is generally unavailable. However, in general, the spread of infection in the continent seems to have been slower and less severe than first feared.

Some countries imposed restrictions on LSM operations when the pandemic began: for example, the South African government first closed down mining, and then permitted mines to operate at 50 per cent capacity. Nevertheless, many governments categorized industrial mining as an 'essential activity' which could continue during the 'lockdown' period. In the LSM sector, testing was introduced and protective measures such as masks were used.

In terms of flows of people, border closures and other restrictions on travel impacted migratory miners' livelihoods. For example, many Tanzanian artisanal gold miners working in Migori, Kenya were reportedly forced to return to Tanzania (Odeny, 2020). In terms of capital flows, there are predictions that some countries may increase taxes on LSM in order to counteract the negative macroeconomic impacts of the pandemic; in the DRC, the government, which is faced with a depreciating currency, enforced regulations on repatriation of foreign earnings by mining companies (Ilunga, 2020). The price of minerals and metals dropped considerably in 2020 due to reduced demand and logistical problems related to disruption to transport networks. The reduction of cash flow in the ASM sector led to a general slowdown in production. In some cases, closed borders led to an increase in smuggling in the ASM sector, and the entry of new illicit actors who are likely stockpiling gems and other products while prices are low (Kimberly Process Civil Society Coalition, 2020). The micro-economy of many communities depending on ASM has suffered, as the price of some foods increased while income dwindled.

The diverse nature of impacts across the sub-Saharan continent is illustrated by the cases of Tanzania and the DRC. The Tanzanian government stopped publishing data on Covid-19 cases in April 2020 and declared the country virus-free (though there was international scepticism about this claim). Activities such as mining were not restricted, but the ASM sector was nevertheless affected by broader price declines and international travel restrictions (Mawala et al., 2020). As international travel started to open up later in 2020, there were signs that the sector was rebounding (Mawala et al., 2020). However, by early 2021 the government acknowledged that Covid-19 cases were spreading. In the DRC, a state of emergency was in place from March to August 2020. Border restrictions led to a rapid decline in minerals and metals trading, and some ASM miners dropped out of the sector altogether (relying on agriculture, for example) or switched from one type of mining to another (for example, from cassiterite to gold) (de Brier, 2020). In the LSM sector, some mines were reportedly under some form of lockdown and companies prevented employees from leaving mine sites, leading to concerns over the rights of workers as well as their exposure to Covid-19 in crowded dormitory rooms (Human Rights Watch, 2020).

NOTES

1. Stabilization agreements or clauses were designed to provide mining companies with greater confidence during negotiation of contracts. They are intended to guarantee that

host country states will not renegotiate central terms of the contract; that is, in case of political changes, or major fluctuations in global minerals markets.

- 2. This was not always the case, however. Prior to the mechanisation of LSM, the mining sector was a catalyst for large movements of people, particularly in Southern Africa. Demand for labour in the gold mines of South Africa, and the Zambian copper belt, in conjunction with colonial regulations around taxation and settlement, triggered labour migration in the early and mid 20th century. Because of the key role of single men in the mining industry, these flows of people had serious gendered impacts on household livelihoods, food production and other aspects of life. Negative impacts from these flows are examples of racial injustice.
- 3. Most mining professionals are men, though today there is greater awareness of gender barriers, and some efforts to support the careers of women in LSM.
- 4. https://impacttransform.org/en/work/project/just-gold/.
- 5. https://delvedatabase.org/.

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12. Corporate and migrant investment in a gold-mining development corridor: the case of Suriname

Marjo de Theije

Twenty years ago, Suriname was a poor country. But look at it now, the development that we, Brazilian goldminers, have brought here. (General opinion among migrant miners in Suriname)

INTRODUCTION: GLOBAL TRENDS IN DEVELOPMENT AND GOLD MINING SINCE 2009

Gold mining expanded worldwide over the past decades. The boom of commodity prices in the first years of the 21st century contributed to extraordinary economic growth in many resource-rich countries. It also motivated mining companies to invest in new extractive projects and increase exploration activities. Agreements between governments and corporations expanded the mining frontier, overlaying territories with concession rights for extractive activities.

Extractivism became part of development models again. In South America, the term "new extractivism" was introduced to distinguish this post-2000 extractivism from the earlier neoliberal form where the export of raw materials was exclusively in the hands of transnational corporations (Gudynas, 2010). In the new extractivism, progressive governments have a vaster role to play by regulating exports, and sometimes also nationalization, and imposing higher taxes. The revenues are invested in social programs and infrastructure, benefitting the population and national economies (Burchardt and Dietz, 2014). In Latin America, substantial economic growth has been accompanied by impressive social progress and infrastructure development in the period 2000–2014. The question of the potential contribution of mining to sustainable development became topical. After the collapse of raw material prices, however, the question arises as to what structural benefits this period has had for the (sustainable) development of the region. In addition to a deep economic crisis and political unrest, there is considerable environmental damage. How broad and sustainable is social progress (Gamu et al., 2015; Hogenboom and Theije, 2017)?

From a growing body of social science development studies literature, the idea arises that there are different answers to the question, much related to the diverse forms of gold mining that are to be found in most regions. Verbrugge and Geenen (2019: 413) characterize the gold industry as a "dual gold mining economy", bifurcated between two distinct sectors. These are the small artisanal-scale gold-mining

activities that are open for participation to a diverse group of individual miners and entrepreneurs, and corporate middle- and large-scale industrial mining, for which large capital investments have to be made. These two different forms of gold mining often coexist in the same gold deposits. Sometimes miners live together peacefully, complementing each other, but in many cases the coexistence is in irreconcilable competition, whereby they clash, which can lead to long-term conflicts (Salman et al., 2018; Theije and Salman, 2018). Scholars have stressed the relationships between the different organizational forms of extraction and how these are connected to the socio-political environment (Verbrugge and Geenen, 2019) and the geology of deposits (Luning and Pijpers, 2017).

Around the globe, both large-scale corporate gold mining and small-scale gold mining involve substantial flows of capital (Bridge, 2004) and important flows of people (Coderre-Proulx et al., 2016). In the 21st century, the rising price of gold has caused a vast expansion of the activity and concomitant flows of workers and knowledge all over the globe. Large mining companies are present in different countries, and their skilled labor force travels between the operations. Small-scale gold mining brings many more miners on the move, typically unskilled workers who live in poverty and have few other opportunities to improve their economic situation (Jønsson and Bryceson, 2009; Theije and Heemskerk, 2009). This flow of labor has substantial translocal economic, social and environmental effects. Throughout the Amazon, there are places where extensive small-scale mining has led to massive deforestation and pollution.

This chapter discusses the various forms of development and the direct and indirect links between large- and small-scale gold mining. How do different actors position themselves with respect to the opportunities and the negative effects of mineral extraction in the development corridor of the Amazon region and the small country of Suriname? The chapter focuses specifically on the role of knowledge flows, capital and personal investments in gold mining.

CORPORATE MINING AND STATE INVOLVEMENT IN SURINAME

Suriname is a small country on the northeast coast of South America, with almost 600,000 inhabitants (Regering van de Republiek Suriname, 2017: 30). Most of the territory of Suriname is covered with Amazon forest, and gold mining comprises the largest part of the extractive exports that comprise 88 percent of the country's official exports (Regering van de Republiek Suriname, 2017: 17–18).¹ The country has two large-scale industrial gold mines – the Gros Rosebel mine (Iamgold, a Canadian company) that came in operation in 2004, and the Merian mine (Newmont, USA), where production started in October 2016 – each producing roughly one-third of the exported gold. The rest of the gold is produced in small-scale mining operations spread over a great part of the forest of South East Suriname.



Map 12.1 Mining sites in Suriname

The transformation to large-scale mining causes an intensification of conflict in the interior. The location of the industrial mines is in a territory that is inhabited by tribal peoples, the Afro-descendant Maroons, the Ndyuka, Saamaka and Paamaka, and is a source of continuous tension. The Government of Suriname participates in both industrial mines, and the incomes generated by this extractive industry are its primary financial resource. As with any rentier society, the country is vulnerable in the face of the volatility of the global commodity prices. The 2014 breakdown in commodity prices immediately translated into a sharp recession and financial crisis, obliging the Suriname government to stop several social and infrastructural programs. The population felt the consequence of the declining economy and inflation immediately, and there were many protests. September 2019 problems (see below) at

the Rosebel mine caused a temporary stop in one of the production units and almost immediately led to the layoff of a few hundred workers at the mine.

Large-scale gold mining is in the hands of transnational corporations operating in different parts of the world. It involves complex technology that requires huge capital investments and specialized knowledge. These big companies negotiate with governments to obtain licenses to operate and to export revenues. The Suriname government participates in both mines, with 25 percent ownership in the case of the Merian mine, and 5 percent in the case of the Rosebel mine. Once in operation, the number of jobs for local people is limited. The two large-scale gold mines employ about 2,500 workers in Suriname to produce about 65 percent of the yearly gold production. Until the opening of the Merian mine in 2016, the largest part of the gold was produced in small-scale mining operations. These units work mostly informally, and the government's income from small-scale mining is relatively marginal, consisting mainly of royalties, which are paid at the time of the commercialization in local gold shops (Regering van Suriname, 2017: 18). But small-scale gold mining employs between 20,000 and 40,000 individuals directly in the mining, and it has a colossal spinoff in other sectors, such as services, provisions, machinery and fuel. In 2009, it was calculated that only the government was a bigger employer than the gold sector (Fritz-Krockow et al., 2009). Estimates of the artisanal mining database are that 15 percent of the rural population of Suriname are small-scale miners, the highest percentage in the world (artisanalmining.org, 2019).² Small-scale miners are responsible for a third of the total yearly gold production of Suriname. Gold is vital for the development of Suriname.

MIGRATING MINERS AND MOBILITY OF MINING TECHNOLOGY (FLOWS OF PEOPLE AND FLOWS OF KNOWLEDGE)

Let us take a closer look to the development of the small-scale mining sector in Suriname. In the 1970s interest in gold mining grew. The Geological Mining Service (GMD), a governmental service, introduced a new mining method, with dredges on small pontoons on the Lawa River by the end of the decade. During the internal war between the military regime and a group of insurgent Maroons under the name of Jungle Commando, in the period between 1986 and 1992, Maroon people who were isolated from urban coastal zone took up gold mining on pontoons with the machinery they had seized from the GMD. Gold mining was an important source of income for the Jungle Commando. In these years, the first Brazilian miners were invited to work with the Suriname people. When the war ended, mining continued to be an important activity. After years without schools in the backlands, a whole generation of young men without diplomas or capital was available to work in the gold mines. Thus, the internal war contributed to a resurgence of small-scale gold mining in various ways.

The return of peace caused a rush on potential mining sites, and the gold sector developed into a system of speculation in which a small group of urban businessmen obtained huge portions of the inland territory under concession. This rent-seeking urban population was not interested in mining, but hoped to make big money attracting international capital-rich companies to eventually take over. In the meantime, most of these concessions are explored and exploited by small-scale gold prospectors, who pay part of their production (usually between 10 and 15 percent) to the concessionaire. The concessionaires themselves only invest in a basic security system to control the miners on their area and to collect the "concession-tax". About ten individuals form this small "concession-grabbing" elite of Suriname.

The "tax"-paying small-scale gold miners are to a large extent migrants from Brazil. After the first miners came to Suriname in the 1990s, many have followed, and Suriname now hosts an estimated population of 40,000 Brazilians. The first came from neighboring French Guiana, where the gold-mining sector had been boosted a decade earlier. French Guianese entrepreneurs scouted experienced skilled miners in Brazil to set up hydraulic mining installations on the river dredges and on land, on the alluvial deposits along the creeks and river beds in the forest. The Brazilians became the experts on mining knowledge and technology of the region. Initially the Brazilians worked as salaried laborers in the mines of local people. Their mining knowledge and preparedness to invest in mining equipment and set up more efficient mines earned them the informal rights to work autonomously on the concessions of the urban rent seekers, in return for the "tax" of 10 or 15 percent of the gross gold production; that is, without deducting the costs for its extraction. This arrangement went against the mining law, but is widely accepted between the actors in small-scale gold mining (Theije, 2017).

Contemporary small-scale gold mining in Suriname is hardly artisanal and manual. It is mechanized, with ample use of engines and pumps, and increasingly also excavators, bulldozers and powerful tractors on land and sophisticated hydraulic dredges on water. The miners have invested heavily in this mechanization of the mining process. The machines have increased the speed at which sites can be exploited, augmenting the turnover rate of the gold-containing material that is separated from the soil.

Brazilian miners are very mobile in the territory. They are agile in moving between different mining areas in Suriname but also to neighboring countries if they see opportunities there. They already came from Brazil, and Suriname is one of the options in the north that is open. Both Guianas, but also Venezuela and Brazilian Amapá together with Suriname, form a potential working area in which many miners can easily explore their options and take opportunities. Thus, next to mining knowledge, their flexibility is an important asset for Brazilian miners in the Guianas (Theije and Bal, 2010).

For the local population the relationship with the territory is different than for the Brazilians. They will want to mine on their own territory and find that the gold in their territory belongs to them. The mineral wealth is therefore much more related to the development of the area. In addition, there are hardly any other sources of income for the Maroons and indigenous people in the interior of Suriname. A local resident in the Lawa area who set up a livestock farm soon found out that the infrastructure is insufficient to serve a larger market than the directly local one. He had to stop his

development project for the region. For young people in the region the options are limited: either you leave the interior to try your luck migrating to Europe or elsewhere, or you engage with gold mining or related activities.

FLOWS OF MONEY FROM SMALL-SCALE MINING

The Government of Suriname has a fundamentally different relationship with large-scale mining and small-scale gold mining activities. There are agreements with the large industrial mining companies that police taxes and shares. With the smaller entrepreneurs, there are no well-functioning regulations. Mining permits, environmental control, regulations with regard to safety and working conditions in the mines – everything is missing. And where directives already exist, they are not complied with by the miners or monitored by the competent authorities. How does the money that originates from small-scale gold mining flow?

Anyone can freely sell gold in Suriname. Nine companies, with branches in Paramaribo, Albina and in the gold fields, have a license to buy gold. They buy for the world market price minus 6 or 7 percent, of which 2.75 percent is royalties and the rest are the costs and profits of the gold-buying companies. Of the nine buying companies, six are also licensed to export (Heemskerk, 2010). Since 2015 Kaloti mint house, located close to the national airport, has been in operation. The mint is a joint venture between Kaloti, the Government of Suriname and local gold traders. According to the Kaloti website³ it is expected to eventually produce as much as 60 tons of refined gold, much more than the current yearly production.⁴

Before it arrives in the gold-buying shops, the gold mined in the country⁵ has passed many hands. In the interior of the country, gold is the main currency used for all kinds of transactions, even before leaving the production site. It starts with the payment to the formal (licensed by GMD) and informal (based on customary land rights) concession owners. At the moment the proceeds of the production are collected, an official of the concessionaire is present to immediately take up the agreed 10 or 15 percent of the total production. In the case of a formal concessionaire, most of the revenue then goes to Paramaribo, where it is sold. With the informal land tax, the gold usually continues to circulate longer in the gold fields. The locals, Maroons or indigenous people, use the proceeds to make purchases, such as oil for their light generator, food brought inland by traders and payment of transport costs, and sometimes invest in gold mining themselves. They also ask for monthly payments from outsiders who come to their area to trade, such as shopkeepers and oil traders. In Eastern Suriname this concerns mostly Chinese merchants. In some cases, the formal concessionaires pay indemnification to local villages, to compensate for the pollution of their water and fields. In all these cases, gold is the main means of payment, thus creating an alternative economy in which the gold circulates before it materially leaves the gold fields to be exported via Paramaribo.

Still at the production site, other actors receive their part in gold: the payments to the workers in the mining teams are made on the spot and in agreed-upon shares

of the production. They do not receive salaries in money, but as a percentage of the production in gold. On the spot, the gold is processed, weighed and distributed to the participants in the production process. Because the workers usually stay for months in a row in the gold fields, they will also spend gold there. They spend it for enter-tainment, phone cards to keep in touch with home and for personal care, such as the hairdresser and soap and perfume. If there is enough, they will also save or sell the gold and transfer money to their family in Paramaribo or Brazil. Maroon miners have similar spending patterns.

What is left of the produce is the share of the owner of the production unit, to cover the production costs, such as fuel for the pumps, food for the crew, the salary of the cook, repairs and depreciations of machinery. And if things go well, there is still profit left. Owners of production units are likely to invest their profits in the improvement of their business or expansion of the operation. But sometimes they also invest profits in other assets, such as agriculture. Here again, in the case of migrant miners, their goal most of the time is to build property in their homeland, not in Suriname.

Nevertheless, before the gold profits get used for savings and investments abroad, the largest share of them has been consumed in Suriname. Maroon miners maintain their families in their villages with the incomes from mining (Heemskerk, 2002). Although it is impossible to show quantitative data on this topic, it is generally assumed that the income from small-scale gold mining flows directly in the local economy, most of the time in the form of crude gold. This is an informal economy, which shies away from government, revenue taxation and international development agencies, but is crucial for the survival of a considerable population both in Suriname and other countries in the region.

SURINAME'S MINING HUB – A DEVELOPMENT CORRIDOR

In terms of development the direct state income from mining is limited to the profit from the Rosebel and Merian mines, and the royalties from gold sales. Indirect income comes from all byproducts in other sectors, such as transport services, production and trade of provisions, and the selling and maintenance of machinery. Thus, the mining generates much economic activity in the country. In terms of development, it connects different countries in the region. Migrants from Brazil arrive with small-scale gold mining knowledge and experience, to share and come to agreements with Suriname inhabitants in the interior and urban concession holders who regulate access to the gold fields. Profits then partly flow from Suriname to Brazil, and may generate income and local development there.

For the local communities in Suriname, gold generates income and is an important contribution to their survival in the interior. Maroon and indigenous population mine for themselves, or lend access to the mining grounds in exchange for part of the production. In the process, their communities come to suffer from environmental degradation and social change caused by economic inequality and the arrival of outsiders. But without mining, the access to consumer goods, health and education would be much more difficult (Heemskerk and Oliveira, 2004). Mining is the materialization of development that results from the mobility of people and capital in this region.

At the border of Suriname this materialization is most visible. In French Guiana much small-scale gold mining takes place illegally, in a national park. As a result, the commercialization of gold as well as the supply of mining materials, food and people is made from the neighboring countries, Brazil and especially Suriname. Along the border rivers Lawa and Marowijne a number of "shopping malls" appeared in the past decade, to provide for the miners in French Guiana. This corridor at the border attracts yet another flow of people, Chinese merchants who are not inhibited by the limited infrastructure of the Amazon forest and come here to trade.

The official involvement of the government with small-scale mining is much less structured compared to the participation agreements that were closed with the large-scale mining companies. In Eastern Suriname large territories are covered with small-scale mining sites, and there is hardly any government regulation of the activities. Since the end of the 19th century, there have been a number of mining sites with known deposits of gold. During the second gold rush 100 years later, the sector developed tremendously and the entire eastern part of the interior turned into a corridor of small mines that have grown together. The growth in the sector has taken place entirely independently of intended and orchestrated development initiatives of the Suriname government or intergovernmental bodies such as United Nations Development Programme or Inter-American Development Bank, who are among the most important agencies in the country.

SMALL-SCALE GOLD MINING AND STATE INVOLVEMENT IN SURINAME: FRAGILE DEVELOPMENT

This is not to say that the government does not engage with small-scale mining. I would like to distinguish between four situations in which the government interacts with small-scale gold mining. Each of these interactions is based on a distinct concept of development. The first two situations allow individual gain to prevail over national development. In the other two situations, gold mining is framed as a national interest, for the development of the country.

The first refers to the public outrage at the fact that some actors do not have to comply with rules while others do. Moreover, the citizens, especially those in the interior, are the victims of the unbridled mines of the unpunished actors who break the rules. The complaints and comments are numerous, with letters sent to newspapers and reports on radio and television, and big and small scandals, from rumors about the origin of the money being invested in the mines to ministers who have to resign because of corruption accusations. The whole of urban society has an opinion about it. A striking case in recent years has been that of the skalians on the Brokopondo hydroelectric reservoir. Skalians are large dredges with mechanically operated suction hoses that take in material from the river or lake. They process large quantities of ore in a short time. These dredges are costly (up to 1 million US\$), so not just any miner can afford such an investment. However, around 2012, a number of skalians suddenly appeared on the lake, quite mysteriously. They had no licenses, according to ministers and officials from the Mining Bureau. However, when the president finally went to visit, he told the villagers he could not just stop the skalians, because of their licenses (fieldwork, Theije, 2014, 2015, 2016). Anno 2020 dozens of skalians are in operation on Suriname rivers and the Brokopondo lake, and the public indignation continues. The underlying view is that it is unfair that some actors such as the wealthy owners of these floating gold machines could continue to operate in the lee of control from the mining service and tax authorities because they had political protection, while others always have to defend themselves against arbitrariness on the part of the police and mining agency officials in charge of the control of permits.

The second is that the most important politicians in the country can also be small-scale mining entrepreneurs. An example is Ronny Brunsijk, since 2020 vice-president of the country but before that a miner and leader of the ABOP party, who in 2010, when his party participated in the ruling coalition (2010-2015), received six concessions in the Lely Mountains. A few years earlier, other entrepreneurs had been removed from the same place. The official reason at the time was that the main creek in this area, the Mama Ndyuka, has an important historical and cultural significance for the original inhabitants of the area. The allocation of the concession suggests that motives change and some actors are allowed to mine in places where others are not allowed to do so. In another case, government officials who wanted to remove an illegal operation of a company from the family of then president Desi Bouterse (2010–2020) were allegedly whistled back by the president's cabinet. Thus, the mining operations of individuals close to the center of political power in the country are covered by public actors such as the police and the army. The highest politicians in the country can go their own way in the informal extraction of gold. This is an open secret, but unlike the case of the skalians on the reservoir, it is hardly mentioned in the media or in society. Political leaders are allowed to appropriate the riches of the land for private use.

The framing of gold mining as a contribution to national development also creates a deep gulf between large- and small-scale mining, where the small-scale miners are expected to sacrifice their interests for the progress of the nation. The third and fourth situation exemplify this conflict of interests clearly. As shown in this chapter, the small-scale gold-mining economy operates largely informally. In 2011, the Government of Suriname set up a service (called OGS) charged with the "regulation of the gold sector". As an executive body, it fell under the direct authority of the President's Cabinet. There were ambitious plans, including a new mining law, training facilities for miners in service centers in the main mining areas, a school of mining in Paramaribo, and a review of permits and tax regulations, but eight years later it can only be concluded that none of the objectives have been achieved. The reasons for this are diverse, but the dependency on those in power, and corruption and lack of commitment are undoubtedly part of it. The political will and capacity to bring about change and make gold mining a regulated sector, accessible to all, that

can contribute to the economic development of the country as a whole have not been sufficient.

Fourth and finally, although the large-scale mining corporations are no "monolithic vehicles of capital driven by an unstoppable logic of maximization" (Gilberthorpe and Rajak, 2017), their interests are certainly different from those of the small-scale miners and local villagers. In several places, small-scale mining activities are approaching the concessions of large-scale mines. This leads to on-the-ground conflicts and dangerous situations. The government must then come up with solutions in order to comply with the agreement with the large mines. But also, to ensure that the population does not turn against the government. This is a difficult task. The national government cannot protect the population because it also has stakes in the company mines. The resulting conflict has different levels. In the case of the Rosebel mine, the Ndvuka village Nieuw Koffiekamp lies within the concession of Iamgold. Since the beginning of the activities of prospection in the 1990s there have been skirmishes. The company and local miners are in a cat-and-mouse game in what seems a never-ending conflict situation (Salman et al., 2018). In 2019, an attack by more than a hundred armed miners killed one and injured several people. According to the newspapers, the attackers were gold miners from other parts of Suriname. But the chairman of the federation of small-scale gold miners in Suriname blames the authorities for not keeping to the agreements, and the deficiency of a transparent policy on small-scale gold mining (Goudwinning in Suriname, 2019; Ministerie van Natuurlijke Hulpbronnen, 2019; Waterkant, 2019).

EPILOGUE: THE CORONAVIRUS AND GOLD MINING

In March the hashtag "#covid19mining" appeared on Twitter to mark news about the coronavirus in relation to mining. The tweets quickly revealed a number of key trends: the emergency situation of indigenous communities that were highly vulnerable to the virus and live far away from medical and social assistance; abuse of the situation of immobility by traders and middlemen who increased their own profits by paying below the market price; and the resilience of some mining communities who resisted the negative impacts of the virus through self-organization (Calvimontes et al., 2020). Globally, the pandemic exposed the economic inequalities and social and environmental conflicts associated with mining.

In Suriname, gold mining was declared an essential activity due to its economic importance, and both large-scale mines restarted production after a short intermission. Small-scale mining, the skalians in the rivers and on Lake Brokopondo, and the hundreds of land-based operations in Marowijne, Brokopondo and Sipaliwini, also continued the activities. In the relatively isolated extraction locations, the Maroon and Brazilian miners are protected from the contagious virus. In one of the commercial mining settlements, Antonio do Brinco, on the Lawa River, a COVID-19 outbreak was reported among the mostly Brazilian population, but it was quickly brought under control. Although international travel and trade have not yet returned

to the old level, gold mining and commerce have only been interrupted for a short time. The rise in the price of gold on the world market is motivating the actors in the sector to resume activities quickly.

NOTES

- 1. In 2015 the Alcoa bauxite industry that was the foundation of Suriname's economy during the 20th century ceased activities.
- 2. Eritrea, Gabon and Mongolia follow it.
- 3. www.kalotipm.com/Media-Center-PressReleases-Details/7/kaloti-opens-surinames-first -gold-refinery.
- 4. Iamgold and Newmont have the right to export directly, without interference of Suriname authorities.
- 5. And in neighboring French Guiana, where it is mined illegally and cannot be commercialized. This gold is smuggled to Suriname (and to a lesser extend also to Brazil) to be sold.

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13. Civil society's positionality in new development chains: insights from the land and mining sectors in Tanzania

Joanny Bélair and Thabit Jacob

INTRODUCTION

The wave of large-scale land investments—or the so-called land-grabbing phenomenon—has received a lot of scholarly and media attention since 2008. The scholarship has been prolific in documenting international and domestic drivers of this investment rush in developing countries. Importantly, these new capital investment flows are also embedded into development flows. International efforts have been on protecting populations from land alienation, on ensuring sustainable and equitable agricultural and mining development, and on protecting local land access, management and ownership. It has led to key policy initiatives at the international level, such as the jointly elaborated Principles of Responsible Agricultural Investments and the 2013 G8's Land Transparency Initiative. In 2012, the Food and Agriculture Organization of the United Nations further advanced international discussions on the issue by proposing its Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the context of national food security, and in 2014, its Principles for Responsible Investments in Agriculture and Food Systems.

In parallel, and in line with this development agenda, emphasis has been put on the important role played by civil society organizations (CSOs) in upholding rights and strengthening democracy and institutions. CSOs are key local development actors in these new investment flows, in both the agricultural and mining sectors. Indeed, CSOs are expected to engage with citizens, educate them, compensate for the state's lack of capacity, facilitate development initiatives at the local level and monitor governance. Moreover, by enhancing participation in policy-making processes, they are often seen as alternatives to state- and market-led development, potentially bridging the gap between citizens and the state. They also work in partnership with donors and international institutions and, as such, they have been continuously implicated in policy-making and donors' socio-economic development initiatives to achieve many Sustainable Development Goals, such as gender equality; reducing inequality; life on land; and peace, justice and strong institutions.

Given CSOs' unique role in development, investigating empirically their positionality in those new development chains is crucial. For instance, how are these new capital flows and associated international policy-making and development initiatives

redefinining CSOs' political role? How are CSOs negotiating their interactions with local populations, state actors and donors to foster sustainable and inclusive governance at the local level? This chapter focuses on these questions. It looks at the role of CSOs in Tanzania, one of the most targeted countries in sub-Saharan Africa for new farmland and mining investments. More specifically, it examines the networked space in which they engage and how it shapes their positionality, from both a macro (central-level) and a micro (local-level) perspective. We first sketch their role at the central level by looking at how CSOs have been recently involved in policy-making initiatives in the land and mining sectors. Second, by examining two specific local empowerment initiatives at the sub-national level, we critically explore how CSOs' positionality in those new development chains shapes their engagement with local communities. Throughout the chapter, we conceptualize civil society in terms of processes to revisit our conception of verticality in governance practices, arguing that CSOs participate in spatialization practices (Ferguson and Gupta 2002) associated with new capital and development flows.

A CURRENT MACRO PERSPECTIVE ON CSOS' POSITIONALITY

Policy-making in the Mining Sector

Tanzania's mining sector has been the focus of various forms of CSO activities in recent years. The often-contentious relations between large-scale mining companies and surrounding communities have provided a platform for CSOs' involvement over the years. Local CSOs were very active in the mining sector at the height of liberalization in the 1990s and 2000s. They actively engaged in campaigns against multinational companies in the areas of poor taxation, transparency of contracts, environmental compliance and the mining sector's poor fiscal contribution to the economy. They also defended small-scale and artisanal miners, local communities and mine workers against forceful evictions and displacement, violence from private and state security forces, environmental pollution and human rights abuses.

During the early days of liberalization, CSOs' approach was confrontational in nature. The Lawyers' Environmental Action Team under activist-lawyer Tundu Lissu and Rugemeleza Nshala led the fight for the rights of artisanal miners evicted to pave the way for the establishment of Bulyanhulu gold mine in 1996. The state reacted with force, and several activists were arrested and charged on suspicion of sedition (*Guardian* 2011). In the late 2000s, new translocal linkages emerged in the mining sector, leading to the creation of a networked space grouping many actors, such as international non-governmental organizations (NGOs), transnational mining companies and national and local CSOs. The network was led by the Interfaith Standing Committee on Economic Justice and Integrity of Creation, a faith-based committee formed in 2008 comprising religious leaders from the Christian Council of Tanzania, Tanzania Episcopal Conference and National Muslim Council of

Tanzania. The network also included the government; international NGOs from the Global North, such as Norwegian Church Aid and Christian Aid (UK); and mining companies such as Canada's Barrick and South Africa's AngloGold Ashanti. In 2008, the interfaith committee released its influential report titled A Golden Opportunity: How Tanzania is Failing to Benefit from Gold Mining, which concluded that Tanzania had not benefited from mining as much as it should have done. The report proposed several policy recommendations that were influential in the introduction of the new mining policy in 2009, and the new Mining Act of 2010. It led to CSOs' involvement in policy-making within the mining sector (Therkildsen 2000). This network was further strengthened in 2009 then Tanzania joined the Extractive Industries Transparency Initiative. A local chapter, Tanzania Extractive Industries Transparency Initiative (TEITI), was formed and it established a multi-stakeholder group (MSG) made up of equal numbers of representatives from government; mining, oil and gas companies; and CSOs (TEITI 2015; Jacob et al. 2016). The MSG offers space for CSOs to discuss transparency and governance issues in the extractive sector, and is credited with improving collaborations and trusts between government, civil society and mining companies. MSG activities under TEITI were reinforced with the passing of the Tanzania Extractive Industries (Transparency and Accountability) Act of 2015, which gives TEITI a legal basis (Jacob et al. 2016). Thus, while the relationship between mining-related CSOs and the state was strained during previous administrations due to the adversarial nature of CSOs' campaigns, things changed dramatically under the Kikwete presidency, which saw a more a more liberal approach towards CSOs in general and less state interference in CSOs' affairs. The close relation between the state and CSOs during the Kikwete era opened up space for CSOs led by the Interfaith Standing Committee and later HakiRasimali¹ to discuss various issues pertaining to the mining sector.

However, CSOs' role and positionality in the mining development chain are contingent in time and space. Recent observations indicate that although the state-CSOs relationship appeared productive, consultation processes were not inclusive enough and the influence of CSOs' actors was constrained during policy-making. This was evident with the passing of the 2010 Mining Act and the 2015 Petroleum Act under certificates of urgency² with limited inputs from CSOs. Furthermore, the fifth government, under President John Magufuli, is characterized by increased emphasis on state-led development compared to the more neoliberal approaches of past administrations. With Magufuli, the mining sector is witnessing increased securitization, which could limit the space and opportunities for CSOs. For instance, the President has declared an economic war, which includes digital surveillance against activists and CSOs which are now suspected of collaborating with foreign mining companies (Jacob and Pedersen 2018). This steadily shrinking space for CSOs is part of the current government's broader policy of closing room for dissent. This includes the recent passing of draconian pieces of legislation, such as a cybercrime law, the Statistics Act and the Electronic and Postal Communications (Online Content) Regulations. Although the dynamics in the land sector are somehow different because the state is less confrontational in its attempt at closing CSOs' political space, the recent policy initiative of reviewing the National Land Policy shows that, as in the mining sector, CSOs' influence over policy-making is heavily constrained. As the next section argues, CSOs' political role is often more performative than substantive.

Reviewing the National Land Policy

The process of reviewing the 1995 Land Policy started in August 2015, but the rationale for the timing of this change remains unclear. Official documentation states that it was triggered by changing national and global contexts: in sum, the current land regime was presented as hampering economic development and industrialization. Officially, this new land policy aims at 'providing a framework for articulating the central role of land in socio-economic development' by implementing an 'effective land tenure system' which ensures 'equitable allocation and access to land for all citizens' for an optimal use of land resources (unpublished 2016 official draft of the New Land Policy). After conducting 'wide-ranging public consultations with stakeholders', the Ministry of Land released an official first draft, which was adopted in November 2016. Even though the document states that the policy was endorsed by the Cabinet and is currently being implemented by the Ministry of Land, there is still much uncertainty about the process. Because of a lack of transparency, it is not clear vet by whether and when the policy will be effectively replacing the previous one. The foreword of the New Land Policy gives the impression that the review process was consultative, democratic and national in the sense that views from different actors were collected and considered. However, the extent to which such objectives have been achieved remains unclear. Regarding consultations with CSOs, it appears that several were not informed in advance of the consultations, giving them a very short window of time to prepare their comments on the policy. Sometimes, they were notified so late that it was logistically impossible for them to attend meetings. Also, CSOs felt powerless during the process. Although the consultations triggered collaboration and a fruitful dialogue between CSOs-several CSOs worked together on a joint position paper on the New Land Policy, their interactions with the officials of the Ministry of Land were mostly unidirectional. Most of them were under the impression that their inputs would not be considered seriously. In the words of one representative of a CSO:

Consultations came as a surprise for us. We were not prepared. Moreover, the process was fake. If you look at how it is presented, it looks like they undertake the whole process seriously, but few people were consulted and are not representative of the country [...] When we participated to the consultations in Morogoro, it was made very clear to us that it was the end of it. They will not be considering our suggestions. (Bélair 2017 interview with the CSO Tawla)

In addition, several CSOs' requests were left unanswered or ignored. For example, the Ministry of Land refused to disclose key documents related to the New Land Policy, such as the strategic implementation plan. It also remained silent on the

subsequent steps, leaving ambiguity about what will happen next. As stated by one of my informants:

They [the Ministry of Land and the government] are speeding up the whole process. We have no luxury of time. We cannot stop or exert any control over the process. And we have not seen the strategic plan of implementation. In the end, we don't really know what will be in the policy. (Bélair 2017 interview with the CSO Haki Ardhi)

This discrepancy between official discourse and practices draws attention to the performative aspect of interactions between actors in the process of reviewing the National Land Policy. Although the government complies with donors' exigencies regarding the importance of considering civil society and their inputs on national land policies, consultation practices appear to stem more from courtesy than from genuine commitment to consider CSOs' inputs. An analysis of public meetings between state officials, donors and CSOs as performances give us interesting insights on CSOs' positionality in this development chain. For example, we assisted at a policy event organized by the Policy Forum³ in September 2017 to discuss the New Land Policy. During this meeting, CSOs were allowed to express their views, and to be very critical. They highlighted the lack of transparency of the process, the problems with the public consultations and several important issues with specific provisions of the new Land Act. This official openness towards CSOs was an elegant way for government officials to convey the impression of creating a political opening. Indeed, at first sight, the government seems genuinely interested not only to hear but also to consider and ponder civil society's views and comments. This apparent political openness to criticism increased the legitimacy of the Tanzanian consultative process with the international community and donors. Yet our interviews with participating CSOs reveal that, while away from the international community's gaze, their interactions with state officials were much more authoritative: they were mostly dismissive of their inputs and concerns. In addition, donors were satisfied by the government's apparent commitment to inclusive and participatory governance even though they are aware, as other actors are, of its performative character. It appears sufficient for them to continue supporting and funding such initiatives.

In sum, our argument here is that despite their increasing presence and visibility in key contentious land and mining issues, CSOs' political influence in Tanzania remains limited, and their participation in policy-making has an important performative function. Tanzanian CSOs' positionality in those development chains remains fragile: they are dependent on donors to secure their inclusion at the central level, have limited powers on policy-making, and are constantly at risk of being disciplined by the state. Indeed, as the current securitization in the mining sector shows, the state will not hesitate to discipline them as soon as their actions are threatening its political agenda. Yet an analysis of CSOs' positionality in Tanzania would not be thorough without looking at how CSOs also have developed translocal linkages at the sub-national level with local communities. To explore this question, the next section analyses the implementation of two donor-funded local empowerment programs in the Pwani region.

LOCAL EMPOWERMENT PROGRAMS

Example 1: Training Local Land Rights Monitors

Haki Ardhi is a national land advocacy organization which is seeking not only to document land issues in Tanzania, but also to influence land-policy-making and improve land governance in the country. The CSO has the reputation of being 'activist and radical', which affects its interactions with government officials. Even though Haki Ardhi wants to engage in a collaborative relation, government officials at both central and local levels remain suspicious of the CSO's mandate and objectives (Bélair 2016 and 2017 interviews with the CSO Haki Ardhi). Training local land rights monitors is an ongoing empowerment initiative that has been deployed by Haki Ardhi in several Tanzanian districts; that is, Morogoro, Bagamovo, Kisarawea and Rufiji. It is funded by international donors and aimed at building grassroots capacity regarding land rights. The usual process entails selecting two representatives-a man and a woman-in each chosen village and educating them about the Tanzanian land legal framework and their land rights. The program has two objectives: strengthening local capacity by training local advisors on land issues, and creating a line of communication on what is happening on the ground at the local level. Those lines of communication are key for the CSO to access relevant local information on land development and issues from its offices in Dar es Salaam. In the words of one Haki Ardhi program manager: 'these land monitors become our ears at the local level, disseminate information to other villages, and most of them became very active at defending Tanzanians' land rights' (Bélair 2016-2017 interviews with the CSO Haki Ardhi).

Rufiji district, located in the Pwani region, was chosen for this program because it has been one of the most targeted areas for new land investments in Tanzania and has witnessed numerous allegations of land rights violations, conflicts and issues. Started in 2011, the program led to the training of about 50 land rights monitors in the district. In addition to collecting data on legal and illegal land investment projects and villages' land dispossession, land rights monitors were responsible for briefing Haki Ardhi's central office, located in Dar es Salaam. Although this program was ongoing for several years, it was at the time of fieldwork in 2017 flimsy. Indeed, after the 2015 elections, most Rufiji land rights monitors abandoned their function. Out of 50 in 2011, only one was left in 2017. Moreover, even when land rights monitors were actively involved, their capacity in changing land management practices associated with these new investments was marginal. In Rufiji specifically, our investigation of five distinct investment projects that were targeting land in six different villages showed that consultations with villagers were either procedural or absent. Although the processes through which these forceful land acquisitions were done vary, our findings reveal that most investors still acquired village land in Rufiji district by working closely with various government officials. In sum, empowering local actors in Rufiji did not succeed in bringing more accountability and transparency in land acquisitions (Bélair 2018). Proper legal procedures are often not followed, and government officials continue to disregard and violate villagers' land rights.

Both the local context of implementation and the limited timespan of donors' funding explain this outcome. First, land investments offer new possibilities for accumulation to government officials at district and local levels. Not surprisingly, these officials are reluctant to share information with villagers, especially if they seek to foster their own material interests with investors at their expense. These governance issues make land investments a very contentious issue in Tanzania. This trend is not unique to Rufiji: similar dynamics have been documented elsewhere in Tanzania, and in many other African countries. One immediate problem to which land rights monitors are confronted daily relates to governance practices. Government officials tend to disagree with Haki Ardhi's claim that information about new investments should be shared with the concerned villagers. In the words of one informant: 'Usually the DC [district commissioner] and most chairmans [village leaders] want to get their bribes from investors. It is why they are reluctant to share information with us and villagers' (Bélair 2016 interview with land rights monitor, Rufiji). In addition, and complexifying the matter, it is worth noting than an inherited socialist and top-down vision of governance is still prevailing in Tanzania. Officials at all levels still acknowledge the government as the uncontested authority over land matters. Although it is true that the enactment of the Village Land Act of 1999 decentralized powers over land management to village entities-the Village Council and the Village Assembly-there is still a tendency among district officials to adopt a paternalistic stance towards villagers. This often translates into either excluding concerned villages from negotiations with investors, or by disseminating information on investors during village meetings in an authoritative and procedural rather than collaborative way. Therefore, Haki Ardhi's empowerment project is much more political than it appears at first sight. At the local level, it is highly controversial because it potentially threatens political and material interests of not only investors, but also of various government officials, Members of Parliament (MPs), and political leaders who might have personal stakes in some of these projects. As a result, local land rights monitors are entrusted with a contentious mission and are vulnerable to threats from various government officials. Intimidation practices have been regularly used against them, ranging from accusations of conducting illicit activities to detention and incarceration. Furthermore, Haki Ardhi does not provide its local monitors with adequate political protection, nor sufficient financial resources. This is partly structural: donors' funding is often project-oriented, and thus limited in terms of both financial resources and duration. As a consequence, when donors terminated the project, those local monitors found themselves without support to document dubious practices associated with land management in the countryside. In addition, engaging local citizens is a way for donors to depoliticize their activities in regions where land issues are very contentious. Indeed, framing their initiative as an empowering

tool is an efficient risk-minimization technique. Donors' expectations are that local monitors should bear not only economic costs—they are volunteering—but also all the socio-political risks associated with their implication in contentious politics associated with land issues. Although Haki Ardhi is aware of these local political dynamics, it remains powerless in this situation. Because of funding dependency, the CSO prefers to comply with donors' demands in terms of project orientation and structure. At the local level, it is unsustainable. Land monitors' opportunity cost to engage is relatively high as they must also sustain their livelihood. It is thus hardly surprising that most of them decided to resign. As one land rights monitor told me: 'When I discover scandals and share the information with Haki Ardhi, they refer to law institutions and human rights organizations. [It is not helpful]. I can't go to the government or court. I don't have money to defend our rights' (Bélair 2016 interview with land rights monitor).

Example 2: Tackling Gender Discrimination in Land Rights

Officially registered in 1990, Tanzania Women Lawyers Association (Tawla) was founded by a professional group of women lawyers who wanted to promote equal rights for all, with a focus on marginalized groups such as women and children. Their mission is to ensure the protection of women through legal empowerment and promote good governance. They have more than 570 members. Their headquarters are in Dar es Salaam, but they also have four regional offices in Tanzania: Arusha, Mwanza, Dodoma and Tanga. Contrary to Haki Ardhi, Tawla is not perceived as an activist organization nor as a threat by government officials. Moreover, the organization benefits from the support of influential MPs. Its core mission is to provide legal services to women. Mostly, its funding is coming from international NGOs and donors. As these donors are often privileging their own projects with their own agenda, it is difficult for Tawla to maintain its legal services and cover its operational costs. It has been and still is a constant struggle for the CSO. Furthermore, over the last few years, competition over donors' funding has been increasingly challenging in Tanzania. As a consequence, Tawla has reduced its permanent staff (from 41 to 15 in 2017) and diversified its activities to better meet donors' requirements for project funding.

In 2014, a pilot project on gender land rights was commissioned by donors in Kisarawe district, Pwani region. The first step was a fact-finding mission, and two specific villages were chosen as case studies. Tawla's conclusions highlighted three main issues: women's lack of participation in decision-making processes; widespread corruption practices in the land sector; and non-respect of official land-acquisition procedures. To address these issues, the second step was to partner with village leaders and district authorities to develop gender-sensitive key principles, which Tawla wanted to integrate in the by-laws of each pilot village. The negotiation process was strenuous. Tawla even had to ask MPs to do some political pushing. District officials and local leaders—mostly men—were initially very resistant to change. Indeed, legally empowering women might be perceived as a threat to

their interests and position of power in the prevailing Tanzanian patriarchal system. Yet despite these initial challenges, all actors finally agreed to sit at the negotiation table, and the principles were integrated in the by-laws of both pilot villages. The third and last step was aimed at ensuring the project's sustainability: Tawla—as did Haki Ardhi—trained gender monitors, who were tasked to continue training and empowering women in each village. Both Tawla and donors depicted the initiative in a very positive light. First, local leaders were now legally bound by these by-laws, which they have officially acknowledged. In addition, since villagers were also consulted and involved during the whole process, they are now better equipped to hold their leaders accountable. Moreover, such collaborative work led to an increased stakeholder feeling of ownership towards the key principles. For instance, Kisarawe indicated to Tawla its intention to pursue the project in all of the 74 villages of the district.

In spite of these encouraging results, one might wonder how these local gender monitors will manage to defend their rights in cases of violation once the funding is over and Tawla is gone. It is likely that they will have to go to court, and for women especially, defending their rights in court is intimidating and challenging. In addition, the judicial system in Tanzania is still plagued with corruption issues. As one Tawla lawyer told us:

Sometimes judges go against the law, or lose the evidence, or don't implement the law correctly. [...] Sometimes, women are just giving up even though we try to encourage them to stay strong to defend their rights. Lack of education is a problem. [...] Their perception of the court system is that to defend your rights, you need money. (Bélair 2017 interview with lawyer, Tawla)

This highlights an interesting paradox. For these results to be sustainable in the medium and long run, legal services should be provided on an ongoing basis to vulnerable communities, a consideration that has not been part of this donors' project. Moreover, Tawla's core mission is to provide these legal services in rural Tanzanian communities, but it cannot expand its services in this specific region because it lacks funding to cover the operational costs. Perhaps it could have been more productive for donors to simply fund the CSO's core activities in this district.

CSOS' NEGOTIATED POSITIONALITY AT THE LOCAL LEVEL AND IMPLICATIONS FOR INCLUSIVE AND SUSTAINABLE DEVELOPMENT

Even though Haki Ardhi's initiative did not bear the expected results, its analysis gives us interesting insights on the role played by CSOs at the local level. Our point here is not to attribute these results to intentionality, but rather to emphasize the ambiguity of CSOs' positionality at the local level. First, donors expected the CSO to reproduce a paternalistic role towards local populations that bears similarities

with historical legacies of top-down governance patterns. The adoption of a Western and neoliberal discourse on the protection of local land rights, and the underlying unquestioned assumption that this conception is the right one for the local context, indicate that the CSO is positioned *above* the local population, who need guidance and education. This dynamic is also embedded in socio-economic cleavages. Most CSOs' employees are highly educated Tanzanians, who have been more exposed to Western theories and models of governance, and therefore are intimidating for most villagers who do not have this access and these possibilities. CSOs' local positionality as knowledge-holders thus partly results from donors' support and funding. This gives implicit credence to a paternalistic normative process at the local level: CSOs are producing their authority with local communities not as their representatives but rather through their position as knowledge-holders.

With donors and government officials, CSOs' positionality also stems from their local knowledge, but mainly from their local status as a Tanzanian organization. Since Haki Ardhi is highly knowledgeable about local issues, it has a much better understanding of local political and socio-economic dynamics than most donors. In this sense, it has the possibility and potential to engage with local communities in a more significant and collaborative way because of their shared understanding of the most pressing issues, of the cultural local context and of the local political economy. Yet this potential has remained untapped in practice. There was little room in the donors' development project design to integrate the CSO's knowledge prior to the project implementation. The development project did not build up on the organization's knowledge of land issues, but rather imposed donors' vision and understanding of what should be done to improve local governance and accountability. Haki Ardhi lacks financial independence, and as a consequence its local role was mostly determined by donors' expectations and plans. For example, an alternative model could have proposed gathering villagers' insights on what is needed to better protect their land rights, or what could be a fruitful way of dealing with investors' increased interest in their land. It could have led to interesting discussions, and perhaps more efficient empowerment tools at the local level. Our interviews reveal that most villagers in Rufiji district are welcoming investors because they believe that new employment opportunities, and infrastructural investments, could foster socio-economic development in the district. Given these insights, it would have been more productive to equip them with tools and resources to better negotiate their terms of inclusion in these new development chains.

The role played by Tawla at the local level differs. Although some aspects of the two projects are similar, the main difference lies in the fact that Tawla's empowerment project is much less political in relation to new capital investment flows. Because it focuses mostly on marital properties and sexual discrimination embedded in customary norms, it does not threaten directly possibilities for accumulation of district and local officials with new investors. Moreover, Tawla's project has involved regular consultations, discussions and negotiations with all actors, including leaders, government officials and local communities. Tawla did not position itself as the knowledge-holder: rather, the CSO worked to find a consensus to satisfy all parties

involved. It resulted in a greater feeling of project ownership at the local level. However, donors assumed a very paternalistic role towards Tawla through their very funding of the project. Their initiative was implicitly deemed more productive than what the organization has been doing over the last 20 years with a lot of success. Although the project brought positive results, it is likely that these positive outcomes will fade away if support is not provided to enforce these legal gains for vulnerable populations. Paradoxically, Tawla's own program of legal empowerment is addressing this concern. It is thus legitimate to ask why donors did not decide to fund the CSO's ongoing activities instead. Second, and relatedly, this points out the importance of the notion of accountability to understand CSOs' positionality at the local level in Tanzania. Scholars' observations regarding the specificities of state-building in many African states seem relevant to understand how legitimacy and accountability affect the relationship between CSOs and local communities. For instance, Vu (2010) remarks that since most African states' legitimacy came from external powers, engaging with large parts of the population was not necessary to raise money because resources came from outside. Their role was imposed and not bargained at the local level, leading to a drastic transformation of the relation between the rulers and the ruled in these contexts. In the contemporary context, CSOs' accountability and resources are also coming from external resources: donors. Our point is that it similarly conditions the translocal linkages CSOs develop with other actors at both the macro and local levels. The question of legitimacy here is key. There is a dynamic of hidden accountability which is structuring CSOs' local practices (Blundo 2015). For instance, it is external recognition—and not the local population—that provides legitimacy to Haki Ardhi. Tawla's own mission has been disregarded to favour donors' vision of what is needed to enforce gender rights in Tanzania.

CONCLUSION

To conclude: this chapter provided empirical insights on how new capital and development flows redefine CSOs' positionality and engagement in two key investment sectors in Tanzania—the land and mining sectors. At the central level, our discussion indicates that despite CSOs' increasing presence, influence and visibility, CSOs' political powers and influence in policy-making remains very limited in Tanzania. In addition to funding dependency, they must rely on donors and international actors to secure their political inclusion at the central level. Even if consultation processes tend to be more inclusive, it appears to stem more from courtesy and international pressures than from the state's genuine commitment to engage with CSOs. At the local level, we reviewed two specific local empowerment initiatives to explore how CSOs redefine their positionality and engage with local communities. Our results indicate that CSOs derive legitimacy and accountability from their participation in a national networked space. At the local level, it means that they are mostly political intermediaries in those development chains. Importantly, it is through this intermediary role that they are both legitimizing and producing their authority towards local communities. In terms of sustainable and inclusive development, because CSOs lack flexibility and financial, normative and political independence, they found themselves bearers of donors' short-term initiatives which are not necessarily adapted to local communities' best interests and needs. Thus, through this process, CSOs participate in very specific spatialization practices associated with global capital and normative development flows. Key questions remain though: whether and how CSOs can emancipate themselves from these dependency relations, renegotiate their positionality and what would then be their political potential to foster sustainable and inclusive development.

EPILOGUE

Tanzania's response to COVID-19 focused largely on controlling its contested 'success' narrative. The state downplayed the effects of the pandemic from the very beginning and portrayed its response as effective compared to 'incompetent' responses by other African countries and the world at large. The narrative was backed by the relatively lower number of cases and mortality rate, numbers which are contested due to a lack of regular updates on infection rates coupled with limited testing. Nevertheless, the President constantly emphasized this success narrative, insisting on how Tanzania competently contained COVID-19 at home and could cooperate with other African countries to find a permanent solution, a move which saw Tanzania teaming up with Madagascar to come up with the so-called Pan-African solution to the pandemic.

As we argued in our chapter, in Tanzania CSOs' positionality in new capital and development flows is heavily shaped by their participation in a national networked space in which they constantly negotiate a difficult position, between donors, state officials and local communities. As the COVID-19 crisis is ongoing, we cannot fully ascertain its effects nor the extent of the changes it will induce on CSOs' activities and positionality in development and knowledge flows. However, already our observations indicate some trends. First, with COVID-19, CSOs' room for manoeuvring in Tanzania is likely to shrink as a result of donors' diminished presence and support on the ground, and of new limitations on lines of communication with local communities. Second, COVID-19 is already legitimizing the state's increased control on CSOs' activities and authoritarian practices. For instance, although crackdowns on CSOs' daily operations were well underway even before the pandemic emerged, COVID-19 has heightened this trend of narrowing civic space. State efforts during COVID-19 concentrated on a tight control on information, peddling its contested 'success' narrative on how it has handled the crisis. The state also led a campaign to control CSOs' efforts to hold the government accountable, thereby forcing many CSOs to resort to service delivery as allies of the state to complement government COVID-19 awareness campaigns. Therefore, COVID-19 already forced CSOs to renegotiate their positionality vis-à-vis the state. What is certain is that CSOs will have to find new ways to safeguard their legitimacy and accountability in this

redefined networked space if they want to survive. Hopefully, this global sanitary crisis will be an opportunity that CSOs will seize to redefine their relations with the state, local communities and donors to strengthen their national accountability and establish a local development narrative. Yet, given the current trend of increased state authoritarian practices, the challenge is great.

NOTES

- 1. HakiRasimali is a relatively new national platform which was launched 2015 to advocate for better governance of natural resources. It is made of member organizations at both the national and sub-national level. They include the Policy Forum; HakiMadini; Governance Links; the Oil, Natural Gas and Environmental Alliance; Tanganyika Law Society; Actions for Democracy and Local Governance; the Governance and Economic Policy Centre; and the Interfaith Standing Committee.
- 2. Legislation passed under certificate of urgency is when the relevant bill is considered to be urgent nature and the process for it to be passed as a law becomes much faster with minimal consultations as opposed to ordinary bills.
- 3. The Policy Forum is incorporated as a non-profit company under the Companies Act of 2002. The Policy Forum is a network of 77 Tanzanian civil society organisations established in 2003 and drawn together by their specific interest in augmenting the voice of ordinary citizens to influence policy processes.

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PART V

TRANSLOCAL DEVELOPMENT IN LANDSCAPES OF NEW CITY DEVELOPMENT AND URBAN INFRASTRUCTURES

14. New master-planned cities in Africa: translocal flows 'touching ground'?

Femke van Noorloos

INTRODUCTION¹

In the past 15 years or so, visionary modernist new cities are arising from scratch around an increasing number of African cities. In search of ways to jump on the 'world city' train, governments across Africa are increasingly lured by the promises of such urban megaprojects to enhance their positioning in the global economy (Carmody and Owusu, 2016; Côté-Roy and Moser, 2018; Van Noorloos and Kloosterboer, 2018; Watson, 2013). A variety of investors, developers, tech companies and architects - both national and international - have proposed master-planned new cities for Africa, either by themselves or in collaboration with national governments in public-private partnerships. Some of these cities are actually built, but in many places utopian new towns remain a drawing-board exercise. Unlike the earlier new capital cities of the early independence period (such as Abuja, Nigeria and Dodoma, Tanzania) we are now seeing private-driven investments in land and real estate. Between 2000 and 2017, an estimated 70 to 105 new cities have been planned (and some built) across the African continent (Keeton and Provoost, 2019; Van Noorloos and Kloosterboer, 2018). Such new property investments in Africa's cities often take the form of entirely new master-planned cities built up from scratch as self-contained enclaves, often at the peripheries of existing cities. At the same time, city centres such as in Addis Ababa (Ethiopia) and Kigali (Rwanda) are reconstructed in ways that resemble entirely new cities. This trend of building new cities is not limited to a specific geographical region: it takes place across the African continent, although North Africa - particularly Egypt - has a longer history of new city experiments than most other regions.

The resurgence of new cities is to some extent a trend elsewhere too, particularly throughout Asia – India is planning hundreds of new cities, Indonesia is considering establishing a new capital city, and other countries such as China and Malaysia have a longer history with new cities. However, we will focus this article on Africa, where these new types of investments have been particularly salient in recent years.

New cities come in a number of different forms. Some projects, such as Konza Technopolis (see later in this chapter), are primarily planned as national hubs to attract technological innovation and entrepreneurship, although housing and leisure are also included. Others are residential enclaves, much more focused on housing and consumption (for example, shopping, restaurants, hotels), mostly directed to the elite and upper middle classes. Diasporas and expats are often important target groups in

these projects, which closely resemble gated communities. An example is La Cité du Fleuve in Congo DRC, where homes have been built on two artificial islands in the Congo river, near Kinshasa. There are also 'social housing' projects where massive housing estates are planned on the outskirts of existing cities – mostly by national governments, such as in Angola and Ethiopia. There are also some new capital cities planned, although this is mostly a thing of the past. Finally, we also see Special Economic Zones re-emerging across the continent.

Urban megaprojects are an important part of current mainstream global urbanism, and criticized as 'urban revolutions from above' (Sheppard et al., 2015). They are part of the increasingly global flows of urban finance, knowledge and ideas. Why are we seeing this trend in Africa in the past 10 to 15 years? Governments, investors and developers will point to high population growth on the continent: according to United Nations (UN) projections, there will be 1.3 billion people living in African cities by 2050. Consultancy firms are also particularly keen to highlight the 'upcoming African middle classes', but caution is needed here: only a very small group can actually afford to live in new cities. What is clear is that economic growth plays an important role in the decisions of developers and investors: African cities are represented as a new global frontier of urban investment (Côté-Roy and Moser, 2018; Sheppard et al., 2015; Watson, 2013), and urban land and real estate have become important objects of speculation. The previous economic crisis of 2008 has played a role in diverting capital to new areas. Many new cities have been planned in fast-growing economies, sometimes specifically near mining and oil spots, as in Zambia, Congo DRC and Mozambique. The availability of new sources of investment, such as Chinese and Middle Eastern government-related funding, is also playing a role, though less than is often assumed: much of the investment is still from the traditional Western countries, global enterprises and national governments and enterprises in the countries. Important initiatives such as the New Urban Agenda and the UN's Sustainable Development Goals (SDGs) may also unintentionally strengthen the call for new cities: promoting sustainable, climate-smart and well-planned cities can in practice lead to a desire to start from scratch.

For governments and other national and urban stakeholders, the temptations of shiny modern images are difficult to resist in the midst of 'Africa rising' rhetoric (Côté-Roy and Moser, 2018). Within the neoliberal trend of intensified inter-city comparison and competition, city governments work hard to acquire an image as 'world cities', which tends to result in the replication of existing urban models in top-down ways in new places (Bunnell, 2015; Carmody and Owusu, 2016; Côté-Roy and Moser, 2018; McCann, 2011, 2013; McCann and Ward, 2012; Roy and Ong, 2011). The master-planned new city is one of these global urban models that is driven into African cities through the actions of global consultancy companies, architects and planners, financial institutions and the like (Carmody and Owusu, 2016; Côté-Roy and Moser, 2018). For example, new city models from Asia (such as Singapore and South Korea) and the Middle East (for example, the Gulf States) are often actively promoted abroad and copied-and-pasted to entirely new contexts without much attention for local context. The building of symbolic power through

hypermodern 'world cities' in order to attract attention – hence investment – in the global economy is an important reason for local and national governments to become involved in such projects (Goldman, 2011; Steel et al., 2017).

New cities increasingly gain attention in urban development debates: research is ongoing on the ways in which they embody specific translocal flows of urban models, ideas and knowledge, as well as capital. However, given the speculative character and lack of realization of many new cities, empirical evidence on their impacts is lacking. This chapter critically outlines the – still speculative – debate on the effects of new cities for translocal development and inclusion and exclusion at different scale levels.

IMPLICATIONS FOR TRANSLOCAL DEVELOPMENT

We will first delve into some general critical points on new cities, and then work out in more detail the implications for local land rights and livelihoods based on the case of Konza, where the translocality and chain effects become particularly clear.

New Cities: General Consequences for Development

In general, one of the main criticisms of the current wave of new cities is its elitist and exclusionary character. As we pointed out, the 'African middle class' rhetoric needs to be viewed with caution, and the large majority of African urban citizens remains completely unable to pay for housing in such projects. In their glossing over (or at best ignoring) existing cities in favour of global connections (Carmody and Owusu, 2016), new master-planned city plans are criticized for envisioning elitist enclaves which do not solve but rather potentially worsen urban problems (Van Noorloos and Kloosterboer, 2018), similar to gated communities. They risk socio-spatial segregation through walling and gating and by providing housing that is inaccessible for the large majority of the urban poor. If new cities provide new spaces for higher-income groups to cluster together, social interaction and the social contract between urban citizens risks falling into decline even more.

Another important aspect is employment and productive investments. While the large majority of African urban employment is informal, it is unclear how these closed and walled projects will provide opportunities for street vendors, small businesses and the like. What is clear is that there is a huge need for productive investments and employment in all African cities, and the types of new cities that contain productive or innovative elements can potentially play a role there. However, this promise has not been fulfilled yet: the new city developments on the African continent so far seem highly speculative and consumptive ('bubble urbanism': Steel et al., 2017), rather than enhancing the necessary productive economic development such as new industries:

Current urban investments build on existing weaknesses rather than transforming them; they offer mostly opportunities for speculation and quick profit to be made from residential and commercial development, thereby reinforcing the externally dependent character of urbanisation. (Van Noorloos and Kloosterboer, 2018, p. 1237)

New cities may also enhance fragmentation of urban governance through privatization of service delivery in these enclaves (Cirolia, 2014; Grant, 2015; Murray, 2015; Van Noorloos and Kloosterboer, 2018; Watson, 2013). As architects and other companies take over the role of urban planners, local governments have more difficulty creating their own integrated cities. This causes challenges for citizen participation and democracy. Furthermore, the attention and government investments that need to go into new cities may divert attention and finance away from the very necessary improvements in existing cities, which house the majority of the urban populations.

Nevertheless, some caution is needed in assessing the actual consequences of new cities, as most of them are only in the planning phase and some may not get beyond that. Also, inevitably there will be differentiation between new cities. Even though most new cities are developed as privatized enclaves and therefore exclusionary by design, experiments in 'inclusive design' are emerging for some cities (Keeton and Provoost, 2019). Furthermore, government-planned new satellite cities are also re-emerging, often meant as a way for authoritarian states to provide housing for the poor and middle classes, but also to assert political authority (Croese and Pitcher, 2019; Planel and Bridonneau, 2017). Indeed, the famous satellite cities of Luanda (Angola) and Addis Ababa (Ethiopia), uniform mass complexes of 'social housing' built by the government after Chinese examples, are directed at the poor and lower-middle classes, although it remains very difficult to reach the real poor. The effects of new cities are thus diverse and can only be assessed in the long term. At the same time, urban megaprojects and master visions do create certain types of impact from their very first planning phase onwards (De Boeck, 2011; Smith, 2017). One type of effect that is already observable, even if the cities have not been built, concerns changes in access to land, resources and the livelihoods of surrounding populations.

New Development Chains and Translocal Effects Around the New Cities: Land Rights, Displacement and Livelihoods

Today's African utopian new city plans provide particularly salient examples of the large-scale speculative urban land investments that have been discussed under the concept of 'urban land grabs' (Klaufus et al., 2017; Steel et al., 2017; Van Noorloos et al., 2018). Given the large scale of the projected urban visions, dramatic changes in land access and use can be expected. These expected changes are particularly problematic as many projects take place in hybrid peri-urban or 'rurban' spaces, which are already highly complex in terms of land governance. Against the background of increasing land scarcity and global struggles over land rights, Africa's new cities raise concern, particularly given their large scale and enclave character.

Large-scale urban projects can create severe land conflict and displacement, as their surrounding spaces are hardly ever 'empty' (Leitner and Sheppard, 2018). While large-scale slum demolition within cities is widely reported, the less-well-known instances of large-scale land development in the peri-urban interfaces around African cities are also problematic. The suburban and peri-urban areas around existing capital cities are exactly the places where most new city projects – the satellite cities – are planned. In these spaces in-between the rural and the urban, the complexity of land governance arrangements, with many intersecting land claims and types of tenure/ governance, often leaves the poor without much protection in the face of land development (Van Noorloos and Kloosterboer, 2018).

The case of Konza Technopolis in Kenya will show that even in the absence of large-scale direct displacements and in spite of delays in the project, there are real consequences for surrounding populations. We need to look at indirect displacement chains and enclosures, but also at other new population movements around new cities.

The Case of Konza Technopolis, Kenya

Konza Technopolis is an ambitious new city plan in Kenya. The project is managed by a development authority, a semi-governmental institution or special-purpose entity working under (and reporting to) the Kenyan Ministry of Information and Communications (MIC), which develops partnerships with a number of (mostly international) private developers (Konza Technopolis, 2015).² The US-based consultancy Tetra Tech leads the master planning. A number of other consultancy companies have also been important in advancing the project, such as the World Bank's International Finance Corporation (acting as a lead advisor on project structuring and bid-out) and McKinsey (IFC, 2014; Smith, 2017). In 2012 the public–private Konza Technopolis Development Authority (KoTDA) was established, and in 2013 the project officially started. It was planned at the very national level, primarily by the MIC (which is the only state institute represented in the KoTDA), but with high national symbolic power and presidential backing (see also Splinter, 2014).

This high national government interest is also clear from the fact that Konza Technopolis has been an iconic part of the Kenya Vision 2030 national development strategy from the start of this new strategy, which aims to further the country's economy to reach a middle-income status, based on the service sector, particularly information and communication technology (ICT) (Government of Kenya, 2007; interview with MIC). Konza Technopolis was envisioned as a flagship project that would become the 'Silicon Valley of Kenya' (or 'Silicon Savannah'): a major ICT hub meant to 'spearhead technological innovation and development' at the national level, by attracting 'high-tech industries, start-ups, and universities' and by providing national and global connectivity (Konza Technopolis in Klaufus et al., 2017). Konza Technopolis, which is planned about 60 km south of Nairobi as a satellite city, is holistic and multi-functionally planned, combining housing, offices/work, a university, a hospital, schools, hotels, shopping, and so on. The MIC through KoTDA

leases the land (5,000 ha in total) to private developers for 99-year terms, and provides public infrastructure and regulatory guidelines. The project will create 17,000 jobs and attract 200,000 residents.

Despite government's high ambitions, Konza Technopolis has been suffering from delays and intra-governmental conflict. Due to funding difficulties it took three years before the first infrastructure provision slowly started; today the first groundwork is laid for roads, water boreholes and electricity infrastructure, and the first buildings are being built, including a datacenter. The major part of the area to be developed is currently just grassland with a fence. Intra-governmental problems were blamed, and the global financial crisis probably also played an important role (Smith, 2017) in stalling investment. In 2019 Chinese investors expressed an interest to provide financing, and since then, the first phase of the project has speeded up.

The Konza Technopolis site (5,000 ha), including its planned buffer zone (20,000 ha), falls within three counties: Machakos, Makueni and Kajiado. The area is part of arid and semi-arid lands, where pastoralism is historically an important source of livelihoods. The buffer zone was established to prevent 'uncontrolled' informal developments from popping up around the project, as these could become an 'eyesore' and discourage investors. The project area itself is currently not used or inhabited, but there are two main communities in the buffer zone area: Malili and Old Konza. Both are very different in their land use, livelihoods and histories.

The community of Malili was a small commercial centre where population growth started to take off rapidly after the announcement of Konza Technopolis in 2012: by that time, much land was subdivided and sold. The announcement of Konza Technopolis and the associated expectations also attracted large numbers of newcomers from all over Kenya in search of job opportunities, and with hopes for better infrastructure and increasing land prices. Malili Centre has grown into a residential and commercial town where people's livelihoods revolve around commercial activities, services and trading. Old Konza is a small town to the south of Konza Technopolis site, with mostly long-term inhabitants who are farmers on their own lands and/or pastoralists, although often combined with other sources of livelihood.

Buffer Zone, Repulsion and Attraction: Displacement Chains

We cannot evaluate displacement effects by looking only at direct project land, or only at instances of actual land lease or acquisition. The experiences around Konza Technopolis show that the creation of extra infrastructure and buffer zones can fuel displacements, and new land use and zoning regulations can create livelihood insecurity.

With the aim of keeping informal development from springing up around the project, a buffer zone was established around the project. The investors or landowners are required to strictly adhere to a comprehensive Local Physical Development Plan, which sets guidelines and standards on how the roads, sewerage and other infrastructure within the buffer zone should be constructed (DPP, 2013). Any construction needs to be approved by KoTDA. For many years, any further construction

or subdivision of land was frozen (Konza Technopolis, 2017). As a consequence, residents were afraid of being unable to live up to high 'modern' building standards and hence risked the demolishing of their house, or being bought out by high-income earners and well-off investors who can meet the required development standards. Given project delays no demolishing has taken place, but residents indicated being more cautious of putting up permanent structures. Old Konza inhabitants were also afraid that the land-use planning would affect their already rather insecure land rights or outlaw their livelihoods.

In assessing the impacts of large-scale urban plans on land use and resource rights, a limited focus on direct displacement or expulsion of sitting land users also tends to overlook important land users and livelihoods dependent on the spaces in other ways. Particular groups which are often overlooked are mobile and temporarily inhabiting groups such as (peri-)urban farmers (De Boeck, 2011; Shannon, 2019; Zoomers et al., 2017), fishers and pastoralists. The fence constructed around the Konza Technopolis project site established a barrier which prevented local pastoralists from grazing their herds of cattle in the area, which they had traditionally used for that purpose.

On the other hand, while some groups may risk indirect displacement, other groups may be attracted to the area exactly because of the Konza Technopolis plans, as is the case in Malili. In tandem with population growth, high land speculation has been ongoing in Malili. Apart from people seeking employment, many also arrive seeking an increase in land prices and quick gains. Indeed, inhabitants and experts generally agreed that land prices have increased considerably since 2006-7, and a number of group ranch shareholders have been able to earn a good profit. It thus shows that even if no real construction has happened yet, the mere existence of a project plan already creates impacts. While villagers are positive and some benefit from opportunities, the majority of Malili settlers live in rather vulnerable circumstances, and hopes for employment are hard to be fulfilled. Paradoxically, many of these recent settlers now face insecurity in their access to land and livelihoods: not only will their access to housing possibly be affected by the buffer zone regulation, they also face extra insecurities as a result of the chaotic local land market, with rapid land transfers and multiple claims on the same plot of land (Mwau, 2013). A potential new displacement chain is thus set in pace.

Finally, from literature worldwide it appears that when political stakes are high and projects are developed with reference to the 'national interest', there is a large risk of fast-tracking procedures, which may heighten land tenure insecurity and thwart public participation in planning (Datta, 2015; Goldman, 2011; Van Noorloos and Kloosterboer, 2018). These problems indeed materialized in Konza Technopolis. Participation by and informed consultation of the inhabitants has hardly taken place. The lack of adequate public participation does not mean inhabitants' perceptions of the project were necessarily negative: rather, communities were heterogeneous in their vision. Also, their opinions have changed over time, as there turned out to be a wide gap between people's high expectations and the very volatile and insecure nature of the new city. Initial widespread positive perceptions of Konza Technopolis in both villages – deriving from hopes for employment, business opportunities and urban services – have gradually made way for scepticism due to delays and political problems. It is important to note such changes over time in the actors' roles and interests, which take place even before any construction has started.

DISCUSSION AND CONCLUSION

The main problem of new cities lies in the failure to accept 'informal' development as being an intrinsic part of African cities (Parnell and Pieterse, 2014). This problem is well known: new cities are often planned as gated middle- or higher-class enclaves disconnected from the real cities. What this case of Konza Technopolis also shows is that the negation of informality also clearly presents itself in the planning of new cities' surroundings, and thereby impacts the daily lives and prospects of their inhabitants, by making access to land and livelihoods less secure. On the other hand, the fragmentation of governance and the consequent delays and failure to act have only increased informal and speculative land developments around Konza Technopolis and made it all the more difficult to reach a utopian 'well planned' vision for the country.

This chapter has highlighted that new cities are inserted into real places with pre-existing activities, humans and livelihoods which start to change and co-evolve as soon as an idea for a new city is elaborated. We have noted that the peri-urban spaces where many new cities are planned are hardly ever empty, and insertion of new structures in such locations bring a risk of displacement, both physically and economically. In Konza Technopolis the potential and real displacements were relatively small, given the low population density in the area, yet they still provide interesting insights into the process.

In the planning of Konza Technopolis south of Nairobi, a variety of land-related problems have emerged, even long before any significant construction has started. The case illustrates well that the risk of displacement in the context of new cities includes more than only direct dispossession of land within the project area. Over time, different types of displacement chains can evolve (Van Noorloos et al., 2018). Indirect displacement in this case took place by impeding the (partly) mobile livelihoods of pastoralists, and potentially by the establishment of a buffer zone with new land-use regulations around the new city – land tenure and livelihoods insecurity for the future is the main issue there. At the same time, displacement chains that caused repulsion also ran parallel to processes of attraction of new inhabitants which were drawn by new aspirations and opportunities. These new inhabitants were not necessarily elites as is often assumed: in Malili, new vulnerable migrants coincide with land speculators and developers.

While the often-studied policy framings and realities, the planning models and the financial flows of new cities are important in understanding how and why new cities are re-emerging in Africa (Carmody and Owusu, 2016; Cirolia, 2014; Côté-Roy and Moser, 2018; Fält, 2019; Grant, 2015; Van Noorloos and Kloosterboer, 2018; Watson, 2013), the local impacts of these projects deserve more attention in them-

selves. As the rural land grab literature has also shown, local impacts, views and responses to land deals are multiplex and differ according to space and time (Sassen, 2014; Zoomers, 2010; Zoomers et al., 2017): they are in themselves highly influenced by global processes. When the investment is peri-urban, these issues are only intensified, and intermingled with pre-existing urban transformations, aspirations and livelihoods.

We also need to look seriously at the long-term consequences of new city development. It cannot be denied that improved urban planning and the generation of productive employment and innovation are highly necessary across the continent, and that not all new cities are necessarily a problematic trend. However, the necessary transformations of local and national economies seem very distant, as many new city projects are currently more driven by consumption and speculation in land and real estate through attracting attention and building an image. This means that they are building on the structural problems of many African economies (such as external dependency), rather than transforming them. The de facto consumptive and supply-driven character of many new city projects (resembling gated communities for middle and higher classes), their insertion into complex 'rurban' spaces with even more complex land governance arrangements, and their tendency to implement post-democratic private-sector-driven governance (but with public funding as a back-up) will make them at best unsuitable for solving any of the main urban problems Africa is facing, and at worst they will increase expulsions and enclosures of the poor, public funding injustice and socio-spatial segregation and fragmentation. This means that particularly the 'inclusive' part of SDG 11 ('Make cities and human settlements inclusive, safe, resilient and sustainable') may be threatened by this trend. As it was noted, policy makers and practitioners need to be aware of the unintentional effects that the SDGs and similar initiatives may have: that is, their focus on formal models of 'good urban planning' may in practice strengthen the call for new cities.

NOTES

- This chapter is based on the following articles which have been published before, and in which the methodology is explained: Van Noorloos, F., Avianto, D., and Otieno Opiyo, R. (2019) New master-planned cities and local land rights: the case of Konza Techno City, Kenya, *Built Environment*, 44(4), pp. 420–437; Van Noorloos, F., and Kloosterboer, M. (2018) Africa's new cities: the contested future of urbanisation, *Urban Studies*, 55(6), pp. 1223–1241.
- 2. The master plan for Phase I is prepared by a consortium of 10 international development companies, among which are global, US-, Germany-, and Kenya-based consultants, architects, and real estate advisors, and the IT firm Cisco, based in San Jose, CA, USA (Klaufus et al., 2017).

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15. Urban infrastructure and displacement: two sides of the sustainability coin

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1. INTRODUCTION

With the dawn of the global urban age sustainable urban development has become a focal point of contemporary international development policy. For the African continent, where urbanization has been a historically neglected topic, the 'urban turn' has triggered unprecedented investments in urban infrastructure from international donors and investors (Zoomers et al., 2017). So far, debates on infrastructure development have been focused on the utility of new infrastructures, largely overlooking any broader impacts infrastructure development may have. More recently, however, there have been growing concerns about the impacts of infrastructure development on urban land use. As urban land is by definition owned and depended on by urban residents, infrastructure development is logically premised on (forced) displacement. So far, there is very little empirical understanding of how such displacement relates to the issue of sustainable urban development. As a result, the real impacts of these mounting investment flows on Africa's urban sustainability remain a mystery.

In this chapter we will explore this empirical and conceptual gap based on recent evidence from Beira, Mozambique. In recent years Beira has become a hotspot of international donor investments, with donors praising the city's leadership for its ambitious and far-reaching agenda to fundamentally restructure the city. Looking behind the curtain of three high-profile infrastructure projects, we explore how displacement has instigated processes of social-spatial and institutional change that have been obscured from the city's development narrative, with far-reaching implications for urban sustainability. The chapter concludes by arguing that there is an urgent need for debates of urban sustainability to include the 'displacement chains' (Van Noorloos et al., 2019) that are set in motion by infrastructure development by recognizing infrastructure development and displacement as two sides of the same coin.

Background: Global Infrastructure Flows and African Urban Development

Since the United Nations declared a global urban majority in 2008, sustainable urban development has become a major topic in international development discourse, enshrined in global agendas such as the Sustainable Development Goals (SDGs) and the New Urban Agenda (Parnell, 2016). The issue of sustainable urban development is particularly pertinent for the African continent, where urbanization is broadly characterized by poverty and precarity and where the largest relative increase of global

urbanization is expected to occur in the coming years (Parnell and Pieterse, 2014). As a result, African urban development has now become the subject of unprecedented interest from international donors and investors alike, ushering in a new era of global interventionism in African cities (Shannon, 2019).

At the same time, knowledge of African urbanism and urban development has been notoriously limited, serving as a hangover of decades of rural bias in development policy and research (Parnell and Pieterse, 2014). Thus, while global interest in African urban development is currently peaking, there is still very little understanding or agreement of what it actually means. In recognition of this deficit, international institutions such as UNHABITAT (2014) have called for new paradigms of African urban development. In response to this call, a flurry of competing urban frameworks have emerged, ranging from speculative and neoliberal to progressive rights-based models (Pieterse et al., 2017; Van Noorloos and Kloosterboer, 2017).

Irrespective of their considerable differences, most urban models share a common understanding that African urban development will be dependent on a massive restructuring of urban infrastructures (Pieterse et al., 2017). Thus, in contrast to the development paradigm of the early 21st century, which was centered on the poverty alleviation of vulnerable groups, urban development has become increasingly understood as a function of the built environment and the 'right' infrastructures. As many African cities lack the resources to fund such costly interventions, there has been an unprecedented surge in global infrastructure investments targeting African cities by international donors and investors (Zoomers et al., 2017).

Troublingly, however, debates on urban infrastructure development have been largely focused on the relative merits of new infrastructures. The implicit assumption hereby is that the developmental impact of infrastructure development is limited to the utility of new infrastructures alone. This narrow focus fails to engage with the broader impacts which occur during the *transition* to new infrastructures, particularly those related to land-use change (Zoomers et al., 2017). For whatever the purpose of planned infrastructures may be, they are most likely premised on the availability on land, which in the context of African urbanism is always *someone*'s land. As a result, land is never simply available, but must be made so first, which generally boils down to coercion, conflict and forced displacement.

The issue of so-called Development Induced Displacement (DID) has been a mainstay of development debates for decades and has repeatedly been demonstrated to disproportionately affect poor households and increase their vulnerability (Cernea, 2003). It is perhaps no surprise therefore that the developmental claims of such violent interventions have been the subject of considerable contention. Despite these troubling insights, the relevance of established DID knowledge to urban development is not immediately clear. For one, and thanks in no small part to the bias in development thinking, DID research has been predominantly focused on large-scale rural displacement. Secondly, such research has largely been centered on issues of compensation and social impact. As theorized by Van Noorloos et al. (2019), however, displacement that occurs in dense urban contexts will also trigger other dynamics of institutional and socio-spatial change. Thus, with massive investments

currently pouring into Africa's urban lands, the broader implications for urban sustainability remain largely unknown (Zoomers et al., 2017).

The aim of this chapter is to provide an empirical and comparative contribution to these emerging debates on urban land and sustainable development (Zoomers et al., 2017) by unpacking the 'displacement chains' (Van Noorloos et al., 2019) instigated by infrastructure development in Beira, Mozambique.

2. DONOR INVESTMENTS AND THE RESTRUCTURING OF BEIRA CITY

Beira city is located in the central Sofala province of Mozambique on the coast of the Indian Ocean. With a population of roughly 500,000 it is formally the fourth largest municipality in the country, though it is commonly understood to be the second most important city in Mozambique, due to its economic and political significance. Beira is a strategically important port city and a major logistical hub in the greater Beira corridor, connecting hinterland economies to global markets. Politically, the city has historically served as an opposition stronghold. Currently ruled by the MDM party, Beira's urban governance has been marked by antagonism with the central FRELIMO government.

Over the last decade Beira has become increasingly known as a hotspot of climate vulnerability and disaster. Due to its geographical location, low elevation and limited infrastructure, the city has routinely been battered by tropical storms and seasonal floods. In March 2019, the particularly severe cyclone Idai wreaked havoc on the city, catapulting this unassuming regional capital into international headlines. In their efforts to run a city in one of the poorest countries in the world, while also being subjected to political hostility from the central state, Beira's leadership has become particularly adept at courting international donors to finance the city's development.

Beira's leadership has been widely praised by the international development community as a role model for other African cities and a beacon of sustainable urban development. As of 2017, the city had become host to a plethora of infrastructure and planning interventions, funded by donors including the Netherlands, Switzerland, the United Kingdom, the World Bank and multiple Chinese and German institutions. With total investments estimated at hundreds of millions of US dollars, these projects represent an unprecedented effort to restructure the city completely, as detailed in its Netherlands-funded master plan.

The city's development discourse, as upheld by municipality leaders and international donors, draws heavily from modernist notions of economic rationality, orderliness and administrative consolidation. Within this context, pre-existing urban dynamics which have historically shaped the city, such as self-build housing and urban agriculture, are problematized and dismissed as being 'informal' and having no place in a modern city. Ironically, however, Beira's municipality governance has also historically been characterized by a high degree of informality, in the form of unregulated rule, abuses of power and elite capture (Shannon, 2019). As is often the case, however, this type of informality has not been part of the formal development discourse.

In the following section we will take a closer look at three high-profile infrastructure projects, which have been the focus of considerable media attention and praise from international donors. Largely unbeknownst to the wider public, however, each



Map 15.1 The locations of the three infrastructure projects and their associated displacement dynamics

of these projects has also been associated with highly divergent dynamics of forced displacement as depicted in Map 15.1.

Case 1: the Manga-Mungassa Special Economic Zone

The first infrastructure project we will explore is the Manga-Mungassa Special Economic Zone (SEZ), which was funded by the Chinese SOGECOA company, a subsidiary of the Anhui (provincial government) Foreign Economic Construction Group. It was the second SEZ to be developed in Mozambique and was part of a national export strategy inspired by Chinese export zones and facilitated through close Sino-Mozambican ties. The SEZ was aimed at serving as a major logistics and manufacturing hub in Beira as part of broader efforts to rehabilitate the Beira corridor. The total investments behind the SEZ were reported by national media as being 500 million USD, although such data is notoriously unreliable.

The SEZ was approved by the national government in 2012 and allocated an area of 217 hectares in the neighborhood of Mungassa, with a total of 1,000 hectares earmarked for future expansion. Plans of the SEZ were displayed on several billboards in and around Mungassa. In addition to zones for industrial production, the billboards also depicted a series of artificial lakes, yacht clubs and waterfront villas, conveying an image of high-modernism and luxury far removed from the urban reality of Beira. In order for this urban vision to be realized, however, an existing space had to be extinguished.

The neighborhood of Mungassa is located along the N6 national highway, which serves as the central transport artery in Beira city and the broader Beira corridor. Set in lush greenery, the neighborhood has traditionally consisted of mixed agricultural and residential land use. Under the current municipality administration, however, the neighborhood has been earmarked for industrial expansion, which has attracted a growing commercial sector, particularly logistics firms. Excluding these private enterprises, the area allocated by the municipality for the SEZ consisted of residential and agricultural land use only, which was home to an estimated 110 households.

The households comprised both long- and short-term inhabitants of the area, ranging from those living in the area for generations to those that had moved there shortly before the SEZ was made known. The households also differ further in terms of income, housing conditions and livelihoods, a demographic diversity not uncommon to Beira's neighborhoods. Only two of the households had formal property titles, which they had acquired through an earlier national housing scheme. The other residents had acquired their land outside formal channels, as is common practice in Beira, and as a result did not have formal titles to their properties.

Displacing land users for the new SEZ infrastructure

Negotiations between the municipality and residents living in the target area were highly informal and resulted in considerable conflict. In addition to the prospect of being forcibly displaced, the conflicts revolved around two key issues, namely eligibility for compensation and the terms of resettlement, particularly the resettlement location. As a result of the varied interests and relative power of the target households, these conflicts eventually resulted in three distinct resettlement groups.

The first group consisted of households that were first deemed eligible for compensation by the municipality. Based on a highly arbitrary enumeration process with no legal basis, the municipality initially determined that only long-term residents with housing of sufficient quality would receive any compensation. As a result, only 50 households were deemed eligible for resettlement. At first, representatives of these households were extremely concerned that they would be relocated to a peripheral location away from vital infrastructures. In a bid to alleviate these concerns, the municipality promised to provide the households with good-quality houses in a nearby site in Mungassa, which eventually led the households to grant their consent to the resettlement. Behind the scenes, however, municipality representatives soon realized that they were unable to acquire the site from its powerful owner, leading the municipality to look elsewhere for a resettlement location, eventually allocating an area neighborhood of Nduda. Just as the households had initially feared, the new site was in a peripheral location lacking in many urban services. Making use of the relative calm resulting from their initial consent, however, the municipality did not inform the households of the new location until a week prior to their resettlement in 2013. Upon hearing about the new site, conflicts reemerged between the municipality and households. The municipality responded by threatening to withhold any compensation if the households did not cooperate, leading the majority to reluctantly relocate to Nduda.

The second resettlement group consisted of households that had been excluded from the initial enumeration, as well as several households from the first group that had refused to relocate to Nduda. Facing the prospect of losing their land and homes without any compensation, these 60-odd households formed a committee that lobbied the municipality and organized targeted protests. After one such protest turned violent and was televised on a national news network, the municipality finally conceded, in an effort to protect its investor-friendly image. Following this decision, it was agreed that the municipality would provide the second group with titled plots and building materials in the neighborhood of Mangalene, which was considerably closer to Mungassa then the resettlement location of the first group. By the end of 2014 all of the members of the second group had been evicted from Mungassa.

The third group consisted of the two households that had possessed formal titles to their properties in Mungassa, both of which had rejected the resettlement packages provided to the first and second groups. Displaying a considerable amount of legal awareness and institutional access, these households took up their grievances with the provincial environmental planning agency, which is legally mandated to oversee resettlements but had not been involved until then. After extended negotiations, the third group was eventually granted formal titles and new homes in two separate locations of considerably better quality then those provided to the first and second groups.

The development chains of the SEZ infrastructure

By 2016 no traces were left of the community that had lived in the target site of Mungassa for generations. Instead, the walled premises of the SEZ stood in its place, with inquisitive passers-by having to make do with billboard images to know what lay beyond its guarded entrance. The national government and municipality celebrated the SEZ as a development success story and evidence of Beira's modernization. Indeed, on the surface, the SEZ appears to have significantly enhanced the city's economic infrastructure.

For the former residents of Mungassa which had been displaced in its wake, however, the SEZ stood as a symbol of conflict and hardship at the hands of the municipality government. For them, the SEZ project had resulted in a drastic increase in household insecurity and distrust in municipality institutions. In addition to the destruction of homes and livelihoods, however, the SEZ also instigated the *creation* of new infrastructures and dynamics through its multiple resettlements, which had been excluded from the development narrative surrounding the SEZ.

In Nduda, where the first group was resettled, the SEZ investment resulted in the establishment of a new purpose-built neighborhood. It was comprised of cramped and poorly constructed housing, located several kilometers away from regular public transport; many households reported feeling trapped and cut off from the city as they struggled to reestablish their livelihoods in this new area. Moreover, due to a lack of adherence to planning regulations by the municipality, the new neighborhood was also an informal one, leaving households without the prospect of formal titles to their land.

But the socio-spatial change instigated by the SEZ was not limited to the resettlement neighborhood alone. The construction of the resettlement neighborhood had also led to the extension of water and electricity infrastructure into the undeveloped area of Nduda. For many prospective homeowners in Beira, this was seen as evidence of Nduda being an up-and-coming urban expansion zone. Aided by the relatively low land prices in Nduda, the resettlement was soon followed by a massive growth of informal developments in the surrounding area. This activity also led to an increase in demand for rental accommodation nearby, which provided many resettled households with an opportunity to rent out their new homes and relocate elsewhere on their own accord.

In Mangalene, where the second group had received land and building materials, the SEZ investment had instigated other dynamics of socio-spatial change. In contrast to the first group, these households had been able to negotiate titled plots, meaning that the value of their land was considerably higher. For instance, untitled (informal) plots in Mangalene sell for around 230 USD while titled plots go for around 3,000 USD. As many households were unwilling or unable to invest the necessary time and resources into building their own homes, with the limited materials provided by the municipality, the value of the land provided them with an opportunity to amass a relative fortune and relocate elsewhere. Thus by 2016, some two years after the resettlement, the neighborhood of Mangalene consisted of a hodge-podge of new houses, building sites and vacant plots, becoming home to a growing population of middle-class urbanites seeking titled land in a well-located neighborhood.

Case 2: the Chiveve River Rehabilitation Project

The second case we will now turn to was a project aimed at rehabilitating Beira's downtown Chiveve river. The Chiveve had historically flowed through the center of Beira until it was cut off from the sea for unknown reasons in the 1980s, transforming the riverbed into a locus of pollution and urban flooding. After actively seeking funding from various international donors, Beira's leadership was eventually awarded approximately 31 million USD by the German development bank KFW and the World Bank, in the form of two consecutive projects aimed at rehabilitating the river and subsequently developing it into a 20-hectare urban green space. By doing so, the projects promised to transform the dilapidated riverbed into an attractive public space for recreational and commercial use, while significantly enhancing the downtown storm-water drainage capacity.

As with the SEZ, however, the rehabilitation site was also home to urban residents, namely a community known as Mangal that comprised 34 households living at the mouth of the river. In contrast to the diverse community in Mungassa, the residents of Mangal were among Beira's poorest population, living in ramshackle housing routinely subjected to flooding and pollution. Most of the households had lived there for less than ten years and none had formal titles to their properties. Irrespective of the precarious living conditions, Mangal was valued highly by the households for its central location and proximity to markets and income-generating opportunities, which could be accessed without the need of (costly) public transport.

Displacing land users for the new Chiveve infrastructure

The KFW and World Bank are both financial institutions that pride themselves on abiding to stringent international standards with regard to social and environmental impacts. In an apparent attempt to distance themselves from the ensuing evictions, however, the displacement of the Mangal community was described in project documentation as being unrelated to the rehabilitation project. Not only was this framing misleading, it also meant that no resources were provided by either institution to compensate the Mangal community. Instead, the municipality agreed to fund and coordinate the resettlement with its own limited resources. As with the SEZ resettlement, the municipality proceeded without the involvement of the formally mandated central government institutions, resulting in another highly informal resettlement.

The Mangal residents were notified of their pending eviction during several visits by municipality representatives and project staff in 2013. During initial negotiations, the households were informed that they would be compensated in the form of building materials and replacement land in Nduda, near the SEZ resettlement of the first group. The Mangal households, who feared that they would not be capable of building their own homes, responded to this proposal with protest. In response to this unrest, the municipality and project staff agreed to provide the households with pre-constructed houses instead, a proposal that was greatly preferred by the Mangal residents. Soon after promising the households new homes, however, it became apparent that the municipality did not have sufficient resources to construct new houses, and the offer was subsequently withdrawn.

Facing the prospect of delayed construction works and mounting costs, municipality representatives and project staff devised a third and final resettlement strategy. The strategy entailed that the Mangal households would be temporarily relocated to rental accommodation while the municipality acquired permanent houses elsewhere, to which the families would eventually move. As part of this arrangement the households were required to seek out their own rental properties, for which the municipality made a limited budget available. However, the households were informed of this strategy no more then ten days prior to their eviction, leaving them with limited time to seek out suitable accommodation. By the end of 2014, the community of Mangal had been evicted and relocated to rental housing where they resided for a period of 6–12 months before moving to their permanent resettlement homes.

Development chains of the Chiveve infrastructure

The first of the two Chiveve projects was completed early 2017. No longer cut off from the ocean, the newly rehabilitated Chiveve boasted a massive retention lagoon with tidal gates regulating the flow of water. The project was widely celebrated during a nationally broadcast inauguration and hailed as a symbolic victory against urban flooding and dilapidation, soon to be followed by the second project and the creation of an urban green space. However, as with the SEZ, the celebrations did not contain any mention of the former inhabitants of the Chiveve, leaving the broader public oblivious to the forced displacement that had preceded the creation of the new Chiveve infrastructure.

For the former residents of Mangal, the Chiveve project represented a violent rupture for their community, spreading them throughout the city. The temporary relocation to rental housing, followed by permanent resettlement elsewhere, meant that the households had effectively been subjected to a double resettlement. As a result, many household members reported a marked increase in livelihood insecurity as they struggled to settle themselves into the new locations and establish income-generating activities.

Because the municipality had acquired existing houses, the Chiveve resettlement did not result in the creation of a new neighborhood. It did, however, result in another form of municipality-sanctioned informality, due to the fact that the municipality had acquired the resettlement houses from Beira's informal housing market. Not only did this mean that the quality of the housing varied greatly, with some missing basic sanitation facilities, but it also meant that they were not eligible for formal land titles in accordance with Mozambican regulations. However, in an effort to appease its apparently oblivious donors, the municipality provided households with title documents anyway, thus lending the suggestion of formality to the resettlement, which was literally paper thin and without any formal institutional or legal basis.

Case 3: the Urban Drainage Rehabilitation and Expansion Project

The third and final case that we will discuss here is the rehabilitation and expansion of Beira's urban drainage infrastructure. After decades of urban expansion and underinvestment, Beira had been left with a dilapidated drainage system dating from the colonial era. In response to the frequent floods plaguing Beira, the World Bank allocated approximately 45 million USD to upgrade the city's drainage system, and work commenced in 2016. The project consisted of the rehabilitation and expansion of 9.3 kilometers of existing drainage infrastructure as well the construction of a 25-hectare retention basin, serving as the first of a threefold upgrade outlined in the city's urban drainage master plan.

The rehabilitation of the drainage system was premised on two distinct displacement processes, the first of which related to 21 residential properties that had been constructed alongside the drainage channel. Spread out over the 9.3 kilometers, these homes were occupied by long-term residents of varying income groups, albeit not the most affluent. A minority of households owned titles provided under the national housing scheme, as with the third group of the SEZ resettlement, while others did not have any formal titles. The second displacement related to the construction of the retention basin, which was allocated a site in the centrally located wetland of the Maraza neighborhood. Maraza has historically been a major agriculture zone for Beira's poor and predominantly woman urban farmers, 490 of which, owning a total of 619 plots, had to be displaced for the project.

Displacing land users for the new drainage infrastructure

The drainage project differed from the SEZ and the Chiveve projects in that it was relatively structured in accordance with national and international laws and standards, albeit only during the planning phase. Negotiations with the 21 households began as early as 2014, and many household representatives reported a considerable degree of transparency and room for input on their side. For instance, project staff had initially identified the area of Nduda for the resettlement, but this was eventually changed after complaints from households over its peripheral location. As a result, the location was changed to the neighborhood of Mutondo, which lies adjacent to the neighborhood of Maraza. The structured nature of these negotiations was largely due to the fact that the World Bank had activated its social safeguard framework, which included the Bank allocating substantial financial resources to the resettlement. In doing so, the project stood in marked contrast to the Chiveve intervention, where World Bank representatives had sought to distance the Bank from the ensuing resettlement.

In terms of compensation, the 21 households were to receive new properties based on household size together with formal titles to their land. Strangely, however, it was determined that livelihood rehabilitation measures would not be necessary, in apparent contravention of the World Bank's social safeguards. For the 490 farmers it was determined that they would receive replacement land elsewhere in Beira to continue farming. This was stated in project documentation as being a requirement of World Bank policies, mentioning explicitly that financial compensation would not be adequate to replace the loss of land. By the end of 2016, the 21 households and 490 farmers had been evicted.

Development chains of the drainage infrastructure

The completed drainage rehabilitation and extension project was inaugurated in 2018 in a nationally televised event. Comprising a network of sleek concrete waterways, bridges and a retention lake, the project represented an unprecedented infrastructural upgrade since the colonial era. In a similar fashion to the Chiveve project, the new drainage network was hailed as an additional victory in the longstanding battle against urban flooding, and another step towards making Beira a modern city.

In addition to the new drainage infrastructure, the project had also resulted in the creation of a new purpose-built housing block in Mutondo, where the 21 households had been resettled, forging a new community. Consisting of well-built properties with fenced yards, paved roads, sidewalks and new recreational areas, the neighborhood resembled a type of uniformity and spatial esthetic more akin to western suburbia then anything seen in Beira. In a further contrast to the SEZ and Chiveve cases, the resettlement was widely reported in local media, while World Bank logos on multiple signs surrounding the housing block illustrated the donor's eagerness to be credited for the 'successful' resettlement.

Unbeknownst to the broader public, however, the drainage resettlement had been associated with some highly controversial measures, with detrimental consequences for the displaced households. For one, the lack of livelihood rehabilitation support had meant that households were left without any income-generating activities in the new location, drastically increasing household hardship. More problematical still, it had been decided during the project that the households would be prohibited from selling their properties, a decision that was only communicated to the households after the resettlement. Aimed at 'protecting' families from losing their new homes, this measure had no basis in formal laws or standards and severely restricted household freedom to relocate elsewhere, effectively trapping them in their newfound state of heightened vulnerability.

Another aspect of the resettlement that was excluded from the celebratory public narrative was the plight of the 490 farmers who had been displaced to make way for the retention basin. Although formal documents stated the need to provide them with replacement land, they had in fact been provided with financial compensation amounting to approximately 75 USD per household, well below the actual value of the land. This compensation strategy was in direct contradiction to the formal resettlement plan, and stemmed from broader 'modernization' efforts of the municipality to displace farming from the city. Forced to establish new livelihood activities elsewhere, many of the displaced farmers took up trading activities in one of Beira's informal markets. Problematically, however, these same markets have been the targets of ongoing evictions by the municipality in an effort to 'clean up' the city. Thus, as a direct result of the new drainage infrastructure, these farmers were forcibly displaced from one insecure and informal space to another.

3. DISCUSSION AND CONCLUSION

Over the last decade Beira city has demonstrated a remarkable ability to attract international investments flows that has resulted in various high-profile infrastructure projects, three of which have been discussed here. In doing so, the municipality leadership has been hailed by international donors as a role model for other cities in Africa, by conquering adversity and bringing about sustainable urban change. Indeed, if we judge these new infrastructures in isolation from their broader impacts, such an optimistic framing is hard to argue with. Taken together, the SEZ, Chiveve and drainage projects represent considerable progress in the realm of industrial development, public space and flood resilience, thus ticking multiple boxes of the SDG agenda.

If we expand our focus beyond the primary infrastructure alone, however, we see that these investment flows have directly resulted in processes of forced displacement, instigating 'chains' of socio-spatial and institutional change whose relationship with sustainability is extremely problematic. Not only have these interventions resulted in a widespread increase of household vulnerability, they have also been implemented in a highly unregulated manner, leading to the creation of new informal spaces and governance relations. This is particularly ironic considering the fact that the municipality administration and international donors legitimize these interventions through a modernist discourse of anti-informality.

In addition to revealing new types of socio-spatial and institutional change that can result from infrastructure development, these findings also demonstrate just how incredibly variable such change can be. For despite occurring within the same urban administration and roughly within the same time frame, each of the three infrastructure projects discussed here has instigated highly different displacement trajectories. This demonstrates a point often argued by more politically inclined urban scholars, namely that it is power relations, not formal laws and institutions, which determine how urban space is shaped (Rokem and Boano, 2018). Because the interests and political capital of the actors involved differ from project to project, so too are the outcomes of displacement highly divergent. Thus, from the perspective of households facing displacement, urban governance appears as an extremely arbitrary regime.

But resettlements are arguably only the first in a sequence of 'displacement chains' set in motion by infrastructure projects (Van Noorloos et al., 2019). Echoing the work of Van Noorloos and her colleagues, the cases discussed here reveal how resettlements can instigate indirect forms of social-spatial and institutional change, such as urban expansion, new forms of informality or more displacement. In other words, urban resettlement is not an isolated process and inevitably affects the broader urban dynamics within which it occurs. In fact, although it admittedly fell outside the scope of the findings discussed here, even new resettlements are premised on the availability of land and thus necessitate additional processes of (forced) displacement, extending the chains of displacement.

This perspective raises urgent questions as to the type of cities that are actually being created through the massive inflow of infrastructure investments into African cities. For as long as the broader impacts of infrastructure development remain annexed from formal development narratives, master plans and project management frameworks, there is a very real threat that (well-intended) interventions will undermine sustainability targets by instigating new and contradictory forms of urban change. Beira alone is expected to host a multitude of high-profile infrastructure investments in the coming years, suggesting that the cases discussed here are just the tip of the iceberg.

So, what does this mean for sustainable urban development more generally? For one, the dominant land-blind tendency of discussing urban development in terms of new infrastructures alone must be abandoned, as it does no justice to the broader impacts of infrastructure development on urban sustainability (Zoomers et al., 2016). Instead, there is an urgent need for a land-centric approach to urban development that recognizes displacement and infrastructure development as two sides of the same coin. This is not just of relevance for mainstream policy, however, but for critical scholars and activists as well. For if we agree with progressive scholars such as Pieterse et al. that infrastructure development is vital to sustainable urban development in Africa, then there is also a need to address the uncomfortable truth of displacement in a constructive manner. Put bluntly, is there such a thing as sustainable displacement?

Secondly, there is an urgent need for stronger oversight and accountability mechanisms within the context of global investments in African cities. A fundamental dilemma of African urban development is the fact that the regions most in need of infrastructure investments are often those with the least institutional capacity and political will to secure social equity outcomes. And as we have seen in Beira, the lofty ideals of international donors are no guarantee of a commitment to social equity within the context of day-to-day implementation politics, which leaves displaced communities to fend for themselves. This state of lawlessness is further exacerbated by the relatively small scale of infrastructure-related displacements, which often occur under the radar of civil society organizations. At the same time, the small scale of individual displacements belies a much greater net sum of citywide displacement in a city like Beira, a sum which is also more fragmented and contradictory then that of one-off large-scale (rural) displacements which generally garner more attention.

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16. Conclusions Kei Otsuki, Guus van Westen and Annelies Zoomers

This book argues that global linkages, flows and circulations merit a more central place in theorisation about development. It is time for a 'mobilities turn' (Sheller and Urry 2006; Walters 2014) to challenge the sedentarist assumptions which are still underlying much of policy making and planning for the future. Discussions about how to stimulate local development usually end up in interventions focusing on enhancing locally available capital assets and capabilities within fixed and confined settings ('the project area'). However, by now we know that 'globalization connects people and places that are distant in space but linked in such ways that what happens in one place has direct bearing on another, even if the relationship between localities is not immediately obvious' (Zoomers and Van Westen 2011: 379). Local development hence should be analysed from a mobility perspective: rather than depending essentially on local resources, in many localities livelihood opportunities are ever more shaped by positionality, and the way people are attached to and participate in translocal and transnational networks (Sheppard 2002). At the time of this writing towards the end of 2020, our mobility is largely frozen, and we find ourselves in a laboratory condition due to the Coronavirus crisis. This unique experience helps us to better appreciate what mobility means in people's lives. Being confronted with the consequences of the local lockdowns globally, we are witnessing the importance of being able and unable to move in and out, and linking up with the outside.

In order to better understand local development in this context of a connected and mobile world, this book has focused on two types of cross border flows, which are, in their own right, crucial triggers for local development and have been intensifying over the past decade: (i) flows of people and (ii) flows of capital. Along with timespace compression and the financialisation of global economies, flows of people/ capital have rapidly increased, leading to large-scale and complex transformations of livelihood opportunities and landscapes. 'The enclosure and sustenance of coherent local spaces increasingly depends on the capacity to secure effective individual and corporate engagements with the wide range of networks and flows' (Simone 2001: 16). Along with the expansion of flows of people and capital, new development hubs and networks of opportunity have emerged, but equally have brought new border walls and enclosures. Local livelihood opportunities are being altered constantly and quickly, more often than not by factors from outside. There is a huge and widening gap between what is currently happening on the ground and Sen's idealised notion of 'development as freedom' (that is, people's capability to lead the kind of lives we have reason to value) (Sen 1999).

Focusing on the trends over the final decade, it is evident that internal and international mobility of labour migrants, students, consultants and businesspeople, but also refugees and various groups of internally displaced people, has rapidly increased – or at least it has become more visible everywhere. The same is true for capital flows (foreign direct investments, trade, aid money, new charities, remittances, and so on), be it in an erratic and irregular way.¹ Together, they have contributed to large-scale spatial, political and socio-economic transformations, which have helped people to improve their lives but also led to growing inequality. Looking at the emergent geographies of local development in different geographical settings, as we did in chapters of this book, makes us aware that globalisation has widened opportunities and simultaneously forced people to face new restrictions, inequalities, vulnerabilities and risks. The world is increasingly a fragmented place with deepening levels of exclusion and 'unfreedoms', infringing upon the capacity of local people in pursuing or enjoying 'development'.

The chapters of this book show that, given planetary boundaries and new and unexpected realities, our future will depend on finding new ways forward and coming up with innovative solutions. Policy makers, businesses and development practitioners as well as civil society activists and researchers are expected to team up to address the need for development as freedom in the environmentally sustainable and climate resilient world. The core questions are: how do we collectively redirect flows of people/capital towards inclusive and sustainable development? How do we address the need of excluded people not only to be included in decision making, pertaining to, for example, Sustainable Development Goals (SDGs), but also to generate their own solutions to their everyday problems, which need to be supported by those who have resources and power?

TRANSLOCAL PERSPECTIVES IN CONTEMPORARY DEVELOPMENT RESEARCH AND POLICY MAKING

If we take the SDGs as what exemplifies the contemporary agenda for development studies and policies, the mobility focus makes us look beyond achieving specific goals and targets and into actual physical and social effects that the pursuit of the SDG agenda brings to various locales over time and influences the ongoing process of 'globalization from below' (Appadurai 2001). In this context, on the one hand, enforced by triple Covid–economic–climate crises and guided by the SDG-oriented new waves of intervention, we are beginning to witness a radical re-allocation of public finances and policy priorities towards more safe and healthy futures that 'leave no one behind' (United Nations 2018). More national and multilateral funding is being planned and implemented to contribute to the SDGS, migration and climate deals, and measures to tackle Covid-19.

On the other hand, local people who are supposed to share the benefits of these reallocated investments, especially those in vulnerable groups, have not acquired a clear voice in debates on such re-allocation of resources. The plans are still formulated from outside, usually by investors and supporting governments preferring technology-based intervention. Governments in the Global South keep on providing

concessions for the investors who intend to appropriate land for monocultural production, biofuel production, mining and nature conservation. The concerted efforts for low-carbon transitions are leading to open concessions for new minerals such as lithium, which is in high demand due to smart technological innovation. The renewed interests in large-scale investments in hydropower dams as well as wind and solar energy in the context of climate change mitigation, especially in emerging economies such as China, Vietnam and Brazil, as well as continual urbanisation, are displacing people (Pham Huu 2015; Tanner and Allouche 2011). All these investments have large implications for local landscapes, as they subsequently create ripple effects for other areas that are usually not mapped in the context of *ex ante* project evaluation. Yet, these are not grasped fully in the efforts towards sustainable and inclusive development.

The gap between what is on the official agenda ('leaving no one behind' in achieving sustainability) and how people keep on being dispossessed and excluded from the project process persists, largely due to the conventional development project cycle. Environmental issues and the consequences for vulnerable groups are usually mentioned in environmental and social impact assessments (ESIAs) carried out by consultants before the approval of a project. Very often, community participation in the formulation of projects is limited and the wider and long-term implications for *other* communities that might be affected or the overall landscape change are not systematically assessed. Many projects require resettlement of local groups – the usual way of compensating local groups who will lose their land is by offering capital and infrastructure in new locations – while the livelihood reconstruction in the new locations involves much more effort than is currently assumed, since the new locations can be relatively isolated, or risky areas that are not climate resilient; or claimed by other groups already.

In addition, current policy debates on developmental issues often narrowly focus on how to maximise the positive impacts while minimising the negative consequences. In this context, local development impacts are described mainly in terms of income and employment generation; and here, the 'local' is conceived as spatially bound and small. For example, migration and land investment policy debates usually focus on the directly affected people, while not much attention is paid to bypassed groups. And, directly affected local groups are referred to as a local 'community', persistently described as a 'territorially fixed, small and homogeneous whole with shared norms' (Agrawal and Gibson 1999: 633). In migration debates, local communities are often simply discussed as the home of the left-behinds or as the potential destination of return migrants. In the ongoing discussions about Free and Prior Informed Consent (FPIC) - that is, a policy mechanism for local communities to be consulted about large-scale investment projects - local communities are seen as all encompassing groups with common interests, able and willing to make desirable collective decisions such as when negotiating with investors. In stimulating local participation, the main attention is given to whether local people are informed, or receive a fair compensation in the case of any loss of assets. This is important, but continues to frame 'locals' as a passive recipient group, having to adapt to the requirements of a modern world defined for them by others, rather than engaging in a critical debate about whether the type of investment made is in line with local people's priorities. As we have argued elsewhere (Zoomers and Otsuki 2017), in comparison with earlier debates about sustainable livelihoods in the context of development intervention or 'counter-tendencies' and local people's making of their own 'room for manoeuvre' (Arce and Long 2000), relatively little attention is given to questions such as whether 'development' matches people's aspirations and capacity, and which people within the communities influence the others. Local communities, even if they existed as homogeneous wholes, which is in reality never the case, are in fact increasingly fragmented due to differential impacts of influences from the outside as well as differences in the abilities of diverse locals to link to non local opportunities.

In this context, we need to seriously envision new development intervention – community-based and participatory – and from 'bottom up', meaning we first generate a sufficient understanding of people's livelihoods; make an *ex ante* assessment of the full range of intended and unintended, expected and unexpected consequences for beneficiaries and non-beneficiaries of the particular project; and pay attention to short- and long-run impacts of the intervention. The 'success' of future investments and policies – in terms of how environmental sustainability is ensured while socio-economic inclusivity is addressed in the process – in the context of climate change and Covid-19 depends on attuning policies to local priorities, circumstances and communication with decision-makers at all levels. Therefore, the focus should shift from individual investments and interventions to embeddedness of the investments and interventions in the existing social relationships, networks and landscapes. In practice, we call for a new approach, underpinned by the translocal perspectives, to promoting bottom-up development research integrated into policy and practice. Below, we outline ten principles for this approach.

TEN PRINCIPLES FOR THE BOTTOM-UP DEVELOPMENT POLICY, PRACTICE AND RESEARCH

1. Use the Livelihood Perspective

The various chapters in this book, both implicitly and explicitly, have shown that local livelihoods are heterogeneous and dynamic, proving that the homogeneous community does not exist. The community is by definition heterogeneous; and vulnerable groups within it can have multilocal livelihoods. Every intervention will produce losers and winners in terms of livelihoods improvement; and the question should centre on how to deal with both beneficiaries *and* non-beneficiaries, as well as with people who play active roles in contesting interventions. The chapters show how interventions and projects have multiple impacts on the livelihood of people, which

comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and

recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base. (Chambers and Conway 1991: 6)

In analysing the impact of different types of interventions, it is useful to make a distinction between different types of assets, and analyse how the intervention influences different assets' base. People then always act upon the influence and find their own solutions. Consequently, different livelihood outcomes can be observed, which are also the reflection of earlier experiences and strategic decision making.

The livelihood perspective will also help us to see various patterns of upward and downward mobility related to particular interventions and processes of change, and see the variety in people's perceptions and agencies. Poor people, for example, being invited to become the beneficiaries of an irrigation program, might end up being excluded from taking part due to the lack of time and initial resources to participate in planning meetings. They might also respond differently to interventions than expected, dependent on their earlier experiences and perceptions, resulting in different patterns of upward and downward mobility in response to particular interventions.

2. Use the Landscape Perspective

Sustainability of livelihoods depends on landscapes in which the people are embedded and interact in their everyday life. Various chapters show how landscapes – in the socio-political and natural sense – and the (natural) resources they provide are used by different groups of people. These groups continuously negotiate their use and access to the landscape and its resources, based on their multiple needs, preferences and aspirations. This inevitably leads to trade-offs, and if we take the social landscape perspective, we can readily acknowledge these trade-offs and therefore try to understand them within their specific spatial and social (as well as political) contexts.

This means that in assessing the impact of interventions, we have to be aware that interventions may cause a change in the landscape and a shift in the use of natural resources. This influences ongoing negotiations, power relations, collaborations and conflict. For example, from the perspective of smallholder farmers, an irrigation project might be successful, but it might problematic for pastoralists who lose their access to commons such as pasture and water. At the same time, such a project may attract newcomers to the landscape and create new scarcities when they purchase land or cattle (see Chapter 6). This means that, by observing landscapes, we identify a diverse range of values, goods and services. Any intervention will result in a shift in access to and control of resources by different groups. In this sense, every intervention is inherently political and might result in competing claims and shifting power relations.

By taking the landscape perspective, *ex ante* impact assessment of interventions can become more explicitly aware of the fact that interventions are never neutral but inherently political and will trigger new processes of redistribution and contestation. These processes should be also assessed as potential impacts.

3. Use the Translocal Networking Perspective

In taking livelihood and landscape perspectives, we obviously do not limit ourselves to the localised impact because the intervention does not operate spatially and temporarily in isolation. By applying the translocal network perspective, we pay attention to how localities are connected to each other. The chapters in this book have shown that local development opportunities are very much determined by what is happening in other places and vice versa. Localities can be connected directly, as a result of flows of capital, goods, people and information. Or, they can be affected indirectly as their relative positions vis-à-vis other localities change as a result of changing market prices, valuation of resources and alternative opportunities for local people prepared to move in the context of globalisation. Examples of processes contributing to the production of translocalities abound, varying from traditional city-countryside relations and nomadic transhumance between different ecological zones, modern production networks integrating different localities in a single value chain, twinning agreements between enterprises and municipal authorities, and attempts by migrants and diaspora organisations to contribute to the development of their home areas, to the linkages that are based on the reception of remittances, the accommodation of foreign tourists spending money locally, or people - and businesses - spending their money for the purchase of land and/or starting an enterprise. Thus, in assessing whether the intervention is meeting the project objective, it is not enough to describe the positive results for the target population: the emergence of development corridors - the materialisation of dynamics between places - and the travelling of development effects and rippling effect should be taken into account: a change in one place (one sector) will affect others (Zoomers and Van Westen 2011); on top of this, local dynamics are multi-scalar in the sense of being influenced by issues and interventions playing at the macro and meso level.

4. Anticipate and Accept Unexpected Consequences

Given the new vulnerabilities and extremes caused by climate change, the pandemic and political uprisings in various parts of the world under lockdown conditions, it will be more and more 'normal' for development interventions to be diverted from the original plan. In this sense, the 'theories of change', which anticipate the positive impacts of particular intervention based on various assumptions, require a participatory approach, allowing for constant adaptation and resetting of objectives in close communication with beneficiaries and non-beneficiaries in multiple localities within the landscape. A new normal should be established to emphasise that any project will not meet expectations and produce different sets of unintended and unexpected consequences. In order to anticipate the unexpected consequences, the development project process should be process- and agency-oriented (Brickell and Datta 2011), with much attention for expectations.

5. Move Away from Assumption-based Intervention to Evidence-based Policies and Interventions

In order to engage with development processes and agencies of people to develop capacity to generate their own solutions, the development planning needs to acknowledge complexity and the wickedness of problems as a point of departure. In the words of the United Nations (2018: 4): 'The pledge to leave no one behind is seldom disputed in principle, but the complexity of its practical implementation is often insufficiently acknowledged.' In envisioning sustainable and inclusive development, we have to be aware that the complexity and trade-offs between objectives can only be properly grasped with empirical data gatherings, through research on existing livelihoods and characterisation of landscapes and translocal networks. These data can easily overturn assumptions, often created in a particular sector of development. The development interventions and research must be holistic and cross-sectorial, linking food, migration, health, employment, energy and infrastructure, and so on, and reflecting synergies between different sustainable and inclusive development goals. In this synergetic development planning, gender, race, ethnicity or generational attributes of people on the ground should also help policy makers and researchers to establish cross-sectorial analysis and collaboration.

6. Think of Longitudinal Research and Intervention

The same impacts observed at one point in development intervention can change over time, as people's livelihoods and landscapes naturally change and so do the nature and extent of translocal networks. Therefore, long wave orientation is a necessary step, thinking of observing various consequences of development intervention for the next generations. For example, for the SDGs, the immediate temporal limitation of achievement of goals is set as 2030 – but many environmental as well as social consequences can only be understood beyond a decade from now. Yet, many projects have a projected period of three to five years. How do we keep on observing the situation, collecting evidence and analysing the impacts in an indefinite period of time, as people's lives develop along the way?

One often-overlooked dimension in development research and planning is to more effectively engage in political-administrative processes of decentralisation. Local authorities are often carriers of national agendas, which, in turn, are frequently dictated by international donors. At the same time, they may resist the top-down instructions that contradict their citizens' needs. The local governments could lead the shaping of migration flows and routes, map out the change in landscapes by controlling investment flows, and ensure emergent new development chains are embedded in the local context. While they may be pushing the 'business as usual' agenda for local growth, they could potentially form a forefront of innovative zoning of nature conservation, agribusiness and human settlement areas by establishing relationships between infrastructures, natural environment and spatial planning for people's livelihoods. The problem is that they are underfunded and invisible in the so-called public–private partnerships (PPPs) or multi-stakeholder partnerships that are increasingly popularised as a method of intervention today, and we need to rethink how to frame the actors of intervention in establishing longitudinal engagement.

7. Clarify Roles and Implications of 'Business for Development'

In the current neoliberal political environment, the SDGs as well as other international development agendas advocate market-led approaches by promoting PPPs. Originally indicating collaboration between the government and a company interested in investing in new development projects, PPPs enable governments to acquire necessary finance to implement their development plans while traditional donors and development banks save their budgets by turning development projects into profit-making ventures. The businesses increasingly conduct impact studies by hiring consultants, negotiate with local governments to acquire concessions or decide on compensations. When the contestation happens, they take a 'corporate social responsibility', supplementing public services in the absence of the government. Compared to the government, which is expected to deal with its predefined administrative boundary as its physical area of action, private businesses can transcend boundaries through their capital and labour flows. They could facilitate the different governments' collaboration and engagement with managing various flows and create new partnerships based on the development chains that they create through their investments. However, much of the investment decisions are detached from the governmental planning process, even when the label is given to a project as a result of the PPP. Their responsibility is also monitored less as they do not have the official legitimacy to the people and landscapes where they operate: after all, they are only accountable to their shareholders. In this sense, we need to be vigilant to the implications of businesses' increasing involvement in development intervention, acknowledging the possibility that the businesses are not best equipped to pursue public objectives.

8. Take Citizen Science Seriously to Follow Dynamics of Change

In order to understand local realities based on people's aspirations and livelihoods and follow longitudinally the dynamics of change, we need to mobilise people and their organisations themselves. Professional civil society organisations can work as watchdogs over the interventions by the government and businesses, or sometimes they replace both the government and the private businesses where they do not have strong influence in providing basic services to citizens. But after all, citizens themselves are the most capable actors to take the necessary action that transcends the project boundaries. Influenced by various flows – of investment and migrants – they can shape new flows by moving, staying put, engaging in new livelihoods or taking collective actions. As a way for them to put their experiences into a form of knowledge that can be communicated to the government, businesses and other researchers, 'citizen science' should be taken more seriously and the development intervention should be reshaped to support the citizen agenda in its process. The chapters of this book have shown some of the possible examples in irrigation strategies or resettlement projects that could be taken up by planners.

9. Use a 'Learning Lab' Approach to Connect Local Knowledge Institutes and Governments

Taking citizen science seriously involves research infrastructure that can lead researchers to keep on following the local dynamics. In order to convince the policy makers to not omit people who are not easy to fit in the categories, frames and boundaries, we need to create a tangible structure where different citizens' experiences with development projects can be shared and documented. As such a structure, we should consider adopting a learning-lab approach to systematically observing, listening and paying attention to what is not said or appeared to be important at first sight. We then bring out different perspectives and visions to the development interventions as what has been learned in the process. Most effectively, the learning lab can be established in local universities or research institutes or schools where different citizens can gather regularly and discuss their experiences. The lab can also travel around different locales in collaboration with village- or community-level councils and organisations. The support for local universities can be made within the context of development intervention policy in order to strengthen the budget and human resources to maintain such an infrastructure of knowledge exchange and co-creation. Furthermore, we can conduct more comparative studies by gathering different cases mapped out and documented in this process.

10. Integrate Bottom-up Development Thinking into Educational Curriculum

The future of development - sustainable and inclusive development - depends on the vounger generation of researchers, citizens and practitioners who will take bottom-up research and intervention seriously in their practice. In particular, students from the Global South and North should more consciously learn from each other, to co-create their research plans and activities, and exchange their experiences. In particular, in our Covid-19 world, ways that development studies and practice are pursued cannot take mobility for granted. At the same time, we are also witnessing the power of social media and online interactions, and involvement of young people in political debates and movements to make a change. Our students are digital natives, and they can play a greater role in understanding and envisioning sustainable and inclusive, translocal development in collaboration with citizens and researchers from around the world. We are also aware of the risks that such exchange could expose: inequality in the university resources between North and South will be more apparent in this process. But this is precisely the point of exchange, so that more resources could be mobilised for the universities and their education and research infrastructures in the Global South and new citizen sciences flourish in every corner of the world to

follow the consequences of development intervention, even when it takes time for the intervention to change. At least, we should envision the future of development that is sustainable and inclusive in our collective production of knowledge for development studies and practice.

FINAL REFLECTIONS

In the context of globalisation, discussions about 'local development' that is sustainable and inclusive must be framed in terms of bringing development interventions in line with people's capabilities and local priorities (Otsuki et al. 2017). In the conventional livelihoods approaches, these 'capabilities and local priorities' were often measured as a set of capitals that people need to accumulate at the household level. Today, in our newly articulated geographies and landscapes, sustainable livelihoods depend on the collective ability of people to become part of the translocal network that enables citizens to establish effective connections with outsiders who are willing to share their capitals and benefits. In other words, livelihood opportunities are to a large extent determined by translocal relations, one's embeddedness in development corridors and development chains (Zoomers and Van Westen 2011) and the ability of local people and institutions to engage with these external forces in such a way that they can reap the benefits. This is ultimately a matter of the degree of local control - in a social, economic, political and territorial sense. The citizens are not there only to be informed of investors or governments' decisions: they are the ones who inform the investors and governments to give consent to their plans and strategies to develop their territory and landscape in sustainable and inclusive ways. Of course, if their decisions become conflictive with a wider sustainability and social inclusion agenda, the negotiations should take place, involving a wide range of actors who can mediate the conflictive views on 'local development'.

Even with lockdowns and associated change in policy orientation, we cannot stop globalisation driven by technology. The already-built transnational and translocal relationships have long shaped places, development trajectories and livelihood possibilities in distinct ways. Relational dynamics are thus even more important in determining whether local people can benefit or not from the inflow of new actors, capital and technological innovations. Whether local people are able to benefit from international migration and/or investment flows will depend greatly on positionality and their ability to link up and finding the 'right' investor willing to come and settle and share benefits. Local development is increasingly a matter of dealing with outsiders, having the capacity to negotiate, being capable of consensus-building and forcing outsiders to fulfil promises and expectations. Interactions (and hence also impact) are unpredictable (Dovey 2012) and local resilience depends on people's capacity to act quickly and cope with the unexpected. To help this process of capacity-building and development, we emphasise the importance of citizen involvement with local researchers and further translocal research and development cooperation. The current lockdowns or restrictions of mobility are not the end of the journey of global development – but the start of a new trajectory forcing us to rethink normal practices and how to shape new futures – that are bottom-up, inclusive and resilient to climate and future pandemics.

NOTE

1. As for capital, reliable records are not available. Foreign direct investment reached peaks in 2007 and 2015, and was down in-between and has been down since. Global currency exchange is measured for only one month every three years, and suggests ongoing growth. But this does not cover flows in the same currency (dollars, and so on) across borders (OECD 2020).

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