APRA

Agricultural Policy Research in Africa

AGRICULTURAL GROWTH CORRIDORS ON THE EASTERN SEABOARD OF AFRICA: AN OVERVIEW

Rebecca Smalley

Working Paper

WP|01
September 2017

CONTENTS

List of figures

List of tables

ACKNOWLEDGEMENTS

The author would like to thank Lidia Cabral, Ian Scoones and Jeremy Lind for their comments on earlier drafts.

LIST OF ABBREVIATIONS

AfDB	African Development Bank
AGRA	Alliance for a Green Revolution Africa
ASAL	Arid and semi-arid lands (Kenya)
BAGC	Beira Agricultural Growth Corridor
BOPIC	Base of the Pyramid Innovation Center
CSMI	Centre for Sustainability in Mining and Industry
DANIDA	Danish International Development Agency
DCED	The Donor Committee for Enterprise Development
DFID	Department for International Development (UK)
DRC	Democratic Republic of Congo
DTI	Department of Trade and Industry (South Africa)
ECDPM	European Centre for Development Policy Management
EPZ	Export processing zone
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross domestic product
ICRA	International Centre for development oriented Research in Agriculture
IFAD	International Fund for Agricultural Development
IFDC	International Fertilizer Development Center
IFPRI	International Food Policy Research Institute
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
LAKAJI	LAgos-KAno-JIbiya
LAPSSET	Lamu Port-South Sudan-Ethiopia Transport Corridor
LCDA	LAPSSET Corridor Development Authority
MVIWATA	Mtandao wa Vikundi vya Wakulima Tanzania
M4P	Making Markets Work for the Poor
NEPAD	New Partnership for Africa's Development
ODA	Official development assistance
PIDA	Programme for Infrastructure Development in Africa
RSA	Republic of South Africa
SAGCT	Southern Agricultural Growth Corridor of Tanzania
SDI	Spatial Development Initiative
SEZ	Special economic zone
SIDA	Swedish International Development Cooperation Agency
SME	Small and medium-sized enterprise
TAP	Tanzania Agricultural Partnership
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

This Working Paper describes and critically reviews the recent emergence of agricultural growth corridors and other types of corridor with a prominent agricultural component. It offers a descriptive overview and poses some political economy questions. It focuses on four projects on the eastern seaboard of Africa: the Southern Agricultural Growth Corridor of Tanzania (SAGCOT); the Beira Agricultural Growth Corridor (BAGC); the Nacala development corridor in Mozambique; and the Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) Corridor based in Kenya. It identifies three major influences on the current popularity of corridors: the evolution of logistics corridors into tools of development policy; new thinking among donors on infrastructure, agriculture and the role of private sector development; and the needs of private sector actors for investment to support production and secure their supply chains in a globalised world.

The paper notes some key differences between the four corridors, which include that agriculture was more central to the original design of SAGCOT and BAGC than the Nacala and LAPSSET corridors. It also notes some similarities, such as the observation that all four aim to use infrastructure to leverage investment in agriculture and support commercially oriented producers to supply globalised markets. It finds that the primary drivers of corridor developments are not usually domestic governments but rather coalitions of private sector actors who have been able to align their commercial ambitions with mainstream ideas on infrastructure and agriculture among donors and the international development community.

Some actors are involved in more than one of the corridor developments. However, the way that public and private interests interact with each other and with local stakeholders is specific to each project, and specific narratives have been used to legitimise the corridors in each context. This has led to some unexpected ruptures in relationships between project partners and spaces for resistance, especially with Nacala and LAPSSET. While project outcomes are just beginning to be documented, the paper raises some preliminary concerns over infringement of land rights, exclusion of some farmers and herders, and failure to articulate how corridors will address the causes of low productivity, poverty and food insecurity in rural areas.

1. INTRODUCTION

Many current policies and programmes for agricultural development in Africa include components that have a distinctly spatial character: ideas of agri-clusters and business hubs, of long-distance supply chains and value chains, of rural–urban linkages and of physical infrastructure projects. One of the ways in which these ideas are being packaged and delivered is the agricultural growth corridor – a new spin on economic development corridors that has gained popularity in recent years (Kaarhus 2011). Combining physical infrastructure along transport and communication routes with place-based investment in agriculture and other sectors, corridor projects from Namibia to Nigeria have received new life during the past decade.

This working paper describes and critically reviews the recent emergence of agricultural growth corridors and other types of corridor with a prominent agricultural component. The paper focuses on four corridor projects on the eastern seaboard of Africa: the Southern Agricultural Growth Corridor of Tanzania (SAGCOT); the Beira Agricultural Growth Corridor (BAGC); the Nacala development corridor, incorporating the ProSAVANA programme[1] and Project for Nacala Corridor Economic Development Strategies (also known as the Nacala Logistics Corridor); and Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) Corridor. While each corridor may link two or more countries, this paper concentrates on the countries where the destination port is located and where the majority of activity has occurred, namely: Tanzania (for SAGCOT), Mozambique (Beira and Nacala) and Kenya (LAPSSET).

The ultimate interest of this research is in how these corridors are reshaping agricultural commercialisation pathways and rural livelihoods in marginal, frontier areas, with what impacts for whom. Concerned with the political economy of agricultural growth corridors, the following questions were used to guide the study:

- **What are the drivers of corridor development in east Africa?**
- **Who are the main interest groups and what are the political dynamics between them which are affecting how the corridor projects have unfolded so far?**
- **What opportunities for accumulation exist from the corridor developments, for whom, and who loses out? What patterns of elite capture, patronage and social differentiation are emerging, with what consequences?**
- **What models of agricultural and rural development are being promoted by the corridor proponents?**
- **What are the likely impacts and influences of the corridor developments on women, on small businesses and on poor farmers and pastoralists?**

The sections that follow highlight some key differences between the four corridors, which include that agriculture was more central to the original design of SAGCOT and BAGC than the Nacala and LAPSSET corridors. They also note some similarities, such as the observation that all four aim to use infrastructure to leverage investment in agriculture and support commercially oriented producers to supply globalised markets. The paper finds that the primary drivers of corridor developments are not usually domestic governments but rather coalitions of private sector actors who have been able to align their commercial ambitions with mainstream ideas on infrastructure and agriculture among donors and the international development community. Some actors are involved in more than one of the corridor developments. However, the way that public and private interests interact with each other and with local stakeholders is specific to each project, and specific narratives have been used to legitimise the corridors in each context. This has led to some unexpected ruptures in relationships between project partners and spaces for resistance, especially with Nacala and LAPSSET. While project outcomes are just beginning to be documented, this paper raises some preliminary concerns over land rights infringements, exclusion of certain farmers and herders, and a lack of attention by corridor proponents to the causes of low productivity, poverty and food insecurity in rural areas.

The paper is structured as follows. Section 2 provides a definition of corridors from a mainstream economics perspective. Section 3 explores the history of corridors to understand why they are popular now and where

they came from. A descriptive overview of the four eastern seaboard corridors is provided in Section 4. Section 5 identifies the main actors involved and assesses how they have influenced progress to date. Finally, Section 6 returns to the research questions and presents some observations from a critical political-economic perspective and raises some new questions for future study.

2. DEFINITIONS

Much of the work to date on development corridors is found in mainstream economics literature. The literature provides definitions and a framing that tend to emphasise the business and macroeconomic functions of corridors over their political-economic aspects. This section presents a classification of corridors drawn from that predominantly economic perspective.

2.1 Defining corridors and other spatial development initiatives

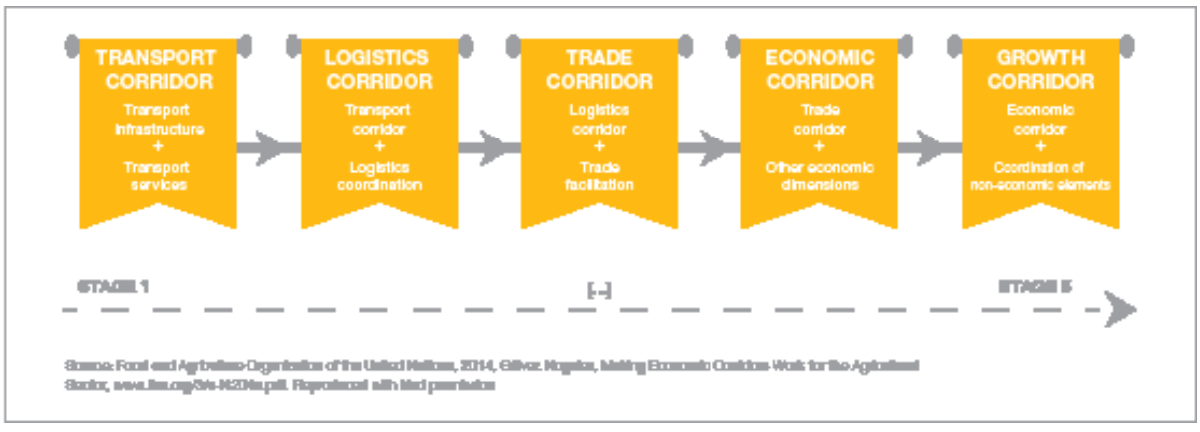
A **corridor**, in this context, is a geographical area of a country or group of countries surrounding a major transport route such as a highway or railway, which supports economic activity at the ends of, and along, the route. Often, the corridor route connects sources of natural materials in the hinterland to ports, markets and labour at the coast, and there may be oil pipelines, telephone lines or fibre-optic cables running along the route.

A corridor is more than simply the transport route itself; the term signals either the concentrated presence of economic activity that is related to the route, or an explicit policy initiative that takes advantage of the transport infrastructure. In a generalised form, corridors are linear, but they can expand into sub-branches and networks (Gálvez Nogales 2014).

Corridors often change over time. The mainstream economics literature presents this as an evolution in the complexity and scope of corridor projects and of their underlying economic and development policy objectives, as illustrated in Figure 1 (see also Hope and Cox 2015). Viewed within this evolutionary framing, the simplest corridors are ***transport or transit corridors,*** which comprise transport infrastructure and associated services. To this can be added: further investment in hard and soft infrastructure; measures to support business, customs and trade; development programmes for economic sectors present in the corridor areas; and social initiatives in health, poverty reduction and so on. These more sophisticated forms are known as ***logistics corridors, trade corridors, economic corridors*** and ***growth or development corridors***, depending on their scope. Although the most sophisticated kind (development corridors) may be planned from scratch, they typically evolve from existing rail or road routes.

Corridors are a kind of *spatial development initiative* (SDI). Other SDIs include special economic zones (SEZs) and development clusters, which themselves may be included as components of economic or development corridors. Some forms of SDI are explicitly designed to support agriculture and agribusiness in rural production areas and/or in urban or coastal processing zones. The most common agricultural SDIs established in rural areas are corridors and clusters.

Figure 1: Types of corridor and the evolutionary path they may take



2.2 The premise of agricultural growth corridors

This paper is most interested in the sophisticated types of corridor known as growth or development corridors, and particularly in the specialist form of 'agricultural growth corridors', which is a term that has been used to describe three of the four eastern seaboard corridors under study. ***Agricultural growth corridors are based on the premise that transport infrastructure can be leveraged to support farming and attract agribusiness investment***. The leverage effect is explained in the following definitions from the literature (emphasis added):

> Resource corridor: A sequence of investments and actions to leverage a large extractive industry investment in infrastructure, goods and services, into sustainable, inclusive economic development and diversification along a specific geographic area. (Adam Smith International 2015: 10)

> Infrastructure corridor: Coordinated investment in an infrastructure system to ***jumpstart and facilitate rural markets*** and reduce logistical inefficiencies. (World Economic Forum 2010: 19)

> The economic corridor approach looks at regional transport routes not only as a means of transporting goods and services or as a gateway for land-locked countries, but also as a tool for ***stimulating social and economic development*** in the areas surrounding the route. (Mulenga 2013: 2)

The coordination and mobilisation of investment that is needed to achieve such wider-reaching development outcomes implies a substantial role for public finance and government, and as such, corridors operate as public–private partnerships, as explained by Byiers and colleagues:

> The corridors approach aims to promote spatially targeted, coordinated public and private investment with focused policy reforms and public finance, clustering of investments, logistics and market integration both within and between national markets, often formed with links to, or building on, SDIs. (Byiers, Bizzotto Molina and Engel 2016: 6)

The next section explores the kinds of agricultural growth corridor that have developed in Africa and broadens the analysis from predominantly economic classifications to a more critical consideration of their origins.

3. INFLUENCES ON THE DEVELOPMENT OF AGRICULTURAL GROWTH CORRIDORS IN AFRICA

3.1 Introduction: the current status of corridors and other agricultural SDIs in Africa

Spatial development initiatives have been less common in sub-Saharan Africa, and less well studied, than in other regions of the world. There are relatively few African corridors of any type, and when it comes to *agricultural* growth or development corridors only four could be identified: SAGCOT in Tanzania, Beira and Nacala in Mozambique, and LAgos-KAno-JIbiya (LAKAJI) in Nigeria. All have been conceived within the past ten years or so. In addition, there are several economic corridors in sub-Saharan Africa which have an agricultural component, such as LAPSSET, the Maputo Development Corridor and the Walvis Bay group of corridors in southern and central Africa. More common in Africa are agricultural clusters, which are also SDIs and depend on infrastructure just like corridors but lack the linear aspect. They are also not so closely linked to transport routes and existing industries which use them, such as mining.

Using the economic definitions introduced in Section 2, one can summarise that Africa has three types of SDI with an agricultural component:

1. *Agricultural growth corridors*, where agriculture is central to the design and planning of the initiative – i.e. 'the whole... programme revolves around agricultural and agribusiness development concentrated around a major infrastructure investment or set of interrelated infrastructure projects' (Gálvez Nogales 2014: 12).

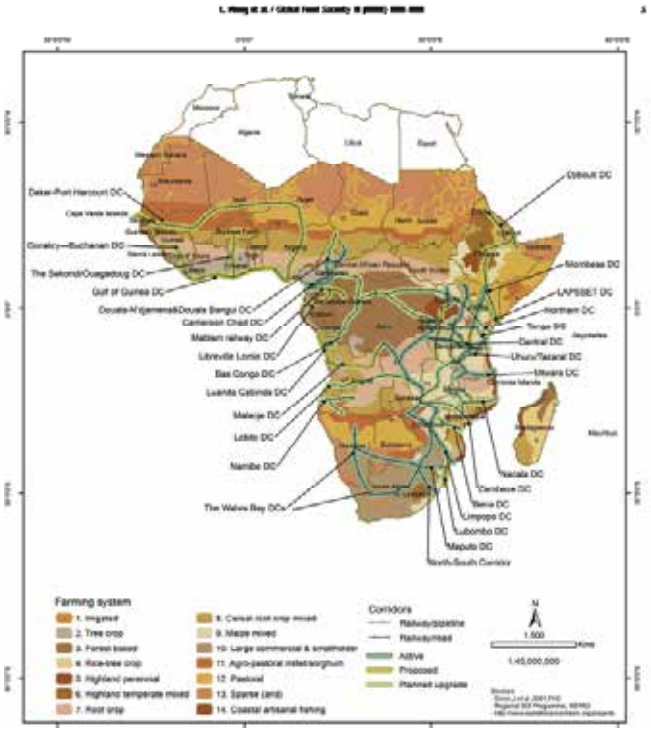
2. More general *economic or development corridors* where, in a secondary phase, planners aim to add components for supporting agriculture (and potentially other economic sectors in the corridor areas) through a process sometimes referred to as 'densification' (Mtegha et al. 2012).

3. *Agricultural clusters,* defined by Gálvez Nogales as 'a concentration of producers and institutions that are engaged in the food and agricultural sector and that inter-connect and build value networks, either formally or informally, when addressing common challenges and pursing common opportunities' (2010: 5).

According to the evolutionary nature of corridors posited by authors such as Gálvez Nogales, one might expect the second type of initiative listed above to become more common over time. Owing to the historical work of the New Partnership for Africa's Development (NEPAD) and South Africa's Spatial Development Initiative, corridors have been most common in southern Africa, as will be explained in Section 3.2. But, in the context of intra-regional initiatives such as the Abuja Process, there are also an increasing number of corridors, particularly transport corridors, in West Africa (Mtegha et al. 2012; Government of Denmark 2014; Byiers et al. 2016).

A list of the African corridors identified in the literature is given in the Annexe, and 33 of them are shown in Figure 2 below.

Figure 2: Development corridors in sub-Saharan Africa as of 2013



Source: Reprinted from *Global Food Security* 2.3, Weng et al., Mineral Industries, Growth Corridors and Agricultural Development in Africa, 2013, with kind permission from Elsevier.

The rest of this section identifies three main roots of the current forms of development corridors in Africa with an agricultural component: (1) previous spatial models and efforts in southern Africa to transform older transport corridors into development corridors; (2) trends in development thinking; and (3) the changing needs of private sector investors.

3.2 The emergence of corridors as development policy tools

Agricultural development corridor projects that exist today are located in *historical transport corridors* which served, notably during colonial times, to exert territorialism and facilitate the flow of exports, imports and labour in core–periphery relationships. This included multiple routes in southern Africa which connected mining towns with manufacturing centres, coastal ports and labour reserves (Maennling, Shah and Thomashausen 2014).

During the 1960s, 1970s and 1980s, political events influenced the development of transport corridors in southern Africa, with events such as Rhodesia's independence and political unrest in Angola and Mozambique leading to some routes becoming blocked and the need to develop or rehabilitate new routes and ports. While it is often rightly stressed that the corridors were important copper and coal transport routes, they were also used for transporting agricultural produce for export, such as sugar, tobacco and citrus, and agricultural interests were consulted on corridors' future development. A plan for rehabilitation of the Zimbabwe–Mozambique Beira corridor in 1986, for example, included agricultural and cattle ranching projects (Fair 1989).

In the 1990s, South African President Nelson Mandela realised that transport corridors could be used for the goals of sustainable development. He saw that the infrastructure needed by the mining industry in southern Africa was a kind of positive externality that could be harnessed to development strategies to revitalise regions of South Africa that had been marginalised under apartheid. In 1994, South Africa's Department of Trade and Industry (DTI) established an SDI with the aim of using infrastructure funded by public money and private mining concessions to serve the needs of farmers and other businesses and to attract additional investors into targeted areas. In a prototype of the 'clusters' discussed in today's corridor developments, the DTI used the concept of 'densification' to promote geographically consolidated business (Taylor 2000; Kuhlmann, Sechler and Guinan 2011).

The *development corridors strategy* was taken on by the African Union through its technical agency NEPAD. Kuhlmann and colleagues (2011: 8) wrote that NEPAD officials believed corridors had the transformative potential to support indigenous economic development. However, they argued that the strategy did not achieve traction for sustained rural development because at that time (the 1990s) there was not enough attention paid to other activities needed to support agriculture, apart from infrastructure, and investors and donors themselves were still not prioritising agriculture. One example is the Maputo Development Corridor in Mozambique, launched in 1996, which used public–private financing to improve railways, highways and the port at Maputo, but also involved regulatory changes to facilitate cross-border trade. A critical review found that the Maputo corridor lacked involvement of government and communities in its planning and execution, which led to limited scope for benefits to extend beyond the investing companies themselves and to a series of unintended side-effects. A member of the South African Commission on Gender Equality remarked, 'Sadly, the only industry that appears to be working for women is sex work that has sprung up along the highway, which is unfortunately accompanied by the increase in HIV and AIDS' (cited in Taylor 2000: 14).

Nevertheless, within NEPAD and other agencies, development corridors have remained a popular, recurring model for regional and rural development programmes in Africa, and the links between the mining sector, agriculture and infrastructure have continued to be explored, partly because of reasons discussed in Section 3.3 below (Thomas 2009).

Another model from which the planners of today's corridors have learned is *economic zones* such as export processing zones (EPZs), freeports and SEZs. Implemented in various forms around the world from the 1950s onwards, these zones were attempts to attract investment and create jobs, often by offering export-oriented companies a chance to operate at zero or minimal tax rates in countries with low labour costs (Baissac 2011; Farole and Akinci 2011). Economic zones are of interest to development corridors as they were similar experiments in ways to create enabling conditions for the private sector in order to generate local social and economic benefits – and obviously they were also, like corridors, SDIs with infrastructural components. However, similar to the southern African development corridors, linkages from SEZs to the wider economy appear to have been limited, except for some striking success stories in China. African SEZs are widely viewed to have been a disappointment –

although it is notable that the types of business that operated within them tended to provide more jobs for women than most business arrangements (Farole and Akinci 2011). Lessons that could perhaps be learned for current development corridor initiatives are that African SEZs suffered from weak governance, lack of good planning and management, and high transport and transaction costs (Farole 2011).

3.3 Trends in development thinking on agriculture and infrastructure

Corridors are public–private partnerships which receive substantial aid and state finance. This section identifies some key priorities and ideas among the international development community that have encouraged their recent support of corridor projects.

3.3.1 Market barriers and infrastructure

There is a wide-ranging concern among development banks, donors, development agencies, academics and other actors about *market barriers or constraints* (see, for example, Kuhlmann et al. 2011). In agriculture, this could refer to barriers impeding farmers' access to markets and services (Weng et al. 2013); but organisations are concerned about market constraints more generally in terms of how they are impeding sectoral development, regional trade and economic growth in developing countries (see, for example, NEPAD 2016 on the MoveAfrica initiative). One priority is to help insecure land-locked countries gain access to markets (Nicol 2015). This phenomenon may be linked to the influence of new institutional economics in recent years – a discipline of economics which addresses impediments to perfectly functioning markets – and also reflects the shift in emphasis from aid to economic growth in development circles (Taylor 2000).

We see this concern about market constraints in the renewed enthusiasm among development banks and other funding organisations to support projects to improve infrastructure in a country or sub-region (Nissanke and Söderberg 2011: 23; see Table 1 below). This support may be enabling national governments to channel more public finance into infrastructure (e.g. see Birch and Lind 2014 for Ethiopia and Kenya). An example is the African Development Bank (AfDB)'s Programme for Infrastructure Development in Africa (PIDA), launched in 2010 with NEPAD and the African Union Commission. The programme explicitly links poverty reduction and socioeconomic development to improved access to infrastructure networks and services (AfDB 2016). Among bilateral donors, an important actor is the Japan International Cooperation Agency (JICA), which makes a financial contribution to PIDA. JICA has historically promoted African infrastructure more strongly than its peers and, in 2008, agreed an increase in aid to Africa, which included a US$4bn facility for hard and soft infrastructure and agriculture projects (Cornelissen 2016).

In the agricultural sphere, lenders now identify infrastructure as a crucial requirement for agricultural development after a long period of underinvestment. From 2003 to 2005, only 3 percent of World Bank Private Participation in Infrastructure projects was for infrastructure intended to raise agricultural productivity, and alternative private or public–private sources of project finance did not materialise in sufficient quantities (Warner, Kahan and Lehel 2008).

The development community reflects that leaving the private sector to invest in rural infrastructure during the 1980s and 1990s has seriously backfired, and transport and road corridors are now once again considered possible models for delivering infrastructure. In the African context, much infrastructure has been damaged or become dilapidated in recent decades through civil war, collapse of state-owned institutions and economic stagnation. Corridors provide an opportunity to rehabilitate and modernise roads, railways and irrigation systems, and today's corridor projects typically include this as an objective (Paul and Steinbrecher 2013).

Table 1: Infrastructure-related barriers to agricultural development

Type of infrastructure	Role of infrastructure	Potential problem	Consequence of problem
Roads	• Enable produce to move rapidly and efficiently • Support on-farm production	Poor quality roads	• Adds to cost of transporting produce from farmgate to processing facility and/or wholesalers • Prevents large bulk or refrigerated trucks from reaching producers or markets
		Lack of roads	• Farmers may not be able to reach local markets or agribusiness processors
		Roads that become impassable in wet season	• Farmers are forced to sell produce in dry season at low prices
Post-harvest storage facilities	• Support on-farm production	• Lack of post-harvest storage facilities	• Post-harvest losses • Farmers cannot benefit from optimum marketing opportunities
Irrigation		Low levels of investment in irrigation	• Farmers cannot afford own irrigation
Market exchanges and auction centres	• Support incomes • Ensure efficient trading and exchange	Lack of market exchanges and auction centres	• Farmers are unable to improve margins • Farmers cannot benefit from economies of scale in inputs
Agroprocessing capacity	• Adds value to economy	Insufficient agroprocessing capacity	• Inability to provide products of sufficient quality, volume and reliability

Source: Compiled by the author from the literature.

3.3.2 New visions for agricultural development

Another change in development thinking which has fuelled the trend for agricultural growth corridors is the recent increase in Official Development Assistance (ODA) committed to agriculture in Africa since around 2007 (Umbadda and Ismail 2013). Similar to the upswing in public funding for infrastructure, there is renewed interest among donors and advisers in agriculture's potential contribution to economic growth, exemplified most famously by the World Bank's 2008 ***Agriculture for Development*** report. However, today's funding strategies for 'agriculture for development' are inflected by contemporary ideas of neoliberalism, globalisation and, perhaps again, new institutional economics.

For instance, increasingly, donors and development advisers are favouring private sector development approaches – particularly in agriculture (Humphrey 2014; Cornelissen 2016; DCED 2017). This means creating both conditions for foreign private sector investment and an enabling environment for local small and medium-sized agribusinesses.

Thus, consistent with the new emphasis on growth rather than aid and the importance placed on removing market barriers, many agricultural development programmes now include elements to improve upstream and downstream business links between suppliers, producers and processors. While crucial, infrastructure alone – it is argued – will not bring about the economic changes required for rural transformation (Kuhlmann et al. 2011; Weng et al. 2013). In a project document for a World Bank intervention in the SAGCOT corridor, for example, the lack of market linkages, rather than low agricultural production or yields, is identified as the most important impediment to smallholder livelihoods (World Bank 2016a). The modalities for delivering agricultural development, meanwhile, typically include the use of public–private partnerships, catalytic funding or market-based approaches such as value chains or Making Markets Work for the Poor (M4P).

The new thinking on 'agriculture for development' also continually highlights the need to bring small-scale farmers into global markets and commercial value chains. Hence, Kuhlmann and colleagues, of the inclusive agriculture initiative TransFarm Africa, talk of the need to 'tie smallholders into the stream of commerce' (2011: 4), while the Dutch-funded Seas of Change value chains initiative looked for 'commercially viable' farmers to support. The schema developed by Dorward and colleagues of alternative livelihood pathways for poor farmers – of either 'hanging in', 'stepping up' or 'stepping out' – appears to have had a strong influence (Dorward et al. 2009). There has been a growing concern among donors and advisers that agricultural development and agribusiness investment should be inclusive (e.g. AfDB 2013; Woodhill 2016; IFPRI 2016;) and yet at the same time, a belief that the poorest, least productive and least 'market-oriented' farmers should perhaps drop out of agriculture (rather than simply 'hang in'?), sell their land to more productive farmers, and be absorbed into the labour market. The policy contradictions that this creates are already visible in the eastern seaboard corridors – something that will be discussed later, in Section 5.

This brings us to one last strand of development thinking relevant to corridors, which relates to ***space and scale***. Evident in documents for development corridors, as well as for rural development programmes, is a model or theory reminiscent of earlier thinking about linkages and trickle-down effects, whereby local entrepreneurs, progressive farmers or professional farming operators are expected to play an important spatial role in transmitting technology throughout an agricultural zone and in providing a link between commercial markets and dispersed local smallholder farmers. Corridors are, by their nature, a type of SDI. The development plans envisage the creation of networks and clusters in order to achieve ***economies of scale*** and ***impacts at scale*** and to link farmers through infrastructure into regional or even global systems of input provision and value addition. Examples include the 2SCALE project in West Africa (BOPIC, ICRA and IFDC 2015) or the Seas of Change initiative (Woodhill et al. 2012). Documentation for such programmes presents typical smallholder farmers as marginal actors who need to be brought into the mainstream, where the mainstream is understood to be the global agribusiness complex – as opposed to, say, local or informal food markets.

The new development thinking on infrastructure and agriculture is highly conducive to corridor projects. All of these elements – funding for infrastructure and creating conditions for private sector investment, spatial models at scale, and support for better-off farmers to join globalised supply chains – are visible in the design of the agricultural growth corridors studied in depth in this paper.

3.4 The needs of private investors

A third aspect which has influenced the adoption of recent agricultural development corridors is the needs of private sector actors. These include: infrastructure firms; companies in the oil, gas and mining sectors; investors in large energy and infrastructure projects; multinational commodity traders and food and beverage companies; agricultural input producers; and domestic and foreign agribusiness concerns such as farmland asset firms and contract farm management firms. Their 'needs' include accommodations that national governments must make in order to attract investors but also the actions and demands of companies already present on the ground.

For example, the push for improved infrastructure, which is so fundamental to development corridors, is strongly linked to the needs of private companies. The minerals, oil and gas boom in Africa has been a strong driver of infrastructure projects, as mining has heavy demands for rail, electrification and shipping (Weng et al. 2013). Retailers and commodity traders, too, are requiring better infrastructure to deliver goods to growing demand in urban areas, supported by the discourse on a looming global food crisis (Nicol 2015; Scoones et al. 2014); while governments see provision of rural infrastructure as key to attracting investors in greenfield developments for agricultural production. The transportation component of development corridors therefore remains a core element of their design.

We observed in Section 2 that the premise behind agricultural development corridors is to leverage or piggy-back on infrastructure that is being developed for the extractives sector or for national economic development more broadly. Just as was envisaged in South Africa in the 1990s, today's planners and investors believe that mining concerns will not only help to fund infrastructure which they can exploit but will also create economic growth in rural towns, which will generate demand for agricultural goods.

However, experience has taught governments and development lenders that even for highly motivated actors such as mining companies, it may be necessary to provide innovative financing models and a public sector contribution to create sufficient conditions for infrastructural investment. Furthermore, it can be most effective to design projects that ***deliver more than one type of infrastructure for more than one sector***, or that

offer additional business incentives to investors (Warner et al. 2008; Paul and Steinbrecher 2013). In particular, it has proved difficult to persuade investors to fund infrastructure purely for agriculture owing to the risks involved in that sector, with farming being an inherently risky activity and the 'client base' being geographically dispersed, often poor farmers from whom investors will not be easily able to recover their capital costs. This riskiness not only dampens investors' appetite for specific agricultural infrastructure projects but also their willingness to invest in other agricultural opportunities such as greenfield plantations or processing businesses (as will be seen in Section 5, the levels of investment in development corridor projects have been lower than planners had hoped for, partly because of this risk aversion). Ironically, the very riskiness of agriculture demands a certain level of infrastructure to mitigate risk, including soft forms of infrastructure such as technology and communication.

Planners of agricultural development programmes, then, typically view infrastructure as crucial to achieving poverty reduction through commercialisation. It is thus not surprising that planners have responded favourably to corridor designs which bundle together multiple hard and soft infrastructural projects funded through public–private partnerships and patient capital (Kaarhus 2011), and which may be closely linked to other sectors such as mining that will assume some of the costs and risks of investment.

It is also not surprising that the agricultural development corridors studied in this paper all envisage at least some of the produce from farmers in corridor zones being transported to ports for export. Paul and Steinbrecher (2013: 5) explain:

> Since private capital wants guaranteed returns on investment, export agriculture is likely to be a major focus, with infrastructure leading out of the country, probably towards other regions, rather than benefiting other African countries. The participation of corporate partners such as Cargill, Bunge and ADM link the Agricultural Growth Corridors projects firmly to the global commodity trade.

However, it is not only export-oriented corporations for whom corridors have been designed. Another type are national or regional players such as the beverage group SAB Miller, which has identified a strategic opportunity to increase production for supplying the growing urban populations and 'bottom of the pyramid' consumers in the corridor countries themselves. Another group with plenty at stake in the African development corridors are the corporations ***selling to*** African farmers as opposed to the corporations ***purchasing from*** African farmers – the input suppliers such as Yara, which has identified a potential to develop new markets for fertiliser, crop protection products, seeds and machinery (Bergius 2016; Ouma, forthcoming).

Corridors have provided a means for corporations and investors with varying interests to collaborate and benefit from positive externalities and economies of scale. But, as will be shown in Section 4, the existence of multiple ambitions – among them, inclusive value chain development, high-volume production for export and increasing sales of inputs to African farmers – can lead to contradictions in the design of development corridors and how they are being implemented. Returning to the question of scale, we perhaps see tensions between the need for corridors to function as just that – as ***linear routes*** for the movement of inputs and outputs – and the vision of corridors as ***clusters*** or ***hubs*** of localised rural regeneration.

4. OVERVIEW OF THE FOUR EASTERN SEABOARD CORRIDORS

The areas where the four corridors are located are historically important trade and marketing routes, and all have featured (to some extent) settler farms, large-scale agriculture and state farms or ranches, which are being transformed in the corridor plans into clusters, hubs and demonstration farms. In contrast to the potential future laid out in the plans, the corridor areas have all experienced marginalisation or underdevelopment particularly in the arid and semi-arid lands (ASALs) of Kenya (LAPSSET) and the civil war-affected areas of Mozambique (Beira and Nacala). Proponents claim that the corridors feature both high-potential farmland and large areas of underutilised land. In practice, the profile of the existing agricultural economy and the population density varies from area to area. It will be interesting to explore in the years ahead how these contextual similarities and differences affect outcomes.

This section summarises the scope of each of the eastern seaboard corridors and describes their historical context. Detailed analyses and sources are available in work by Shankland, Gonçalves and Favareto (2016) for Nacala, by Kaarhus (2011) and Maennling, Shah and Thomashausen (2014) for Beira, by Jenkins (2012) and Bergius (2016) for SAGCOT, and by Browne (2015) and Mosley and Watson (2016) for LAPSSET.

Figure 3: Location of the four eastern seaboard corridors

Source: Author's own.

4.1 Nacala

The core concept of the Nacala development corridor as it emerged in the early 2000s is rehabilitation of the rail line that travels across northern Mozambique to the port at Nacala, which is one of the deepest and most highly valued ports in East Africa (JICA 2016; Synergia 2016). The main purpose was to develop an alternative route for transporting coal from inland to the coast.[2] The plan includes a logistics corridor to travel from Tete province (a major coal-mining region) to Nacala through Malawi, and investment in a Nacala SEZ. The Mozambican government took advantage of private sector demand for a corridor to request that project financing cover additional rehabilitation of a spur rail line to Lichinga in the interest of regional development (Synergia 2016). The historical Nacala road and rail routes had been attacked by the militants of the Renamo opposition party during the 1980s and 1990s, to the extent that Malawi sent forces to protect this vital trade artery (Alden 2001).

However, Nacala is more than just a rehabilitated transport corridor for the extractives industry. In 2010, the government announced, in a national plan for agrarian sector development (*Plano Estratégico para o Desenvolvimento do Sector Agrário*, or PEDSA), that it intended to use the Nacala corridor (and others such as Beira and Maputo) to develop agricultural value chains (República de Moçambique 2010). The agricultural component of the Nacala corridor was further strengthened by the creation of the Programme

for Agricultural Development of the Tropical Savannah in Mozambique, or ProSAVANA, which was announced in 2009 and whose draft 'master plan' was leaked in 2013 (Shankland and Gonçalves 2016).

ProSAVANA consists of three components:
(1) 'extension and models' (***Projecto de Extensão e Modelos***, PEM), a component for smallholder inclusion and engagement; (2) 'research and technology transfer' (Projecto de Investigação, PI); and (3) support for the agricultural development master plan (PD), which is aimed at engaging private investors in the Nacala corridor region. It covers 19 districts in the northern provinces of Nampula, Niassa and Zambezia. A separate PEDEC (Project for Nacala Corridor Economic Development Strategies) element of the corridor includes building capacity for land and environmental management – in part in anticipation of land disputes and environmental problems that may arise from the developments.

The ProSAVANA architects stated as their main objectives the development of market-oriented agriculture through regional agricultural clusters and value chains, and a shift in farming livelihoods from subsistence to sustainable commercial agriculture, working to strengthen 'local leading farmers'. Further stated aims were to improve food security, create jobs and reduce rural poverty. The focus was on rice, soy, maize and cotton operations, but other targeted crops included sunflower and coffee, as well as poultry, cattle and pork. Initially, the plan was to produce commodities for both domestic and export markets in Africa and Asia (e.g. soy was intended both for export and for feed for associated livestock developments), and in a 2014 presentation by Brazilian company Vale, it was clear that inputs such as fertiliser, fuel, wheat, clinker and sulphur were intended to be imported. In a revised master plan of 2015, there was more emphasis on local markets.

4.2 Beira

The Beira Agricultural Growth Corridor (BAGC) concept was launched in 2010. As with the Nacala project to the north, the Beira corridor is a historically important route linking the port at Beira (located approximately 1,000km south of Nacala) with central Mozambique, Zimbabwe and other southern African countries.Like Nacala, the route's infrastructure deteriorated during the1976-92 civil war, and during the 2000s the Mozambican government faced pressure from mining companies (and, to a lesser extent, sugar companies) to improve port capacity at Beira as well as the trucking routes and rail lines linking Beira to operations inland, such as the mines in Tete province. This created an opportunity for proponents of agricultural growth corridors to leverage finance from government and mining companies to promote transformation of the agricultural sector in central Mozambique.

Whereas with the Nacala project, agricultural elements were added through PEDSA and ProSAVANA, agriculture was central to the BAGC concept's design from the start. The BAGC plan includes the transformation of 190,000ha of farmland in Tete, Sofala and Manica provinces through irrigation and restructuring into livestock ranches, large irrigated sugarcane estates of 10,000 or more, medium-sized operations of 300–3,000ha (particularly for rice, field crops and horticulture), and irrigated smallholdings, which would comprise 35 percent of the total land allocated (AgDevCo 2010). There was to be investment in processing and milling facilities, promotion of fertiliser use, and an increase in provision of other inputs and extension services using nucleus farm 'hubs' and managed farm blocks in agribusiness clusters. Public and private sector funding was to be channelled to local businesses and farmers through a social venture Catalytic Fund and a matching grant Smallholder Support Facility managed by AgDevCo (an agribusiness investor and consultancy) and a BAGC secretariat.

This region of Mozambique was settled by white farmers in the nineteenth century and small-scale Portuguese farmers in the mid-twentieth century. After independence in 1975, state farms were established on the land of former estates and of the small-scale settlements. Many of these are now privately owned by absentee elites (Kaarhus 2011). In 2014, the population density of Manica, Sofala and Tete provinces was 33, 32 and 26 people/km^2 respectively.[3]

4.3 SAGCOT

Presented to the World Economic Forum in 2011 – one year after BAGC was publicly launched – the project blueprint for the Southern Agricultural Growth Corridor of Tanzania envisioned six agribusiness clusters, where investment would be channelled into large farms and plantations, outgrower schemes, irrigation works, post-harvest storage and processing, as well as improvement to the road, rail and port infrastructure. The plan covers a huge area of southern Tanzania, stretching from the port at Dar es Salaam to across the border into northern Zambia. This is the route of the cross-national TAZARA railroad, which opened a new port outlet for Zambia in 1975 but subsequently fell into decline. The surrounding development area falls in the Tanzanian administrative regions of Iringa, Mbeya and Morogoro.

These are among six regions targeted in the Tanzania Bread-Basket Transformation Project funded by the Alliance for a Green Revolution Africa (AGRA) and are historically important agricultural production zones for a range of crops such as maize and rice, and cash crops such as sunflower and tea. Mbeya and Iringa are also areas of labour outmigration to neighbouring Morogoro and other rural and urban centres (Wenban-Smith 2015). As of 2012, the population densities of Iringa, Mbeya and Morogoro were 18, 40 and 34 people/km^2 respectively.[4] The SAGCOT initiative aims to bring at least 350,000 additional hectares of farmland in the region into commercial production (World Bank 2016a).

Once the SAGCOT project was endorsed and supported by powerful bodies such as the national government and the World Bank, high ambitions of SAGCOT were set. The stated aims focused on commercialising tens of thousands of small farmers, increasing farmers' adoption of technology and other inputs (including fertiliser), and creating a business-friendly environment for revenue-generating agricultural value chains. Underlying this were the rhetorical aims of Green Revolution and making better use of underutilised land. SAGCOT also aimed to lift two million people out of poverty. A wide range of crops were identified for development (among them rice, sugar, sunflower, soy, wheat and barley, high-value crops such as avocado, macadamia and tomato, and dairy and livestock) and project documents specified that some produce would be for export.

4.4 LAPSSET

Whereas Nacala and its ProSAVANA programme, BAGC and SAGCOT may be considered agricultural growth corridors according to the classification from Section 2, LAPSSET is more accurately considered as an economic corridor with agriculture as a secondary or 'densification' component.

The LAPSSET corridor concept was developed over decades, largely driven by oil interests. Launched in its current form in 2011, LAPSSET comprises: a plan for a deep port, oil refinery and SEZ at Lamu; a 500m-wide corridor of road, rail, pipeline, electrical power lines and fibre optics to connect Lamu with a new airport and tourist resort at Isiolo in central Kenya, where the corridor forks and continues west and north across the borders into Ethiopia and South Sudan; and a 100km-wide economic corridor flanking the pipeline and communications corridor. It is an enormous development project, with an investment budget equivalent to half of Kenya's gross domestic product (GDP) (Repcon Associates 2017).

The corridor in Kenya traverses nine counties – Lamu, Garissa, Marsabit, Isiolo, Meru, Turkana, Samburu, Baringo and Laikipia – whose population density in 2009 ranged from 6 people/km^2 in Isiolo to 61 people/km^2 in Baringo (Kenya National Bureau of Statistics 2015). These are part of the northern Kenyan arid and semi-arid lands (ASALs), which have experienced economic and political marginalisation (Odhiambo 2013).[5] Pastoralism is an important component of the ASAL agricultural economy. Much of the LAPSSET route is proximate to cross-country livestock marketing corridors and while most land remains officially as trust land under communal pastoral or agro-pastoral systems, several private and state ranches were established in the region during the 1960s and 1970s (Smalley and Corbera 2012; Njoka et al. 2016).

The marginalised, dryland context of LAPSSET is different from the contexts of SAGCOT, Nacala and BAGC and has some implications for possible outcomes of the corridor's development. New investment projects such as LAPSSET are an opportunity to redress the historical marginalisation of Kenya's ASALs and perhaps contribute to climate resilience. There will be greater scope for livestock-related projects such as abattoirs or improving cross-border and rural–urban livestock marketing routes. However, there is a risk that the historical bias against pastoralism will see priority given to irrigated farming projects rather than initiatives to support herding livelihoods, and that both poorly planned project components and the rush to control land and natural resources will exacerbate class and gender inequality in pastoral areas and lead to land rights infringements (Birch and Lind 2014).

The LAPSSET corridor initiative is a flagship project of Kenya's Vision 2030 development plan (Repcon Associates 2017). LAPSSET's stated aims are to promote regional trade, develop Kenya's marginalised drylands, and increase jobs, economic growth and GDP. The Kenyan government frames the corridor according to its wider ambition of 'positioning Kenya as an economic power house in Africa... infusing new technology and skills into the economy and more critical bring[ing] to reality the dream of a social-economic rebirth of the Kenyan nation' (LCDA 2016: 17). A key rhetorical phrase has been 'unlocking potential' for Kenya's drylands (Nicol 2015).

Although agriculture was not at the heart of the initiative as conceived, in its 2013–17 planning document for Vision 2030, the government included agricultural development along the LAPSSET Corridor as a priority programme, with the forthcoming High Grand Falls dam expected to bring hundreds of thousands of hectares

of land in the region into irrigation (Kenya Vision2030 2013; Tarda 2017). Targeted agribusiness and value chain developments include large-scale sugarcane and mango schemes in Kenya and Ethiopia, and livestock and related food processing projects and potential opportunities in floriculture and horticulture, sugar and coffee (LCDA 2016; Repcon Associates 2017: 21).

5. EASTERN SEABOARD CORRIDOR INTEREST GROUPS AND INFLUENCES

The four eastern seaboard corridors were launched around eight to ten years ago, and have progressed to varying degrees. The documentation available so far suggests there has been some significant deviation from their original design and aims, mainly in response to conflicts of interest and unexpected events. To help understand the political-economic dynamics, this section identifies the main actors involved and how they have influenced the corridors' development and early implementation.

5.1 Nacala

The plans for the Nacala development corridor – and also for Beira – were strongly influenced by the increased activity of extractives firms in Mozambique's north-west Tete province during the early 2000s. An investment and mining boom at that time led to demands on the Mozambican government to improve infrastructure for use by the extractives industry in the region (coal, iron ore, titanium and natural gas) (Portos e Caminhos de Ferro de Moçambique 2013; Justiça Ambiental 2016).

The driving force behind the transport and logistics element of the Nacala project has been the Brazilian mining company Vale. Vale included railway and port development as part of its bid to develop the Moatize coal mine in Tete and until recently it owned 70 percent of the Nacala Logistics Corridor with fellow mining group Mitsui (Mitsui acquired Vale's share in March 2017).

Vale was one of several Brazilian and Japanese mining and agribusiness interests which have shaped the design and early implementation of the Nacala project. A coalition of political and business interests in Brazil, Japan and Mozambique have given the Nacala corridor a singular character: compared with the other three eastern seaboard corridors, Nacala has a stronger emphasis on soy cultivation (reflecting the Brazil–Japan links) and more projects in agricultural research (reflecting the contributions of Brazilian and Japanese agronomists).

Indeed, a Brazilian consultancy, GV Agro, helped to develop the ProSAVANA agricultural programme in its early stages. The importance of the port at Nacala has long attracted business interest in the hinterland farming areas in Nampula, Niassa and Zambezia. Authors Cabral (2016) and Shankland and Gonçalves (2016) explain that ProSAVANA was a combined result of: (1) efforts by former Brazilian president Lula to market Brazilian agribusiness abroad; (2) investment ambitions of Brazilian companies in the Nacala hinterland; (3) long-standing support by Japan of Brazil's development of its *cerrado* savannah region for soybean production; and (4) the endorsement by both Japan and the World Bank of a similar model of agricultural development that could be transferred to the African savannah. On this last point, Mozambique was argued to be an ideal savannah zone for development owing to its low population density and land underutilisation. In point of fact, Niassa has a low population density of 13 people/km^2, but it is higher in Zambezia (48 people/km^2) and Nampula (65 people/km^2).[5] Proponents of ProSAVANA highlighted unused arable land in the Nacala corridor region and argued that development in the hinterland could follow the experience of soy farming in the *cerrado* since the 1970s (World Bank 2009; Cabral 2016). Although the programme was claimed in a ProSAVANA communications leaflet to be 'A programme in Mozambique by Mozambicans', Shankland and Gonçalves (2016) note that similarities between the Brazilian *cerrado* and Mozambican savannah were repeatedly stressed to justify the extent of Brazilian influence.

A large number of companies and joint ventures have acquired thousands of hectares of land in the Nacala region – although it is unclear to what extent this has occurred as part of the ProSAVANA project. They include Grupo Pinesso, a Brazilian agribusiness firm; Mozaco (Mozambique Agricultural Corporation), established in 2013 by Rioforte Investments (Portuguese holding company for Grupo Espirito Santo) and JFS Holding (Portuguese cotton company); and AgroMoz (a partnership involving the richest man in Portugal, the former president of Mozambique and one of the largest land-holders in Brazil). According to the Mozambique National Peasants' Union (União Nacional de Camponeses or UNAC) and GRAIN

(2015: 5), 'a number of foreign companies, some in collaboration with local businesses linked to members of Mozambique's ruling Frelimo party, have already acquired large areas of farmland in the area and have displaced thousands of peasant families'. The region is historically a stronghold of the Renamo opposition.

In addition to the Brazilian and Japanese investment, companies have also made use of foreign donors such as the United States Agency for International Development (USAID), the Swedish International Development Cooperation Agency (SIDA), Norfund and the European Union (EU), International Fund for Agricultural Development (IFAD) and Food and Agriculture Organization of the United Nations (FAO) to obtain land and subsidise the establishment of outgrower operations (UNAC and GRAIN 2015). The activities have included acquisition of former state farms and community land for commodities such as soy, cotton, rice and poultry. In 2012, the Brazilian consultancy FGV Projetos launched a private equity fund (the Nacala Corridor Fund) to invest capital in agricultural production and input businesses in the corridor region, stating that rice, soy, maize and cotton were the priority crops (FGV Projetos 2013).

The design of the Nacala corridor – specifically, the ProSAVANA agricultural element – has undergone the greatest resistance from civil society of all four eastern seaboard corridors, with the possible exception of LAPSSET. Active and effective resistance from Mozambican, Brazilian, Japanese and international non-government organisations (NGOs) and unions from 2012 to 2015 led to the ProSAVANA master plan being rewritten in 2015 under guidance of JICA, 'which had become very concerned to present itself as "pro-peasant" in the face of rising criticism of its role in ProSAVANA by Japanese civil society' (Cabral 2016; Shankland and Gonçalves 2016: 42). The revised plan placed more emphasis on smallholder agriculture and less emphasis on exports.

Despite ProSAVANA's emphasis on producer organisations, capacity building and market models for smallholders, relatively few such projects have been documented thus far (Shankland and Gonçalves 2016: 36). Of all the corridors, Nacala has the clearest strategy for reaching farmers and effecting change in rural areas, through the ProSAVANA programme. However, early signs are that implementation is taking a different direction. Project design and objectives have been changed to accommodate strong civil society pressure on the one hand (as discussed above) and agribusiness interests on the other. Critical observers argue that the aims of ProSAVANA have become 'fuzzy' and the role of transnational capital in the programme has been concealed from public view (Shankland and Gonçalves 2016: 43; Cabral 2016: 99). The influence of the Brazilian and Mozambican agribusiness sector, and the discursive power of large-scale *cerrado*/savannah transformation, may be acting against more smallholder-focused initiatives.

In addition, progress has been delayed by a fall in commodity prices and a decline in interest from Brazilian investors (Cabral 2016). Progress may also have been impeded by political instability. Two decades after civil war, tensions between Renamo and the ruling Frelimo party have once again escalated in the Nacala corridor region, with outbreaks of violence in the Tete coal-mining province and an attack on a train in Nampula in November 2016 attributed to armed Renamo fighters (Fiorin 2016).

5.2 Beira

Beira shares many contextual similarities with Nacala: a government open to foreign investment and the promise of a Green Revolution, a historically important transport corridor needing rehabilitation, and a poor rural economy featuring lapsed state farms and the legacy of civil war. However, the BAGC has been designed and developed differently.

The agricultural industry has been more prominent in the BAGC architecture than with Nacala, although the extractives industry is also influential and was instrumental in this latest chapter of the Beira corridor's history. Rather than the Brazilian and Japanese consultants of Nacala, documentation on Beira reveals a different set of key players, including Yara International, AGRA, AgDevCo and Prorustica, which also collaborated on the SAGCOT blueprint (as noted elsewhere). According to Kaarhus (2011), while the Mozambican government was keen on the agricultural growth corridor approach, the specific design of BAGC was developed by Yara and a group of agribusiness consultants and investors, including AGRA and AgDevCo. Their ideas were welcomed by the Mozambican government, which was looking to promote public–private partnerships in the agricultural sector. The *cerrado*/savannah rhetoric is still evident in BAGC documentation, but another vision is provided by AGRA of Beira becoming a 'breadbasket' for Mozambique and southern Africa.

Yara announced plans to invest in a fertiliser terminal at Beira port, before turning its attention to SAGCOT (Kaarhus 2011), and a Catalytic Fund and Smallholder Support Facility were established, under the

management of AgDevCo, for commercial agriculture investments. As of 2014, 2,821 farmers were connected as outgrowers to Catalytic Fund projects – much lower than the ambitious target of 7,500 farmers; and 10,737 farmers were receiving access to irrigation, inputs or finance (DFID 2015). Foreign donors such as DFID, USAID and JICA have also provided finance.

Documents suggest that competing interests in the architecture of the Beira corridor may have caused disruption. In 2013–14, disagreements over the scope and finances of the initiative, with a lack of trust between AgDevCo and the multi-stakeholder BAGC Partnership, delayed progress with the project pipeline. DFID decided to withdraw its support for the BAGC after 2015 and AgDevCo resigned as a Fund Manager in early 2015 (DFID 2015). According to the African Centre for Biodiversity (2015: 8), there were complaints that AgDevCo was prioritising medium-scale commercial farmers, who also tend to be foreign.

Comparatively less infrastructural activity is visible for the BAGC than at Nacala, perhaps because Beira is a less-prized port. However, the literature suggests that Beira may have made more progress with smallholder programmes – even though Nacala may have the stronger emphasis on smallholders through the revised ProSAVANA programme. This is partly due to the inception in 2011 of the PROIRRI Sustainable Irrigation Development Project, which was designed to be aligned with the BAGC (World Bank 2011). Funded by the World Bank, JICA and the Mozambican government, PROIRRI involves irrigation development for medium- and small-scale rice cultivation and horticulture, promotion of outgrower schemes, and grants for inputs, equipment or post-harvest facilities. Although the project was scaled down, a World Bank report (2016b: 7) records that 'PROIRRI disbursed MZN 7,825,678 to procure seeds and fertilizers under the Window 1 and MZN 1,631,699 for tractors, plows and animal traction under the Window 2, which benefited 675 horticulture farmers in Sofala and 250 rice farmers'. It is too early to assess the long-term impacts of this or of projects supported through the Catalytic Fund, but it may be of note that PROIRRI is a publicly financed project, which was not a central element of the BAGC blueprint.

5.3 SAGCOT

In Tanzania, the ideas that would develop into SAGCOT appear to have originated around 2005 as a strategy to increase demand for fertiliser among Tanzanian farmers by supporting the growth of high-value agricultural markets, which would then stimulate and facilitate greater use of inputs. The key actor was Yara, which joined forces with the Agricultural Council of Tanzania and the agribusiness consultancy Prorustica to form the Tanzania Agricultural Partnership (TAP), and then developed the concept of an agricultural growth corridor in 2008 with AgDevCo, another agribusiness investor and consultancy.

The SAGCOT development process grew substantially to embrace a large number of private sector companies and donors as well as the Tanzanian government, whose agricultural policies – not least the 2009 Kilimo Kwanza (Agriculture First) initiative – had increasingly targeted private sector investment. SAGCOT was promoted in investor roadshows by the domestic government under former Tanzanian President Jakaya Kikwete, and became even more closely aligned to government policy in 2012–13 when it was connected to the Big Results Now initiative to fast-track agricultural investments inside and outside the SAGCOT area (Ouma, forthcoming).[6]

SAGCOT is alone among the four eastern seaboard corridors in having agriculture as the primary industry, with no extractives operations to 'anchor' the corridor. This gives free rein to domestic and international agribusiness to drive direction and investment, facilitated by the Tanzania Investment Centre. The agribusiness actors include a number of joint ventures and 'umbrella' industry bodies, such as the TAP Rice Partnership, Africa Potato Initiative and Kapunga Rice Project.

A striking element of SAGCOT is the extent to which private sector companies funded, and gave input to, the development of the corridor blueprint, alongside multilateral donors and lenders:

> [Contributors] included the Tanzanian government, the US Agency for International Development (USAID), AGRA, the Norwegian Embassy, and Norfund, as well as a larger group of companies adding their cumulative weight to the initiative: Yara, Dupont, Monsanto, General Mills, SAB Miller, Syngenta, Standard Bank, and the National Microfinance Bank. (Jenkins 2012: 16)

Having been presented by Yara to meetings of the UN Private Sector Forum in 2008 and the World Economic Forum in 2010, SAGCOT attracted further interest of multiple donors and companies. Tens of millions of dollars have been provided in grants or loans from DFID, USAID and the World Bank, and additional funding comes from other organisations such as the Danish International Development Agency (DANIDA), JICA,

Norfund and the Millennium Challenge Corporation. A Catalytic Fund was established to provide concessional funding, and the World Bank is providing matching grants for agribusiness companies to set up forms of contract farming schemes with smallholders. Varied Tanzanian and international companies – mainly input sellers and producers, and a smaller number of downstream buyers, providers of finance and irrigation infrastructure – have pledged around US$1bn after paying to become 30 SAGCOT 'partners' (New Alliance 2012: 1, cited in Bergius 2016). European investors lent US$65m to the National Microfinance Bank of Tanzania for the provision of loans to farmers and businesses.

A wide range of agricultural and agribusiness operations are argued to be part of SAGCOT; examples include development of smallholder tea estates by Unilever, an investment by the Dutch group FrieslandCampina with Tanzanian dairy cooperatives, a Tanzanian-owned avocado packing house and development of a wind farm (and some of those operations have accessed finance for modernising or expanding). It is not yet possible to say that these enterprises are functioning within a system of hubs and clusters as outlined in the SAGCOT blueprint. There is also no sense of coherence in the pattern of agricultural developments under SAGCOT in terms of crop, size or farming model.

Critics argue that the transnational agri-food regime is using SAGCOT, aided by donors, to develop markets in Tanzania for inputs and increase supply of commodities for export (Paul and Steinbrecher 2013; Bergius 2016). Bergius (ibid.: 7–8) reports that the government has excluded activist groups from SAGCOT and notes that although four agricultural organisations are listed as official SAGCOT partners,[7] the largest network of smallholder farmers in Tanzania, ***Mtandao wa Vikundi vya Wakulima Tanzania*** (MVIWATA), was not included in any discussions.

5.4 LAPSSET

In contrast to the three preceding corridor projects, whose main actors have been the private sector or foreign governments, the LAPSSET initiative has been driven by the host Kenyan government (Browne 2015). Its roots lie in political and commercial interests since the 1960s to develop a major port at Lamu on Kenya's coast and pipe oil to Kenya from Sudan. Browne (2015) describes the crystallisation of those interests into a corridor concept in the early 2000s as a highly geopolitical process. It involved the Kenyan government's ambition to restore Kenya's reputation as a stable economic gateway to East Africa after the post-election violence in 2008; the movement in South Sudan towards independence in 2011; Ethiopia's economic growth and demand for an alternative port outlet to Djibouti; rising oil prices and international interest from Kuwait and Qatar; and the discovery of crude oil in Uganda.

The main administrative body in Kenya is the LAPSSET Corridor Development Authority (LCDA), established in 2013 within the presidency. Kenyan government officials have been closely involved in the construction of the Lamu port (Makena 2015). Over the years, disagreements, negotiations and differing priorities between Kenya, Uganda, South Sudan and Ethiopia have obstructed progress. Ethiopia 'lost patience' and built a 700km-long railway costing US$4bn between Addis Ababa and Djibouti; while Uganda opted to route its new-found crude oil to Tanzania, dealing a blow to the proposed pipeline from Lamu to Lokichar (and across into Uganda) (GTAI 2016). The political challenges presented by cross-border corridors have been well documented (Thomas 2009).

Aside from the state, other key interest groups comprise extractive, power and telecoms firms. Tullow Oil is an important player, having discovered petroleum near Lake Turkana in 2012. These firms' strategic interests are central to the LAPSSET concept. Activities include construction of a fibre-optic network along the LAPSSET corridor by African group Liquid Telecom (Bocha 2014), prior development (begun in 2006) of the Lake Turkana Wind Power Project, seismic surveys in the Tana Delta (Kroes and van Gelder 2014), and proposals for a coal-fired power plant in Lamu. Such activities have required substantial debt and private equity financing from investors and development banks. Funding for the port and road improvements has also been provided by lenders such as the World Bank, the African Development Bank and the Development Bank of South Africa. As with the other three eastern seaboard corridors, the literature highlights the role of Japan (which is reportedly a major importer of South Sudanese oil) and Japanese consultants. Generally, donors are increasingly supportive of cross-border infrastructure projects such as LAPSSET, which could help to increase trade and regional integration in the Horn of Africa (Nicol 2015).

The priority for LAPSSET is to develop an oil pipeline and port in the context of regional integration, and the agriculture industry has had relatively little influence in comparison with the three other corridors. Although a small number of livestock and agriculture-related projects have been proposed by the government and interested companies and donors to take advantage of the planned infrastructural improvements, the Kenyan

Ministry of Agriculture, Livestock and Fisheries has not played a prominent role. The few actors observed in this area include the Kenya Agribusiness and Agroindustry Alliance, which promotes investment in the mango industry in the Tana River Delta near Lamu, and the international development organisation Mennonite Economic Development Associates, which runs a project for supporting small and medium-sized agricultural enterprises in the LAPSSET area.

LAPSSET has proved to be a volatile and changeable project. In addition to the geopolitical manoeuvrings described above, there have been delays in financing (BMI Research 2014) and the project has also been hampered by security issues, such as the Al-Shabaab threat and civil war in South Sudan (Browne 2015). As agriculture is not a core element, LAPSSET has not attracted opposition from pro-peasant groups similar to that seen with Nacala, but there has been substantial activism on environmental and land aspects of LAPSSET by civil society groups, such as Save Lamu (a coalition of 35 civil society organisations (CSOs), which filed a legal petition against the port) and the Mipakani project (a civil society watchdog run by the Rift Valley Institute, Heinrich Böll Foundation and LAPSSET Community Forum). The Kenyan activists have links to international organisations such as the International Union for Conservation of Nature (IUCN) and UNESCO; and well-publicised environmental concerns may have been a factor in Uganda's decision to route its oil pipeline through Tanzania rather than use the LAPSSET corridor (Musisi and Muhumuza 2016). There may yet be further disruption, as in early 2017 a Strategic Environmental Assessment recommended that the LAPSSET be re-routed in several sections to protect wildlife corridors and habitats, notably near Isiolo Town, where much development and land speculation has already taken place (Elliott 2016; Repcon Associates 2017: xxxvi).

5.5 Summary

A review of the literature finds that the primary drivers of the Nacala, Beira and SAGCOT corridors are not the host governments but rather groups of private sector actors, ranging from the Brazilian agribusiness lobby to Tanzanian agri-processors to multinational energy and telecoms firms. A vast number of donors, consultants and investors are involved in these public–private partnerships. Although some actors such as Yara, AgDevCo or JICA are involved in more than one corridor, the way that public and private interests interact with each other and with local stakeholders is specific to each corridor, and specific narratives have been used to legitimise the corridors in each context. Table 2 provides a summary of the key characteristics of the four corridors. The final section draws some conclusions for the political-economic dynamics of the eastern seaboard corridors.

Table 2: Key characteristics of the four corridors

	Nacala	Beira	SAGCOT	LAPSSET
Corridor type	Agricultural growth corridor	Agricultural growth corridor	Agricultural growth corridor	Economic corridor with secondary agriculture
Anchor project	Coal mining	Coal mining	None	Oil pipeline
Location of port	Nacala, Mozambique	Beira, Mozambique	Dar es Salaam, Tanzania	Lamu, Kenya
Corridor locations in the main country	Nampula, Niassa, Zambezia provinces	Manica, Sofala, Tete provinces	Iringa, Mbeya, Morogoro regions	Lamu, Garissa, Marsabit, Isiolo, Meru, Turkana, Samburu, Baringo and Laikipia counties
Key actors	Brazilian and Japanese mining and agribusiness firms, FGV Projetos and other consultancies, Mozambican elites, Renamo, civil society	Mining firms, Yara, AgDevCo, Prorustica, AGRA	Yara, AgDevCo, Prorustica, AGRA, Tanzanian agri lobby, multinational traders and food companies, Tanzanian government	Kenyan government, Tullow Oil and other extractives, power and telecoms firms, civil society
Underlying objectives	Rehabilitate and commercialise agriculture, support mining industry, facilitate Brazilian agribusiness expansion	Rehabilitate and commercialise agriculture, support mining industry	Drive fertiliser sales, increase foreign investment	Reassert Kenya's regional standing, increase trade and energy security
Narratives	Breadbasket, *cerrado*	Breadbasket, *cerrado*, 'empty' arable land	Green revolution, breadbasket, under-used land	Technocracy, 'unlocking potential' of drylands
Key donors	JICA	DFID, Norad, World Bank (PROIRRI), JICA	DFID, World Bank, EU, USAID	AfDB, World Bank, EU, Development Bank of South Africa

6. DISCUSSION

6.1 Competing interests in corridor developments

Reviewing the four eastern seaboard corridors reveals a tremendous variety of interest groups that are promoting, funding, governing and resisting these complex projects.

Development of the corridors has been possible because actors in the extractives and agribusiness sectors were able to express their strategic goals in spatial terms. Doing this allowed them to align their ambitions of expansion into new territories or new markets with the interests of domestic governments and international donors. The private sector strategies aligned with government and donor priorities in three key areas: firstly, in the area of infrastructure, which governments and donors were increasingly prioritising for investment; secondly, in the growing emphasis in development policy on attracting foreign investment and facilitating private sector development; and thirdly, in the attractiveness to governments and donors of certain forms of spatial development or territorialism – be it the value chain and SDIs endorsed by donors, or states aiming to increase regional trade and political influence, or to use policies of agricultural commercialisation and modernisation to reduce poverty in rural areas.

It is this context which allowed the recent agricultural corridor projects to win such broad support and to be promoted as poverty alleviation tools, despite the highly prominent position given to the interests of foreign capital in the project designs. Only LAPSSET is a creation of central government; Nacala, BAGC and SAGCOT are largely donor- and corporate-driven. However, government officials are facilitating the projects, providing governance and finding opportunities to benefit.

Yet despite the complementarity of public and private sector interests in many respects, the eastern seaboard corridors have unfurled in unexpected ways, with disruptions ranging from geopolitical manoeuvring to investment setbacks to governance issues to civil society opposition. We are seeing what Ouma calls 'The Messy Actualities of Market-oriented Agricultural Governance' (2016, forthcoming). One important development to watch is political instability: Frelimo and Renamo tensions are resurgent in Nacala and Beira, while LAPSSET has seen land disputes in Isiolo and Islamist insurgency. How will instability affect the implementation of corridor plans?

There is another possible source of tensions. Bundling together different types of investment covering logistics and agricultural production while balancing public welfare and commercial objectives requires not only good planning and governance but patient capital and compromise between competing interests and conceptualisations of development. The question arises: are there tensions inherent to agricultural growth corridors between a demand for linear routes and the strategy to develop localised clusters?

Table 3 suggests the range of interests that have influenced the eastern seaboard corridors to date and that may co-exist in any one project. It may help us to understand that farmers and herders themselves are minority voices in the political drama, and that poverty alleviation and rural development are not always consistent with the other motivations behind corridor developments.

6.2 Promoting better outcomes from corridor projects

Returning to the central question of how corridors reshape agricultural commercialisation pathways and rural livelihoods, with what impacts and for whom, it is too soon to review the outcomes of Nacala, Beira, SAGCOT and LAPSSET. However, it is possible to collate impacts that have been reported so far, as well as impacts documented in the literature on older corridors and agricultural clusters in sub-Saharan Africa and other developing countries (Table 4; note that most studies have concentrated on macroeconomic and trade-related aspects). These preliminary outcomes, as well as observations on the interest groups and underlying motivations of the four eastern seaboard developments, allow us to set out some critical questions on the political economy of the corridors and their potential to support women's empowerment, local business and the poorest members of farming and pastoralist societies in the region.

Table 3: Competing interests in corridor developments

Motivation	Key actors
Expand into African hinterland	Business (e.g. Yara, Brazilian soy interests)
Increase trade and exports	Business (e.g. Olam, Unilever), food-insecure states, port authorities
Control supply or support production through logistics or market linkages	Business (e.g. local processors, supermarkets, SAB Miller)
Attract and assuage investors	Business, domestic governments
Rehabilitate infrastructure and state farms	Domestic governments
Acquire land, patronage, a share of the benefits	Elites
Control territory and local politics	Central and local authorities, Renamo, Islamists
Achieve stability, spread risk	Investors, planners
Protect people or the environment	Civil society, environmental NGOs, donors
Alleviate poverty	Domestic governments, local authorities, donors
Increase input intensity	Business (e.g. Yara), development advisers (e.g. AGRA)
Foster value addition and professional agriculture	Domestic governments, donors, development advisers, local authorities
Foster regional integration	NEPAD, Kenyan government
Connect to markets	Farmers and herders
Improve access to inputs and services	Farmers and herders, small and medium-size enterprises (SMEs)

Table 4: Documented impacts of agricultural corridors and other spatial development initiatives

Impact area	Impact
1. Inception phase	
Land	Local community members' **loss of land** to public or private actors through land-grabbing and undemocratic acquisition. Rise in land prices due to speculation may foster small-scale land grabbing by elites and local residents.
	Some corridors include community displacement and **resettlement schemes.**
Labour	**Job creation** (e.g. temporary construction roles).
Environment	**Environmental degradation** from land clearance and construction work.
Power and institutions	Emergence of new **power structures and elites.**
2. During implementation	
Transport and trade	**Reduction in transport times and costs**, leading to increased haulage volumes and lower costs for business.
	Reduction in border crossing times.
	Increase in **road accidents.**
Farming livelihoods	In successful cases, farmers experience **improved productivity, improved physical access to markets and improved access to high-value markets and to inputs and services**. Such cases lead to higher incomes for farming households.
	Some of the 'soft' initiatives implemented as part of development corridors may help farmers to **meet quality standards** and achieve certification.
	In negative cases, small farmers experience **shocks** from global markets or are **excluded** from the new market opportunities by transaction costs or quality standards.
Business	In successful cases, the improved infrastructure and other investments **stimulate growth in local businesses**, while soft projects improve the small business environment.
	In negative cases, upstream and downstream **spillover effects for local SMEs are minimal**, as business is dominated by large and/or foreign enterprises and capital is even concentrated within them, and **small businesses experience negative impacts.**
	Improved investment environment
Labour	**Job creation** (e.g. permanent roles).
	However, in some cases the nature of employment offered by new agribusiness in corridor areas provides only **limited, low-wage employment** or creates **'vulnerabilities' in the local labour market.**
	There may also be impacts – positive or negative – on **labour conditions**.
Power and institutions	**Greater collaboration** among public and private actors, and **improved quality of farmers' collective institutions.**
	Creation of public–private partnership models that can be replicated elsewhere.
	Improvement in local governance.
	Technology transfer and innovation.
	Foster an **improved policy and institutional context for supporting small-scale farmers** and helping them adjust to the globalised agri-food complex.
Health and welfare	Increase in sex work and **HIV/AIDS** transmission along routes.
	Increase in **health of local household members.**
Environment	**Environmental pollution and over-extraction of water.**

Source: Compiled by the author from multiple sources, including Mtegha et al. 2012; Kibugi et al. 2015; Browne 2015; Maennling et al. 2014; UNAC and GRAIN 2015; Gálvez-Nogales 2014, 2010; Laurance et al. 2015; World Bank 2016; Muigua 2012, cited in Makena 2015; BOPIC, ICRA and IFDC 2015; Walvis Bay Corridor Group 2017; Byiers et al. 2016; DFID 2015; Kuhlmann et al. 2011; Taylor 2000; ECDPM 2015.

6.2.1 Governance and land

Launching corridor projects involves the establishment of governance architecture such as secretariats, funds and implementation agencies. These bodies can become powerful decision-makers and conduits of capital. As the experience of DFID and AgDevCo in Beira shows, they may face protests from stakeholders over how they interpret their mandates for corridor implementation. Corridors can lead to changes in, or creation of, new power structures. Inside and outside formal bodies, the demands and business ambitions of the private sector have offered various opportunities for local elites, from brokering deals to accessing financing for their own businesses to facilitating land acquisition.

Corridor development affords a crucial role to those with power to allocate land. In all four corridors, land has been repurposed by the state (often through compulsory acquisition) or private investors for roads and railways, large-scale farms, mining concessions, port development or support buildings and facilities. Some corridors include community displacement and resettlement schemes.[8] This process has been facilitated by the administrative structures put in place to make land available for infrastructure and agricultural investments. The *Direito do Uso e Aproveitamento da Terra* (DUAT) system seems to have facilitated large-scale land acquisition in Mozambique, as documented by UNAC and GRAIN. Land rights abuses are also reported in relation to forestry and mining concessions (ADECRU 2016; Maennling et al. 2014). Tanzania has a National Land Use Planning Commission and a Land and Infrastructure Task Force for demarcating and allocating village land for SAGCOT – rice and sugarcane schemes in particular. However, there are reports that procedures have been rushed and that village land-use planning is concentrated in low-lying fertile areas, suggesting that their purpose is to make it easier for the land to be transferred to investors (Bergius 2016). These state bodies may work with, or come up against, elites and local authorities who take advantage of corridor developments to acquire land. In Kenya, for example, the National Land Commission is helping to 'facilitate land acquisition' for LAPSSET developments (LCDA 2016: 10), leading to complaints (Kibugi et al. 2016; Kazungu 2015); but land speculation and disputes have also been fuelled by local business people and devolved land administrators at county level. Boone et al. (2016: 46) comment that despite the hopes of improved land governance in Kenya after devolution, 'community land remains a highly vulnerable target of large-scale resource grabbing' – which is highly concerning, given that LAPSSET covers extensive areas of community and trust land (Elliott 2016; Repcon Associates 2017).

While this paper – and, indeed, international interest – has focused on the potential acquisition and transformation of farmland, the experience to date from LAPSSET in particular has highlighted that corridor development can stimulate land markets and threaten people's resource tenure in other places, such as road-side settlements or the urban outskirts of towns such as Lamu and Isiolo.

The risk of land rights abuses exists despite several of the donors involved requiring certain standards and due diligence to be followed (Synergia 2016; World Bank 2016a: 25). *A critical question, then, is: how can corridor projects be introduced without endangering the access rights of people in rural and urban areas? Under what conditions are land rights respected, and what forms of land access will become important for accumulation and social differentiation in corridor regions?*

6.2.2 'Focused on poor smallholders, but not on the poorest'

The proponents of agricultural growth corridors – corporations, consultants, governments and donors – agree on certain things: the need for greater irrigation, a Green Revolution, production for export, and a continued place for large-scale farming. These ideas are deeply embedded in corridor blueprints and programmes, and are being implemented in the early years of the corridors.

It can create incongruity and stakeholder tension when this vision of agriculture becomes incompatible with arguments – sometimes found in the same project documents – for smallholder empowerment, sustainable agriculture or import substitution (Byiers et al. 2016: 24). Nowhere is this incongruity and tension more evident than with the question of smallholders.

All of the corridors' proponents use language of commercialisation and modernisation for their countries' agricultural sectors, and promote the idea of needing to bring small-scale farmers or herders into globalised supply chains by transforming them from semi-subsistence to professionalism rather than supporting the farmers to flourish (as they would see it) outside the system. This often means targeting a certain type or class of farming household. The ProSAVANA leaflet states an aim to 'promote and strengthen leading farmers', for example, while the Beira blueprint did not include holdings under 5ha in its definition of smallholder.

There may be some beneficial effects for some rural residents from introduction of supportive outgrower schemes and projects like PROIRRI in Beira. However, programmes such as these, which require participating farmers to have a certain level of capital or collateral, risk excluding women and poor farmers with few assets. According to DFID's annual review for 2014:

> The SAGCOT Centre is focused on poor smallholders, but not on the poorest. Typically the poorest farmers do not get priority treatment whereas the better off receive a large share of the benefits. This is principally for two reasons: the entrepreneurial few tend to rise to the top; and the drive by project implementing partners (IPs) to identify 'early bird' benefits and engage with 'low hanging fruit' – processes which do not normally engage the poorest farmers. By allowing the best performing smallholders to rise to the top, the focus on the broad mass of the very poorest could be subverted in the interests of meeting performance targets. (DFID 2015: 5)

This is the intrinsic risk of supporting programmes that explicitly set out to work with commercially minded smallholders and incorporate them into transnational supply chains rather than support farmers in staple food markets and local supply chains. Such programmes are often justified as endorsing the 'stepping up' rather than 'hanging in' livelihood strategy described by Dorward et al. (2009) – but supporting a wider range of farmers, commodities and markets need not mean consigning those farmers to a life of barely getting by in semi-subsistence. Commenting on corporate-led value chain initiatives, IFAD authors wrote in the *Rural Development Report 2016* that:

> … governments should carefully assess the relative merits of investing in this powerful option for fewer small-scale farmers. Alternatively the government should look at other markets that may be less beneficial for each individual farmer, but have the potential to uplift many more family farms. (IFAD 2016: 240)

Understanding what inclusive agribusiness looks like to different interest groups and who is being excluded from opportunities created through corridor developments should be a priority task for any future studies.

6.2.3 Beyond production

A range of activities have been undertaken within the remit of the Nacala, Beira and SAGCOT corridors. With SAGCOT, the focus appears to have been on establishing outgrower schemes and large-scale farming operations, whereas Nacala and in particular Beira go beyond this to provide a wider range of support such as access to credit for farmers, training and a range of financing of upstream and downstream agribusiness SMEs (although note that cases of large-scale agriculture and land-grabbing for that purpose are also documented for both Beira and Nacala). In general, there may need to be more activity in other areas to: support domestic processing firms; facilitate farmer organisations; and understand and support rural–urban markets, especially for staple food crops. Some of the grants or catalytic funding are reported to have gone to local processing enterprises, and their numbers and impacts may increase as the corridors develop.

It will be interesting to compare outcomes for farming and herding communities from those corridors with an explicit focus on agriculture, such as SAGCOT, to those for which agriculture is only a secondary concern, such as LAPSSET. *To what extent does putting agricultural development at the centre of a corridor design, and including cluster development or research and extension services, 'add value' for farmers over simply providing hard and soft infrastructure from which farmers and local agribusiness can benefit?* In the LAPSSET region, construction of road between Isiolo and Moyale in Kenya, and Moyale to Hawassa in Ethiopia, is already reported to have enhanced access to markets, cross-border trade and local investment (LCDA 2016). During focus group discussions held in the area of Kambi ya Garba in Isiolo county, residents told Kibugi et al. (2016: 37) that 'construction of the Isiolo Moyale Road had resulted in many positive developments, with enhanced transportation and market access for their livestock and other produce, increased value for their properties, and other opportunities'. There may be further efforts to exploit improved road infrastructure for benefit of livestock markets in LAPSSET areas. Similarly, in Tanzania, the CGIAR is reported to be working with smallholders in the groundnut and green bean markets to take advantage of SAGCOT infrastructural improvements (ECDPM 2015).

A key question for future research will be: are corridors actually lowering the market barriers which economic analysts (e.g. Kuhlmann et al. 2011; Woodhill 2016) have argued to be hindering African producers from thriving?

6.2.4 Understanding the dynamics of poverty and production

These observations lead to a final comment about the theory of how agricultural growth corridors will achieve positive change in rural economies. We accept that the range of motivations of actors may have led to ambiguity or deliberate 'fuzziness' in the documentation of corridor projects concerning their underlying objectives and the likely impacts on rural communities. Nevertheless (or perhaps because of this), when taken at surface value, it can appear that the logic of cause and effect has not been maintained consistently in the project design of corridors or the terms of engagement with investors.

For instance, the World Bank's SAGCOT Investment Project targets activities that will improve links between productivity, service provision and market linkages, and is not clear if 'agribusiness' refers to domestic SMEs or transnational corporations. The ambiguity allows the corridors to subsidise supply chain initiatives of multinational input sellers and commodity buyers within the rubric of achieving 'inclusive agribusiness', 'poverty alleviation' and even reduction of food insecurity.

Food security and local food markets do not feature strongly in any of the corridor designs. Although the World Bank states that improving food security is one of the objectives of its SAGCOT Investment Project, it is unclear how exactly this will be achieved. As the World Bank explicitly allows for agribusiness projects in which produce will be exported, it may be assuming that food insecurity will be alleviated indirectly by increasing smallholder household incomes, although there will also be a contribution towards improving nutrition by 'enhancing the competitiveness of smallholders in rice, maize and horticulture'. Agro-based clusters – a concentration of producers, traders and market institutions – tend to involve high-value, export-oriented commodities rather than staple crops for local markets (Gálvez-Nogales 2010). The importance of small-scale farming for domestic food production in Mozambique was a core message of civil society protests against ProSAVANA. Consequently, the revised ProSAVANA plan 'went silent on private investment in export-oriented large-scale commercial agriculture and emphasised support for small-scale farming and local markets instead' (Cabral 2016: 123), while activities suggest that large-scale cultivation of soy for feed or export remains a core component of Nacala (Shankland and Gonçalves 2016).

The World Bank position also highlights another issue: the proponents of corridors – particularly those donor and government actors which argue that the corridors will achieve sustainable development – are not clear on whether the problem faced by African smallholders is low productivity or weak market linkages. Let us again take SAGCOT as an example. SAGCOT as a whole is clearly framed by the designers' assumption that smallholders must enter high-value, cross-border or international markets. Yet when it comes to the detail of where corridor activities will be concentrated, there is sometimes an unclear or confused rationale as to whether the focus should be on increasing farmers' input usage and yields, improving transport and storage infrastructure, or ensuring smallholders' access to markets. While for certain corporations the answer may be obvious, for the donors and governments that aim to reposition Yara's original vision into an SDI, the objective and theory of change are not always clear.

This is important, not only for ensuring that corridor investment leads to truly inclusive agribusiness development, but also for ensuring sustainability of the corridor initiatives themselves. The experiences of Nacala and BAGC suggest that corridor designs that are incongruous with the interests of key stakeholders or farmers' groups can create tension, which can lead to breakdown in administrative structures or the call to revise corridor blueprints. *It is crucial that corridor planners articulate the causes of low productivity, poverty and food insecurity in rural areas and how these will be addressed. Policymakers must identify the obstacles to strengthening production and livelihoods for smallholders and poorer pastoralists, and critically assess the prospects for agricultural growth corridors or other corridors with an agricultural component to reduce those obstacles.*

ANNEXE

Corridors in sub-Saharan Africa

Corridor	Country or countries	Type of transport corridor	If minerals and/ or agriculture mentioned	
1. Southern Africa				
North–South	Democratic Republic of Congo (DRC), Botswana, Malawi, Mozambique (Moz), Republic of South Africa (RSA), Zambia, Zimbabwe	Railway		
Maputo	Moz, RSA	Railway, road, port	Minerals (aluminium), gas, power	
Lubombo	Swaziland, Moz, RSA	Railway, road		
Limpopo	Zimbabwe, RSA, Zambia, Moz	Railway	Proposed to be transformed into a development corridor	
Beira	Moz	Railway, road	Agriculture, mining	
Zambezi	Moz, Zimbabwe, Zambia	Railway		
Nacala	Moz, Malawi, Zambia	Railway	Agriculture, mining	
Walvis Bay (includes Trans-Kalahari, Trans Caprivi / Walvis Bay-Ndola-Lubumbashi, Trans Cunene, and Trans Oranje)	Namibia, Botswana, RSA	Railway, road		
Luanda Cabinda	Angola	Pipeline		
Lobito Benguela	Angola	Railway		
Namibe	Angola	Railway, road		
Malanje / Malange	Angola, DRC	Railway, road		
Coast-to-Coast	Moz, Swaziland, RSA, Botswana, Namibia			
Gauteng City Region	RSA	Urban		
Manzini Durban	RSA, Swaziland			
Maseru-Durban	RSA, Lesotho			
Phalaborwa-Richards Bay	RSA, Swaziland			
Zambezi Valley	Moz	Railway	Coal mining	

Corridor	Country or countries	Type of transport corridor	If minerals and/ or agriculture mentioned	
2. East Africa				
Mtwara	Tanzania, Malawi, Moz, Zambia	Railway	Minerals (coal, iron ore, gas), agriculture, fisheries	
Uhuru/Tazara	Tanzania	Railway		
Central	Tanzania, Rwanda	Railway or road (unclear)	Gold	
Tanga	Tanzania	Railway, road		
Northern	Kenya, Uganda, DRC	Railway, road		
LAPSSET	Kenya, Ethiopia, South Sudan, (Uganda)	Railway, pipeline		
Mombasa-Nairobi-Addis Ababa	Kenya, Ethiopia	Road		
Djibouti	Djibouti, Ethiopia	Railway		
SAGCOT			Agriculture	
Central	Tanzania, Burundi, DRC, Rwanda, Uganda			
Kampala-Entebbe	Uganda			
3. West and Central Africa				
Dakar-Port Harcourt	Nigeria, Senegal, Mali, Niger	Railway		
Conakry-Buchanan	Guinea, Liberia, Côte d'Ivoire	Railway, pipeline		
Sekondi-Ougadougou	Ghana, Burkina Faso	Railway		
Gulf of Guinea	'Coastal West Africa'	Coastal highway		
Douala-N'djamena and Douala-Bangui	Cameroon, Central African Republic (CAR), Chad	Railway, road		
Cameroon-Chad	Chad, Cameroon	Pipeline		
Mbalam	Cameroon, Congo	Railway, road		
Libreville-Lomie	Gabon, Cameroon	Railway, road		
Bas Congo	DRC	Railway	Hydropower, minerals	
Abidjan-Ouagadougou	Côte d'Ivoire			
West African Rail Ring	Niger, Burkina Faso, Benin, Togo, Côte d'Ivoire	Railway	Minerals	
Abidjan-Lagos				
Dakar-Touba	Senegal			
Greater Ibadan Lagos Accra (GILA)	Benin, Ghana, Nigeria, Togo	Urban		
Great Hausa Yoruba Ashanti City Triangle (GHAYA-CT)	Ghana, Benin, Togo, Nigeria			
Emerging Luanda-N'Djamena Corridor	Angola, DRC, Congo, Cameroon, Gabon, CAR, Chad			
LAKAJI	Nigeria		Agriculture	

REFERENCES

Adam Smith International (2015) ***Integrated Resource Corridors Initiative: Scoping & Business Plan***, www.adamsmithinternational.com/documents/resource-uploads/IRCI_Scoping_Report_Business_Plan.pdf [accessed 21 July 2017]

ADECRU (2016) 'Corredor de Nacala: Comunidades se Mobilizam em Defesa da Terra e Combate ao Tráfico Humano', Acção Académica Para o Desenvolvimento das Comunidades Rurais, https://adecru.wordpress.com/2016/08/29/%ef%bb%bfcorredor-de-nacala-comunidades-se-mobilizam-em-defesa-da-terra-e-combate-ao-trafico-humano/ [accessed 21 July 2017]

African Centre for Biodiversity (2015) ***Agricultural Investment Activities in Beira Corridor, Mozambique: Threats and Opportunities for Small-scale Farmers***, Johannesburg: African Centre for Biodiversity, http://acbio.org.za/wp-content/uploads/2015/10/Mozambique-2015-report-full.pdf [accessed 21 July 2017]

African Development Bank (AfDB) (2013) ***AfDB and Ethiopia: Partnering for Inclusive Growth,*** Tunisia: African Development Bank Group, www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AfDB%20and%20Ethiopia%20-%20Partnering%20for%20Inclusive%20Growth.pdf [accessed 21 July 2017]

African Development Bank (AfDB) (2016) 'Programme for Infrastructure Development in Africa (PIDA)', www.afdb.org/en/topics-and-sectors/initiatives-partnerships/programme-for-infrastructure-development-in-africa-pida/ [accessed 21 July 2017]

AgDevCo (2010) ***Beira Agricultural Growth Corridor: Delivering the Potential***, www.agdevco.com/uploads/reports/BAGC_Investment_Blueprint_rpt19.pdf [accessed 21 July 2017]

Alden, C. (2001) ***Mozambique and the Construction of the New African State***, Basingstoke: Palgrave

Baissac, C. (2011) 'Brief History of SEZs and Overview of Policy Debates', in T. Farole (ed.), ***Special Economic Zones in Africa: Comparing Performance and Learning from Global Experience***, Washington DC: World Bank

Base of the Pyramid Innovation Center (BOPIC), International Centre for development oriented Research in Agriculture (ICRA) and International Fertilizer Development Center (IFDC) (2015) ***Business as Unusual: The 2SCALE Project***, https://ifdcorg.files.wordpress.com/2015/10/2scale-brochure_oct-2015.pdf [accessed 21 July 2017]

Bergius, M. (2016) 'Expanding the Corporate Food Regime in Africa through Agricultural Growth Corridors: The Case of Tanzania', draft paper for Colloquium on Global Governance/Politics, Climate Justice and Agrarian/Social Justice: Linkages and Challenges, 4-5 February

Birch, I. and Lind, A. (2014) 'Investment in Drylands: Widening the Benefits for Food Security and Development', ***Future Agricultures Policy Brief*** 71, Brighton: IDS, Future Agricultures Consortium. www.future-agricultures.org/policy-engagement/policy-briefs/1879-investment-in-drylands-widening-the-benefits-for-food-security-and-development [accessed 4 August 2017]

BMI Research (2014) ***Kenyan LAPSSET Project Update: Finance Causing Delays***, www.bmiresearch.com/news-and-views/kenyan-lapsset-project-update-finance-causing-delays [accessed 21 July 2017]

Bocha, G. (2014) 'Liquid Telecom unveils Lapsset fibre optic project', ***Daily Nation***, 7 September, http://mobile.nation.co.ke/business/Liquid-Telecom-Kenya-Lapsset-Fibre-Optic/1950106-2444396-format-xhtml-t08g7rz/index.html [accessed 21 July 2017]

Boone, C., Dyzenhaus, A., Ouma, S., Kabugu Owino, J., Gateri, C., Gargule, A., Klopp, J. and Manji, A. (2016) ***Land Politics under Kenya's New Constitution: Counties, Devolution and the National Land Commission***, International Development Working Paper Series 2016, No. 16-178, London: London School of Economics and Political Science

Browne, A.J. (2015) ***LAPSSET: The History and Politics of an Eastern African Megaproject***, London/ Nairobi: Rift Valley Institute

Byiers, B., Bizzotto Molina, P. and Engel, P. (2016) ***Agricultural Growth Corridors: Mapping Potential Research Gaps on Impact, Implementation and Institutions***. Report commissioned by the Independent Science and Partnership Council of CGIAR, http://ispc.cgiar.org/sites/default/files/ISPC_StrategyTrends_DevelopmentCorridors.pdf [accessed 21 July 2017]

Cabral, L. (2016) ***Priests, Technicians and Traders: Actors, Interests and Discursive Politics in Brazil's Agricultural Development Cooperation Programmes with Mozambique,*** PhD thesis. University of Sussex, http://sro.sussex.ac.uk/65773/1/Cabral%2C%20L%C3%ADdia%20Vilela.pdf [accessed 21 July 2017]

Cornelissen, S. (2016) 'Japan's Official Development Assistance to Sub-Saharan Africa: Patterns, Dynamics and Lessons', in Y. Shimomura, J. Page and H. Kato (eds), ***Japan's Development Assistance: Foreign Aid and the Post-2015 Agenda***, Basingstoke: Palgrave Macmillan

DCED (2017) 'Japan International Cooperation Agency', www.enterprise-development.org/agency-strategies-and-coordination/japan-international-cooperation-agency-jica/ [accessed 21 July 2017]

DFID (2015) 'Annual Review, Beira Agricultural Growth Corridor (BAGC): April/May 2015', https://devtracker.dfid.gov.uk/projects/GB-1-201862 [accessed 21 July 2017]

Dorward, A., Anderson, S., Nava Bernal, Y., Sánchez Vera, E., Rushton, J., Pattison, J. and Paz, R. (2009) ***Hanging In, Stepping Up and Stepping Out: Livelihood Aspirations and Strategies of the Poor***. https://eprints.soas.ac.uk/6163/1/HangingInDIP.pdf [accessed 21 July 2017]

ECDPM (2015) 'Corridors, Clusters and Spatial Development Initiatives in African Agriculture'. Workshop report, Durban, 30 November, http://ecdpm.org/wp-content/uploads/Corridors-Clusters-Spatial-Development-Initiatives-Engel-Bizzotto-November-2015-1.pdf [accessed 21 July 2017]

Elliott, H. (2016) 'Planning, Property and Plots at the Gateway to Kenya's "New Frontier"', ***Journal of Eastern African Studies***, 10(3): 511–29

Fair, D. (1989) 'The Beira, Maputo and Nacala Corridors', ***Africa Insight***, 19(1): 21–27

Farole, T. (ed) (2011) 'Assessing the Outcomes in Africa's SEZs', in T. Farole (ed.) ***Special Economic Zones in Africa: Comparing Performance and Learning from Global Experience***, Washington DC: World Bank

Farole, T. and Akinci, G. (eds) (2011) 'Introduction', in ***Special Economic Zones: Progress, Emerging Challenges, and Future Directions***, Washington DC: World Bank

FGV Projetos (2013) 'Nacala Corridor Fund. Information Memorandum'. Rio de Janeiro and Sao Paolo: FGV Projetos

Fiorin, D. (2016) 'No sign of calm in Mozambique's growing conflict', ***Fair Observer***, 28 March, www.fairobserver.com/region/africa/no-sign-calm-mozambiques-growing-conflict-32323/ [accessed 21 July 2017]

Gálvez-Nogales, E. (2010) ***Agro-based Clusters in Developing Countries: Staying Competitive in a Globalized Economy***, Rome: FAO

Gálvez Nogales, E. (2014) ***Making Economic Corridors Work for the Agricultural Sector***, Agribusiness and Food Industries Series 4, Rome: FAO, www.fao.org/3/a-i4204e.pdf [accessed 21 July 2017]

Government of Denmark, Accelerating Regional Trade Integration in West Africa (ATWA) (2014) 'Supporting the Abuja Process on Cross Border Trade Facilitation and Lagos-Abidjan Corridor Development', Concept Note

GTAI (2016) 'Neue Perspektiven für kenianisches Lapsset-Projekt', www.gtai.de/GTAI/Navigation/DE/Trade/Maerkte/suche,t=neue-perspektiven-fuer-kenianisches-lapssetprojekt,did=1546508.html?view=renderPrint [accessed 21 July 2017]

Hope, A. and Cox, J. (2015) ***Development Corridors***. Coffey International Development for EPS-PEAKS consortium, https://assets.publishing.service.gov.uk/media/57a08995e5274a31e000016a/Topic_Guide_Development_Corridors.pdf [accessed 4 August 2017]

Humphrey, J. (2014) ***Market Systems Approaches: A Literature Review.*** https://beamexchange.org/uploads/filer_public/b2/3a/b23a3505-e3f1-4f63-8c0c-

aeb35a763f91/beamliteraturereview.pdf [accessed 21 July 2017]

IFAD (2016) *Rural Development Report 2016: Fostering Inclusive Rural Transformation*. Rome: IFAD

IFPRI (2016) *Innovation for Inclusive Value-chain Development: Successes and Challenges*. Washington DC: IFPRI, www.ifpri.org/publication/innovation-inclusive-value-chain-development-successes-and-challenges [accessed 21 July 2017]

Jenkins, B. (2012) *Mobilizing the Southern Agricultural Growth Corridor of Tanzania: A Case Study.* Cambridge, MA: CSR Initiative, Harvard Kennedy School. www.hks.harvard.edu/m-rcbg/CSRI/publications/report_48_SAGCOT.pdf [accessed 21 July 2017]

JICA (2016) 'The Project for Nacala Corridor Economic Development Strategies in the Republic of Mozambique', www.jica.go.jp/project/english/mozambique/002/outline/index.html [accessed 21 July 2017]

Justiça Ambiental (2016) *The Economics of Coal: Where Are Its Benefits?* Maputo: Justiça Ambiental

Kaarhus, R. (2011) 'Agricultural Growth Corridors Equals Land-Grabbing? Models, Roles and Accountabilities in a Mozambican Case'. *Paper presented at the International Conference on Global Land Grabbing*, 6–8 April

Kazungu, K. (2015) '45 get Sh350m over Lamu port land', *Daily Nation*, 15 May, www.nation.co.ke/news/45-get-Sh350m-over-Lamu-port-land/1056-2717940-w0iy45/index.html [accessed 21 July 2017]

Kenya National Bureau of Statistics (2015) *Kenya Statistical Abstract 2015*, Kenya National Bureau of Statistics, www.knbs.or.ke/index.php?option=com_phocadownload&view=category&id=106&Itemid=117 [accessed 21 July 2017]

Kenya Vision2030 [2013) 'Another Vision 2030 Milestone as Isiolo Airport Runway is Commissioned', www.vision2030.go.ke/161/another-vision-2030-milestone-as-isiolo-airport-runway-commissioned-construction-works-for-terminal-building/ [accessed 21 July 2017]

Kibugi, R., Mwathane, I. and Makathimo, M. (2016) *Large-Scale Land Acquisitions for Investment in Kenya: Is the Participation and Benefits of Affected Local Communities Meaningful and Equitable? A Case Study of the Situation in Lamu, Isiolo and Siaya Counties*. Nairobi: Land Development and Governance Institute, www.ldgi.org/index.php/media-centre/research-reports/88-ldgi-research-large-scale-land-acquistiton-for-investments-in-kenya/file [accessed 21 July 2017)

Kroes, H. and van Gelder, J.W. (2014) *Dutch Companies Involved in the SAGCOT and LAPSSET Corridors*. A research report for IUCN Netherlands Committee

Kuhlmann, K., Sechler, S. and Guinan, J. (2011) 'Africa's Development Corridors as Pathways to Agricultural Development, Regional Economic Integration and Food Security in Africa', draft working paper from TransFarm Africa at Aspen Institute

Laurance, W.F., Sloan, S., Weng, L. and Seyer, J.A. (2015) 'Estimating the Environmental Costs of Africa's Massive "Development Corridors"', *Current Biology*, 25(24): 3202–3208

LCDA (LAPSSET Corridor Development Authority) (2016) *Brief on LAPSSET Corridor Project, July 2016*

Maennling, N., Shah, A. and Thomashausen, S. (2014) *A Framework to Approach Shared Use of Mining-Related Infrastructure. Case Study: Mozambique*. Columbia Center on Sustainable Investment report, http://ccsi.columbia.edu/files/2014/05/Case-Study_Mozambique-March-2014.pdf [accessed 21 July 2017]

Makena, K.D. (2015) *Research Topic: Environmental Impact Assessment Process In Kenya With Reference To The Lamu-Port Project (Lapsset)*

Mosley, J. and Watson, E.E. (2016) 'Frontier Transformations: Development Visions, Spaces and Processes in Northern Kenya and Southern Ethiopia', *Journal of Eastern African Studies*, 10(3): 452–475

Mtegha, H., Leeuw, P., Naicker, S. and Molepo, M. (2012) *Resources Corridors: Experiences, Economics and Engagement; a Typology of Sub-Saharan African Corridors*, South Africa: Centre for Sustainability in Mining and Industry (CSMI), University of the Witwatersrand, www.eisourcebook.org/cms/files/EISB%20Resources%20Corridors.pdf [accessed 21 July 2017]

Mulenga, G. (2013) ***Developing Economic Corridors in Africa: Rationale for the Participation of the African Development Bank***, AfDB Regional Integration Brief 1. www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Regional_Integration_Brief_-_Developing_Economic_Corridors_in_Africa_-_Rationale_for_the_Participation_of_the_AfDB.pdf [accessed 21 July 2017]

Musisi, F. and Muhumuza, M.K. (2016) 'How Oil Pipeline Deal Slipped Out of Kenya's Hands', ***Daily Monitor***, 25 April, www.monitor.co.ug/News/National/How-oil-pipeline-deal-slipped-out-of-Kenya-s-hands/-/688334/3174606/-/item/0/-/crvg2h/-/index.html [accessed 21 July 2017]

NEPAD (2016) ***Move Africa.*** www.nepad.org/download/file/fid/3345%20 [accessed 21 July 2017]

Nicol, A. (2015) 'Towards Conflict-sensitive Regional Integration in East Africa', ***IDS Policy Briefing*** 100, Brighton: IDS,https://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/6931/PB100_AG64_EastAfrica_Online.pdf;jsessionid=21A6FB40E04C0C509BBC02A3C961C92C?sequence=1[accessed 4 August 2017]

Nissanke, M. and Söderberg, M. (2011) ***The Changing Landscape in Aid Relationships in Africa: Can China's Engagement Make a Difference to African Development?*** http://eprints.soas.ac.uk/13323/1/Nissanke-Soderberg-_UI_paper.pdf [accessed 21 July 2017]

Njoka, J.T. with Yanda, P., Maganga, F., Liwenga, E., Kateka, A., Henku, A., Mabhuye, E., Malik, N. and Bavo, C. (2016) ***Kenya: Country Situation Assessment***, PRISE Working Paper, http://prise.odi.org/wp-content/uploads/2016/01/Low-Res_Kenya-CSA.pdf [accessed 21 July 2017]

Odhiambo, M.O. (2013) ***The Unrelenting Persistence of Certain Narratives: An Analysis of Changing Policy Narratives about the ASALs in Kenya***, www.fao.org/fileadmin/user_upload/drought/docs/Changing%20policy%20narratives%20about%20the%20asals%20in%20Kenya.pdf [accessed 21 July 2017]

Paul, H. and Steinbrecher, R. (2013) ***African Agricultural Growth Corridors and the New Alliance for Food Security and Nutrition: Who Benefits, Who Loses?*** EcoNexus report, June

Portos e Caminhos de Ferro de Moçambique (2013) 'Development of Mozambique's Port and Rail Systems'. http://portandcorridor.org/wp-content/uploads/2013/04/Development-of-Mozambique-Railways-and-Port-Systems_-February-2013.pdf [accessed 21 July 2017]

Repcon Associates (2017) ***Strategic Environmental Assessment for the LAPSSET Corridor Infrastructure Development Project: Draft Final Report***, www.nema.go.ke/images/Docs/SEA%20Reports/SEA-037%20LAPSSET%20Corridor%20Authority%20Development%20report.pdf [accessed 4 August 2017]

República de Moçambique (2010) Plano Estratégico para o Desenvolvimento do Sector Agrário. http://fsg.afre.msu.edu/mozambique/caadp/pedsa_final_10out.pdf [accessed 21 July 2017]

Scoones, I., Smalley, R., Hall, R. and Tsikata, D. (2014) ***Narratives of Scarcity: Understanding the 'Global Resource Grab',*** Future Agricultures Consortium Working Paper, Brighton: Future Agricultures Consortium, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.589.1561&rep=rep1&type=pdf [accessed 21 July 2017]

Shankland, A. and Gonçalves, E. (2016) 'Imagining Agricultural Development in South–South Cooperation: The Contestation and Transformation of ProSAVANA', ***World Development***, 81: 35–46

Shankland, A., Gonçalves, E. and Favareto, A. (2016) ***Social Movements, Agrarian Change and the Contestation of ProSAVANA in Mozambique and Brazil***, Future Agricultures Working Paper 136, Brighton: Future Agricultures Consortium, www.future-agricultures.org/publications/research-and-analysis/working-papers/1995-social-movements-agrarian-change-and-the-contestation-of-prosavana-in-mozambique-and-brazil?format=html [accessed 4 August 2017]

Smalley, R. and Corbera, E. (2012) 'Large-scale Land Deals form the Inside Out: Findings from Kenya's Tana Delta', ***The Journal of Peasant Studies***, 39(3–4): 1039–1075

Synergia (2016) ***Nacala Corridor Resettlement Status Report for Lenders,*** www.afdb.org/fileadmin/uploads/afdb/Documents/Environmental-and-Social-Assessments/Mozambique_-_NACALA_RAIL___PORT_PROJECT_-_Summary_RAP_%E2%80%93_10_2015.pdf [accessed 21 July 2017]

Tana and Athi Rivers Development Authority (Tarda) (2017) 'The High Grand Falls – Tharaka Nithi visit', http://tarda.co.ke/the-high-grand-falls-visit-2/

[accessed 21 July 2017]

Taylor, I. (2000) 'Class, Gender and Ecology in Spatial Development Initiatives: The Case of Maputo Development Corridor', *Southern African Perspectives*, 82

Thomas, R.H. (2009) 'Development Corridors and Spatial Development Initiatives in Africa'. www.academia.edu/16999917/Development_Corridors_and_Spatial_Development_Initiatives [accessed 21 July 2017]

Umbadda, S. and Ismail, E. (2013) *Foreign Aid and Sustainable Agriculture in Africa*. WIDER Working Paper 2013/081, www.econstor.eu/bitstream/10419/80982/1/767047559.pdf [accessed 21 July 2017]

UNAC and GRAIN (2015) *The Land Grabbers of the Nacala Corridor: A New Era of Struggle Against Colonial Plantations in Northern Mozambique*, UNAC and GRAIN

Walvis Bay Corridor Group (2017) *Walvis Bay Corridor Group*, www.wbcg.com.na/ [accessed 4 August 2017]

Warner, M., Kahan, D. and Lehel, S. (2008) *Market-Oriented Agricultural Infrastructure: Appraisal of Public–Private Partnerships*, Rome: FAO

Wenban-Smith, H. (2015) *Population Growth, Internal Migration, and Urbanisation in Tanzania, 1967–2012*, Phase 2 (Final report), www.theigc.org/wp-content/uploads/2015/09/Wenban-Smith-2015-Working-paper.pdf [accessed 21 July 2017]

Weng, L., Klintuni Boedhihartonoa, A., Dirks, P.H.G.M., Dixon, J., Irfansyah Lubis, M. and Sayer, J.A. (2013) 'Mineral Industries, Growth Corridors and Agricultural Development in Africa', *Global Food Security*, 2: 195–202

Woodhill, J. (2016) *Inclusive Agribusiness: The State of Play*, background working paper prepared for the Global Donor Platform for Rural Development Woodhill, J., Guijt, J., Wegner, L. and Sopov, M. (2012) *From Islands of Success to Seas of Change: A Report on Scaling Inclusive Agri-Food Markets,* Wageningen: Centre for Development Innovation, www.inclusivebusinesshub.org/wp-content/uploads/2016/05/SOC2012report.pdf [accessed 21 July 2017]

World Bank (2009) *Awakening Africa's Sleeping Giant: Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond*, Washington DC: International Bank for Reconstruction and Development/ World Bank, http://siteresources.worldbank.org/INTARD/Resources/sleeping_giant.pdf [accessed 21 July 2017]

World Bank (2011) *Project Appraisal Document on a Proposed Credit in the Amount of SDR 44.90 Million to the Government of Mozambique for the PROIRRI – Sustainable Irrigation Development Project,* Report 59590-MZ, http://documents.worldbank.org/curated/en/674351468287756944/pdf/595900P1075980IDA1R20111004011.pdf [accessed 21 July 2017]

World Bank (2016a) *International Development Association Project Appraisal Document on a Proposed Credit in the Amount of (SDR 50.8) Million (US$ 70 Million Equivalent) to the United Republic of Tanzania for a Southern Agricultural Growth Corridor of Tanzania (SAGCOT) Investment Project*. Report PAD345, http://documents.worldbank.org/curated/en/621921468190165214/pdf/PAD345-PAD-P125728-IDA-R2016-0016-1-OUO-9.pdf [accessed 21 July 2017]

World Bank (2016b) *Proposed Project Restructuring Of The Mozambique Sustainable Irrigation Development Project*. Report RES21715. http://documents.worldbank.org/curated/en/770281468053057870/pdf/Restructuring-Paper-2-EGP-April-12.pdf [accessed 21 July 2017]

World Economic Forum (2010) *Realizing a New Vision for Agriculture: A Roadmap for Stakeholders*, www3.weforum.org/docs/WEF_IP_NVA_Roadmap_Report.pdf [accessed 21 July 2017]

ENDNOTES

1 Mozambique-Brazil-Japan Cooperation Programme for the Agricultural Development of the Savannah of Mozambique.

2 At the time, the established route was to use the Beira corridor due south to the port at Beira.

3 Population density calculated from area figures from www.statoids.com/umz.html and population numbers from World Bank Subnational Population Database (http://data.worldbank.org/data-catalog/subnational-population).

4 Population density calculated from area figures from www.statoids.com/utz.html and population numbers fromWorld Bank Subnational Population Database (http://data.worldbank.org/data-catalog/subnational-population).

5 Population density calculated from area figures from www.statoids.com/umz.html and populationnumbers from World Bank Subnational Population Database (http://data.worldbank.org/data-catalog/subnational-population).

6 Big Results Now was disbanded in June 2017.

7 Tanzania Sugarcane Growers Association, Agricultural Council of Tanzania, Tanzania Horticultural Association and Confederation of Tanzania Industries.

8 Such as the Nacala railway and port developments (Synergia 2016) www.afdb.org/fileadmin/uploads/afdb/Documents/Environmental-and-Social-Assessments/Mozambique_-_NACALA_RAIL___PORT_PROJECT_-_Summary_RAP_%E2%80%93_10_2015.pdf

Agricultural Policy Research in Africa (APRA) is a, five year, Research Programme Consortium funded by UK aid from the UK Government through the Department for International Development (DFID) and will run from 2016 to 2021.

The programme is based at the Institute of Development Studies (IDS), UK (www.ids.ac.uk), with regional hubs at the Centre for African Bio-Entrepreneurship (CABE), Kenya; the Institute for Poverty, Land and Agrarian Studies (PLAAS), South Africa; and the University of Ghana, Legon. It builds on more than a decade of research and policy engagement work by the Future Agricultures Consortium (www.future-agricultures.org) and involves new partners at Lund University, Sweden and Michigan State University and Tufts University, USA.

Funded By

UKaid
from the British people

The views expressed do not necessarily reflect the UK Government's official policies.

Future Agricultures