



## Africa's Development Corridors as Pathways to Agricultural Development, Regional Economic Integration and Food Security in Africa

### *A Draft Working Paper*

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#### **Introduction: The L'Aquila Commitments and Africa's Food Security**

The 2007-2008 food crisis resulted in an unprecedented level of global public attention and political commitment to tackling the problem of food insecurity. At the G-8 summit in Italy in July 2009, the leaders of the advanced industrial countries issued the *L'Aquila Joint Statement on Global Food Security*, expressing their commitment to “take decisive action to free humankind from hunger and poverty through improving food security, nutrition, and sustainable agriculture” and pledging to mobilize \$22 billion over three years for a global effort “characterized by a comprehensive approach to food security, effective coordination, support for country-owned processes and plans as well as by the use of multilateral institutions whenever appropriate.” The L’Aquila communiqué went beyond emergency response and food aid and placed a strong focus on the development of agricultural markets, trade and rural economic growth as the cornerstones of food security. It promised to create a “Global Partnership for Agriculture and Food Security” as part of a renewed effort to accelerate progress and reach the first Millennium Development Goal of halving the number of people living in extreme poverty and suffering from hunger and under-nutrition by 2015.

The political attention and increased resources presently being devoted to global food security have created a new international policy and business environment that provides a window for a much needed and fundamental change of approach to African agricultural development and food security on the part of governments, donors, and the private sector. A number of significant initiatives are underway on the bilateral, regional and multilateral levels.<sup>1</sup> The European Union has created a €1 billion Food Facility (EUFF) and launched the EU Joint Programming Initiative on Agriculture, Food Security and Climate Change (JPI). At the multilateral level, the United States, Canada, Australia, Korea, Ireland and Spain together with the Bill & Melinda Gates Foundation have collaborated in setting up a trust fund—the Global Agriculture and Food Security Program (GAFSP)—at the World Bank as the primary mechanism for disbursing funds that materialize as part of the \$22 billion pledged at the L’Aquila summit. In Africa itself, the Comprehensive Africa Agriculture Development Programme (CAADP) has been launched to extend sustainable land and water management practices, improve rural infrastructure and trade-related capacities for market access, raise smallholder productivity and respond more effectively to food emergencies, and improve agricultural research to disseminate new technologies.

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Since L’Aquila, the United States has been playing a strong international leadership role on food security, launching the *Feed the Future* initiative based on a whole-of-government approach and promising \$3.5 billion from fiscal years 2010 to 2012. *Feed the Future* is organized around five broad principles (with specific actions to be taken under each category): comprehensively addressing the underlying causes of hunger; investing in country-led plans; improving strategic cooperation; leveraging the benefits of multilateral mechanisms; and making a sustained commitment to be held publicly accountable.

While policymakers are endeavoring to put in place a concerted response to the challenge of food insecurity in Africa, events on the ground are continuing to move rapidly. The early months of 2011 brought another global food price spike on the back of bad weather in Russia, Ukraine and China. The onset of the second food crisis in less than three years has put the world on notice that we have now definitively entered a new phase of global agricultural production and consumption. Recognition is growing that recent changes in global agricultural markets are structural in nature and signal a reversal of the long-term downward trend of prices for agricultural commodities. Growing global population and wealth are increasing demand for food as resources are diminishing, soils are being depleted, and climate change is touching off fierce competition for water and land. Yields of the world’s most important crops—rice and wheat—are rising more slowly than the number of mouths to feed, with experts predicting that global food production must rise by 70 percent by mid-century in order simply to keep pace with population. These long-term structural factors driving demand are here to stay and will continue to affect food prices for years to come.

In anticipation of a future in which their own populations will outgrow their ability to feed them, investors from countries as diverse as Saudi Arabia, India, South Korea, and Qatar have been looking for arable land on which to establish plantations to produce rice and other staple crops in African nations like Ethiopia, Sudan, Tanzania, Kenya, and Mali. Since 2007, tens of millions of acres of land on the African continent have been leased by foreign investors. Ethiopia alone has approved more than 800 foreign-financed agricultural projects since 2007. China has signed a contract with the Democratic Republic of Congo to grow 6.9 million acres of palm oil for biofuels, while European biofuels companies have acquired or requested another 10 million acres in Africa. These leases are generally long-term and include tax holidays, with few environmental, labor, or social safeguards. They have caused civil unrest in some countries. The Malagasy government fell after a scandalously one-sided agreement with South Korean Daewoo Logistics to take over half of Madagascar’s arable land to grow crops for export without paying rent was revealed. Experts are warning of a neo-colonial grab for African land.

This growing interest in Africa’s agricultural potential represents an enormous opportunity, but the manner in which the investment occurs will be critical to whether or not it leads to enhanced food security for Africa’s people. If land grabs continue without concern for smallholder farmers, it could result in a dismal re-run of colonial-era extractive models of investment that do little or nothing to benefit Africa. Different types of investment and different business models for agriculture in sub-Saharan Africa are urgently needed to show investors—and African governments—that there are ways to deliver both commercial and social returns that will lead to better development outcomes and enhanced food security. Alongside the new models of investment it will be important to insist on mechanisms for transparency and accountability, so that Africans can shine a light on the corrupt practices that lead their governments to participate in these one-sided leasing agreements, bringing pressure on governments and investors to do business in ways that extend the benefits of these investments to Africans themselves.

The following paper sets out a framework for combining investment and policy in an innovative approach to agricultural development and food security in Africa on the basis of Africa’s “Development Corridors” movement, which consists of using existing roads and railroads linking mines and other investments with regional markets and ports to bring farmers into a system that can move food, goods, services and information. At TransFarm Africa, we believe that the substantial public and private investment going into Africa’s Development Corridors provides donors with an exceptional opportunity to focus collaboration with each other and with African leadership organizations to leverage high-level political commitments from national governments to improve agriculture-

related policies and investment regimes and overcome trade- and infrastructure-related barriers that are slowing down Africa's ability to produce more food.

This will be particularly important in agriculture and food, where coherent policy means infrastructure to enable inputs to reach the interior—many of Africa's farmers are in the hinterlands far from the sea—and products to reach markets. In any attempt aimed at fostering food security and better nutrition in Africa over the longer term, it will be important not only to ensure that donors eventually leave behind a cohort of trained Africans who can manage responsive public institutions but that the process itself also strengthens those institutions—such as NEPAD, the New Partnership for Africa's Development—that are engaged in it. Far more can be accomplished if the effectiveness of these investments is augmented by private sector development, investment in public goods, and better and more transparent methods of accountability.

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### Africa's Growing Food Crisis

**S**ub-Saharan Africa is at a crossroads of tremendous opportunity and significant challenge. With half of the world's uncultivated arable land, the region is both the last great agricultural frontier and a locus of vast humanitarian catastrophe in the making, a building crisis of hunger and food insecurity that will only be exacerbated by climate change.

Home to 12 percent of the world's population, Africa today has 44 percent of the world's hungry. Millions of African men, women and children struggle to exist on less than two dollars a day, living in isolated rural areas and depending upon what little they can grow for most of their meager living. Yet recent events have shown that this tragic situation is not static. As global population and wealth increase, demand for food is increasing within Africa and throughout the world. If harnessed to Africa's advantage, this new demand could represent an enormous opportunity for Africa's poor farmers and consumers as well as a platform for agriculture-led growth throughout the economy. But absent such a transformation, if current trends are allowed to prevail sub-Saharan Africa's share of the world's hungry is projected to increase to 75 percent by 2025, most of whom will live in rural areas.<sup>2</sup>

Much depends on the response of international capital markets, the donor community, private sector companies, African governments and, above all, Africa's entrepreneurs. So far, most are moving in the right direction, but the scale, pace and scope is still too constrained relative to the need and the opportunities that are unfolding. Recent history has shown what the future might look like if the current course is not corrected and the response not accelerated. In the past three years, rising global prices and strong demand, coupled with the weakness and isolation of much of the African small farm sector, have led to two major food price crises, resulting in destabilizing bread riots in urban areas and an upsurge of deprivation among the poorest, while triggering a rash of national export restrictions that only pushed prices still higher.

The increase in global population and wealth has also touched off an intense competition for Africa's land and water resources, making it both more difficult and more important for Africa's farmers to take advantage of global demand by becoming the backbone of thriving regional food systems capable of feeding the continent's swelling numbers and reducing the dependence on expensive food imports. If African countries and donors do not develop Africa's agricultural potential it is already clear that—given the pressure of rising global demand for food—outside investors will.

A new ramped-up approach is needed—and needed quickly—as the window of opportunity to put Africa's tremendous agricultural production potential to use to feed its people and spur economic growth is closing quickly. Climate change is taking an increasing and unexpectedly rapid toll, threatening to cut rain-fed farm yields by half,

with severe impacts for the vast preponderance of African farming.<sup>3</sup> Left unchecked, the deterioration of Africa's productive capacity will not only continue to wreak havoc in the region but will be felt acutely worldwide.

Building the political will to promote the kind of efficient regional markets that are required for Africa's development will require that African governments, donors and the private sector recognize and act on the important role trade must play in both broader development and food security. Bluntly stated, Africa will remain underdeveloped and food insecure if its regional markets are not improved and Africa's trade—both regionally and with the rest of the world—is not increased. It is essential to make generating the business and investment climate necessary for trading systems to work efficiently, at all stages from production to consumption and from the local level to the international, a priority.

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### African Agriculture's "Missing Middle"

**T**here is no simple solution, but there are ways to build on the recent revolution in African leadership, the global demand for Africa's commodities, and the new interest in "doing business" to enable donors to leverage their investments by complementing private sector investment and building Africa's growing but still fragile capacity to think and act regionally to remove the barriers to Africa's agricultural development. These barriers are both internal and external, and removing them will be essential to Africa's efforts to build the current collection of fragmented and isolated communities and underdeveloped, disconnected markets into an integrated, diverse African regional economy capable of both creating economic growth and opportunity within Africa and trading with the rest of the world. This is a heavy lift, but only by developing more efficient, equitable and extensive market systems that link Africa's vast food production potential to growing demand can current efforts to achieve sustainable food security be realized.

The potential to take this huge but essential step exists in part because Africa's significant resources remain underutilized. Africa possesses nearly 20 percent of the planet's arable land, but less than 10 percent of this land is cultivated at present. Most of Africa's production across commodities, including its vast and largely untapped mineral deposits and virtually all of its agricultural products, leave the continent without any additional processing or value added, cutting off the potential for added income from its products.

One reason for this is that major gaps in the food production value chain and high front-end costs limit the attractiveness of investment opportunities. Consequently, the region's reliance upon food imports has grown speedily; commercial agriculture in Africa has lost market share in 90 percent of its export products and has, at the same time, failed to penetrate the domestic regional food markets because of its weak links to African consumers and the small farmer segment.

Africa's agricultural sector spans two vastly different worlds—a small commercial sector capable of obtaining financing for its operations and turning a profit, and a vast, largely subsistence small farm sector that operates outside of systems for getting capital or selling goods. Between the two lies African agriculture's "missing middle," the underdeveloped link in value chains that will build productive systems and tie smallholders into the stream of commerce. The majority of Africa's untapped human resources engaged in agriculture—approximately 600 million small producers—exist at present largely outside of mainstream market systems, lacking capacity and technical knowledge and cut off from the established commercial enterprises that could provide a link to larger, more profitable markets.

The gap between the top of Africa's agricultural pyramid and the very large base of small farmers robs both of opportunities to become integrated into more dynamic and diverse regional food systems like those that exist in the United States and Europe. Small farmers are denied the benefits of learning from the commercial agricultural sector

and are barred from the potential for spin-off industries, upward mobility, and increased productivity that comes from being linked to markets.

On the other side, this disconnect also robs the commercial sector of opportunities to expand commercial production and develop regional markets that could provide the African consumer with a more diverse and reliable array of nutritious foodstuffs than one limited to locally-grown crops. Most of the commercial food sector's links to finance, production, distribution, marketing, and trading are in the international economy, and it has had little success selling into local or regional markets in Africa.

Focusing on removing barriers to the success of this “missing middle” will unlock new innovation in African agriculture and is the key to developing a vibrant agricultural economy. Functioning market systems that effectively integrate small farmers would open up a realm of possibilities beyond subsistence farming and enable farmers to sell more of what they produce, giving rise to increased productivity, higher incomes and lower and more stable food prices.

Ensuring the physical movement of food from areas of surplus to areas of deficit is perhaps the most critical function of Africa’s regional marketing capacity. But the legacy of arbitrary colonial boundaries and past power struggles has meant that moving food from areas of surplus to areas of deficit is often prevented.<sup>4</sup> These fragmented and arbitrary market designations—accompanied by incredibly burdensome policy and regulatory environments—have left many of Africa’s poor and landlocked countries at the mercy of their neighbors’ infrastructure and policy environments. Not surprisingly, regional trade in both agriculture and food has increased only moderately over the last two decades, with the biggest gains in Eastern and Southern Africa.<sup>5</sup>

Better access to regional markets will also encourage farmers to produce more, increasing incomes and increasing the availability of food for Africa’s hungry. Currently, many African farmers—the vast majority of whom are women working to feed their families—are not connected to market systems at all, making food difficult to come by despite the fact that most African economies are so heavily focused on agriculture.<sup>6</sup> In a year when crops are good, these farmers are able to sell and barter surplus produce in village markets, but because they cannot reach larger markets, they lack the motivation to consistently produce surpluses, even if it were possible. No farmer will look to produce more than the family can consume if she can neither store nor sell that surplus.

From a longer-term and broader developmental perspective, enhancing regional markets and connecting farmers to them is absolutely essential. Not only would markets open up economic opportunities, they would give farmers and their families access to additional goods and services, including education and life-saving health care. The emergence of a market-oriented, integrated agricultural economy in Africa capable of generating and recycling agricultural surpluses would set the stage for the tremendous exodus from agriculture that must ultimately take place, providing better opportunities for those leaving farming and enhancing their ability to take advantage of those opportunities through better education, health, and connection to the modern world. The farmers who stay behind would themselves be part of a vastly more efficient and lucrative production system—a genuine *food economy*.

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### Africa’s Development Corridors as a Framework

**M**any of the problems that have held back Africa’s trade in the past are still widespread today. As a result, Africa’s markets are often unable to generate economies of scale sufficient to attract the sort of private sector interest needed to fuel growth, increase exports and, ultimately, spur poverty alleviation. Unlocking Africa’s untapped potential for expanded trade and equitable development will depend upon improving both hard and soft infrastructure.

Hard infrastructure—meaning roads, railways, ports and energy systems—is notoriously weak: The World Bank estimates that half of infrastructure projects in Africa are not placed where they would need to be to maximize economic benefit.<sup>7</sup> And almost in all cases, infrastructure simply does not extend to the rural areas that need it most, as only about 20 percent of public investment in infrastructure historically has gone to rural areas.<sup>8</sup>

While physical infrastructure concerns are significant, gaps in Africa’s policy, regulatory and institutional systems—“soft” infrastructure—and the numerous supply-side and capacity challenges facing farmers and other producers alike present perhaps the greatest obstacles. Currently, despite the signature by African governments of numerous agreements to the contrary, Africa’s national and regional markets are still blocked by a host of barriers that limit opportunities for trade and investment. If addressed systematically, removing these barriers can yield significant results in terms of developing regional markets, but this will require both political will and the shared efforts of both government and the private sector.

Given Africa’s vast size and the pervasive barriers to inclusive and efficient regional food markets that exist, an ambitious framework is needed that embraces all of Africa’s vast territory from its isolated interior to the sea. Fortunately, an African framework of sufficient scope exists in the “Development Corridors,” an innovative approach to market development using existing roads and railroads linking mines and other investments with regional markets and ports to bring farmers into a system that can move food, goods, services and information. The promise of the Development Corridors builds on the central role trade must play in Africa’s economic and food future and unlocks tremendous new opportunities in agriculture and across Africa’s economies.

Initiated by Nelson Mandela when he was president of South Africa shortly after the end of apartheid, the Development Corridors are a comprehensive system that touches every country in Africa, potentially linking them together through stronger infrastructure and better policies connecting rural and urban communities to create functioning regional market systems and build opportunities across economic sectors and sovereign states. The Development Corridors not only enhance the ability of countries to trade regionally and internationally, they also present a way to equitably spread the benefits of trade, including greater access to economic opportunities and food, harnessing trade’s potential as a lever of broad-based development.

If pursued with political support, strong and inclusive governance, the right international policies and a focus on agriculture and equitable growth all along value chains, the Development Corridors stand to revolutionize African agriculture, enhance food security and create much-needed opportunities for economic diversification and sustainable development.

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### **Mandela’s Vision: An Economically Integrated Africa**

**F**rom the roads of ancient Rome to the nineteenth-century canals and railways of the United Kingdom and the Erie Canal and trans-Continental railroad in the United States, development tends to happen along corridors.<sup>9</sup> The Tennessee Valley Authority is a particularly good example of a “Development Corridor”: a public-private partnership that was established to bring electricity, navigation, investment in fertilizer production and economic development to a region of the United States hit particularly hard by the Great Depression.

Corridors are also natural markets and trade routes for all products, including food. Since ancient times, trade has taken place along linear corridors.<sup>10</sup> One of the most significant trade corridors, the ancient Silk Road that covered 4,000 miles and connected China, India, the Middle East and Central Asia to markets in the Mediterranean and Europe, is once again being developed. And in India, plans are afoot for a massive new \$90 billion industrial corridor—including nine special industrial zones, power systems, and new ports and airports linked to a high-speed

freight line—that will stretch from Delhi to Mumbai, encompassing a region that contains a seventh of the country’s population.<sup>11</sup>

Nelson Mandela’s vision for economic growth and security in sub-Saharan Africa hinged upon economic policies shared across regions, greater collaboration between business and government, and more efficient transportation between Africa’s vast interior and maritime trading lanes of the sea. Shortly after he became president of South Africa in 1994, he charged his staff at the Department of Trade and Industry (DTI), many of whom fought alongside him in the struggle against apartheid, with creating a way to implement his vision. The department created the concept of “African Development Corridors,” which are referred to by various titles in the literature and were intended to generate a “new African industrial revolution,”<sup>12</sup> that would turn infrastructure around natural resources into regional “economic ecosystems” connecting farmers and other businesses to vibrant markets. As envisioned, the Development Corridors would generate employment, enhance community welfare and increase economic development and security.

At the heart of the motivation for the Development Corridors was the recognition that Africa’s rudimentary transportation infrastructure is preventing African entrepreneurs from benefitting—as either sellers or buyers—from regional and global markets, ultimately keeping millions of Africans locked in poverty. Mandela was especially concerned that Africa’s vast numbers of small—mostly subsistence—farmers be included in value chains and benefit from regional development strategies. He understood that African nations would never function peacefully and provide freedom to their people through harmonized policies to promote the movement of people, goods and services across borders if there were no way to tap into its economic potential as a uniting force between rural and urban areas within countries and between countries themselves.

Accordingly, the original objective of the Development Corridors was not just to build stronger trade and transport routes for commercial use but simultaneously to bring deep, sustainable development to Africa’s regions and farmers. The combination of public and private investment through which lucrative mining concessions could support infrastructure that could also benefit agriculture—otherwise unlikely to ever be able to carry the infrastructure costs—is one of the key elements of a spatial development initiative (SDI). Its premise is relatively simple: use the existing but underperforming infrastructure connecting mines to ports to build out a comprehensive market system that connects rural areas to cities and farmers to commercial systems. Leveraging public support and private sector investment, Africa’s initial trade and transport routes would be turned into Development Corridors by using anchor mining and infrastructure projects to help attract additional investment capital, and, as the corridors grow, boost economic growth, diversify economies, expand exports and foreign exchange, increase skills and technology transfer and create jobs and boost local incomes.<sup>13</sup> This process of geographic consolidation of development initiatives around market-driven business opportunities is referred to as “densification,” which means enhancing the development benefits through both backward and forward linkages to improve supply chains, facilitating the ability of SMEs to provide more goods and services locally and linking agricultural development to other investment.<sup>14</sup> Aligning public and private investment around a market-based development plan will amplify the broad benefits for farmers and other entrepreneurs of turning transportation routes into Development Corridors.

Mandela’s vision included the removal of barriers—hard and soft—that prevented people goods and services from being able to move easily and efficiently from country to country. This was to occur through public-private partnerships that would build the secondary and tertiary infrastructure needed to open up the corridors’ surrounding rural areas for agribusinesses and other small and medium-sized enterprises (SMEs) and create better access to urban, regional and global markets for farmers and other rural businesses. Significant investment in roads, railways, processing facilities, warehouses, energy infrastructure and ports would reduce transportation times and costs and stimulate successive rounds of investment, turning the Development Corridors into engines of regional growth and development.

NEPAD was given the task of supporting the design of the Development Corridor plan, with assistance from the South African Department of Trade and Industry's Spatial Development Initiative. NEPAD viewed the transformative potential of the corridors in the same comprehensive manner as Mandela: "the realization of a linked series of private sector and key infrastructure investments that are instrumental in kick-starting and/or accelerating a self-sustained indigenous economic development process."<sup>15</sup> NEPAD's CAADP initiative was also involved in planning the corridors to ensure they benefit the agricultural sector. NEPAD envisioned development based on African natural resources, but focusing on adding value to those resources through incorporation into local supply chains and partnerships of various kinds.

At first both politics and lack of private sector interest in agriculture limited the possibilities for realizing Mandela's vision. Within Africa, the political leadership was not yet ready to fully embrace a regional approach. The time was not yet right for such an ambitious regional effort, and NEPAD, the Regional Economic Communities (RECs) and the African Union (AU) took on regional integration in a piecemeal fashion, which limited early development of the corridors. Furthermore, while the corridors needed business to thrive—as was demonstrated by experience with successful corridors in Southern Africa—business was mainly interested in resource extraction and other industrial development but not in agriculture. NEPAD, which was staffed mainly by government officials and academics, did not have the business development connections or knowledge to make entrepreneurs, business or markets a fundamental part of the development process. At that time, there wasn't much money to be made from agriculture, because there wasn't much demand for the food Africa was producing, so it would have been difficult to attract agricultural entrepreneurs even if it had been tried.

This lack of attention to agriculture has been reflected in the attitudes and resource allocation of the national governments along the corridors, whose officials in many cases not only fail to help create opportunities for farmers but also hinder agricultural development by passing laws that slow the permitting processes and subject farmers to many new fees and taxes. There has also been a problem with the national governments' commitments to building and maintaining the secondary roads and the farm-to-market roads essential to connect more remote producers. Inefficiencies such as unnecessary checkpoints and weigh stations tend to keep agribusinesses and other companies that do not own anchor investments out of the corridors.

But in the past several years there has been an external shift that has opened up new opportunity for the corridors, if provided with resources and enhanced governance capacity, to spur agricultural development and especially the formation of regional markets. Increased global demand for food and for Africa's natural resources—both agricultural and mineral—represents a shift in the economic fundamentals and a major opportunity. The impacts of climate change on Africa will also raise the premium on distribution and transportation systems capable of moving food in and out and necessitate the reclamation of farmed-out soils which, in turn, will require technology transfer, irrigation, and increased use of inputs such as fertilizer, preferably via the development of a homegrown African fertilizer industry. Non-agricultural investment in areas such as mining will provide additional sources of demand; mining operations in the African interior will need to be supplied with food, and this could be produced by local farmers rather than imported. Such semi-guaranteed markets could, in turn, provide an opportunity to upgrade current farm practices and increase productivity in advance of entry into more competitive regional and global markets.

Agriculture has also become a focus of public interest and policy among African leadership many of whom envision the Corridors playing a central role. NEPAD, under the leadership of Ibrahim Mayaki, now understands the importance of pursuing a transformation in African agriculture in which the key focal points are development of vibrant regional markets, increased agricultural productivity, a new focus on value addition, trade and partnerships with business. As engines of regional economic integration, the corridors are also receiving increasingly broad support among African leadership, including the AU, as well as from international institutions, including the United Nations' Economic Commission for Africa and a number of donors, most notably the United Kingdom's Department for International Development (DFID). With Africa-wide and international support, a number of

corridors now exist or are in varying stages of development. NEPAD officially works with 26 priority corridors, and a number of others have sprung up as well. The South Africans, using the SDI approach, have provided help with corridor management to several successful corridors in southern Africa, starting with the Maputo and Walvis Bay Corridors and now extending to additional corridors.

As noted above, the substantial public and private investment going into development corridors provides donors with an exceptional opportunity to focus collaboration with each other and with African leadership organizations—NEPAD, CAADP, and the RECs—to leverage high-level political commitments from national governments to remove the barriers to investment and trade that are slowing down Africa’s ability to produce more food. Without a concentrated effort toward removing barriers to building Africa’s own production and marketing capacity, it will be impossible to realize the transformation of Africa’s food economy required to meet the development challenges that lie ahead as global demand for food grows stronger and world food prices become increasingly volatile.

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## **Barriers to Success: Hard and Soft Infrastructure**

The barriers to increased trade and development in Africa’s regional markets are not insignificant. Africa’s transport costs are the highest in world, at well over twice the level of other developing regions.<sup>16</sup> Costs vary by region and depend upon whether a country is landlocked or has port access. Transport costs for poor, landlocked countries are up to four times as high as those in developed countries.<sup>17</sup> These high costs result from a combination of hard and soft infrastructure challenges, many stemming from neighboring countries,<sup>18</sup> with poor infrastructure accounting for up to 60 percent of the cost of doing business in landlocked countries.<sup>19</sup> The cost of transporting goods in Eastern Africa is 30 percent higher than in South Africa—and 60 to 70 percent higher than in the United States—reducing growth by one percent annually.<sup>20</sup>

These problems are most acutely felt in agriculture, as transport costs are relatively higher for many farm products, including cotton, fruits and vegetables. Delays and uncertainty in transportation can lead to spoilage, additional warehousing or port payments, along with the need to maintain extra inventory. Weak storage and distribution infrastructure further add to the costs of agricultural trade.

High transport costs limit Africa’s ability to trade locally, regionally and globally. It is estimated that every ten percent increase in transport costs reduces trade by 20 percent.<sup>21</sup> Better infrastructure and policies will reduce transportation times and costs and stimulate investment and trade. And, once again, what a country’s neighbors do, particularly if it is landlocked, will be a determining factor in opening up or limiting economic possibilities.

### *Hard Infrastructure*

Focusing on Africa’s roads alone would have a significant impact. The continent lacks all-weather roads, with fewer than 30 percent of roads paved and the majority of roads covered in either gravel or dirt. Much of the existing road network is in disrepair.<sup>22</sup> An estimated investment of \$32 billion is needed to upgrade Africa’s roads. If this investment were to be made, however, the results would be exponential, generating over \$250 billion in trade over 15 years.<sup>23</sup> Further, paving all of Africa’s inter-state roads could more than triple existing trade.<sup>24</sup>

Africa’s railroads also need investment. Along the two main corridors in the East African Community (EAC), the Central Corridor<sup>25</sup> and Northern Corridor,<sup>26</sup> railroad coverage is spotty and cannot be relied upon for most transportation, driving up the cost of transport by road. Repeating a problem of early industrializing England, the Northern Corridor still has three separate railway gauges, making railway transport particularly difficult and costly.

In addition to roads and railways, Africa's ports lack capacity, and opportunities for water transport are underdeveloped.<sup>27</sup> The port of Mombasa, one of East Africa's major ports and the anchor port of the Northern Corridor, takes up to two weeks to clear.<sup>28</sup> Finally, electricity coverage is low throughout sub-Saharan Africa, with coverage as a percentage of population at only 16 percent as compared with 41 percent in other developing regions.<sup>29</sup>

Past experience has shown the corridors' potential to function as an organizing framework for both public and private infrastructure investors, which is particularly appealing in the context of Africa's history and geography. Much money has been wasted creating infrastructure without a sound economic justification: roads that did not connect markets to centers of production and ports in which the wrong equipment lies idle. The cumulative effect of this history is highlighted in the World Bank's 2009 World Development Report, which focuses on spatial development. Bank economists analyzed the past 20 years of Bank infrastructure investments, dividing the developing world into four regions, one of which is sub-Saharan Africa. They found in three of the four areas, over 75 percent of the business infrastructure was in the "right" places to underpin increased economic growth. In sub-Saharan Africa, the figure was under 50 percent.

Where donor efforts on corridors have helped to fund some infrastructure investment and address certain policy barriers—e.g. lowering customs barriers—they have been less successful in stimulating the development of Africa's agriculture and food systems. As conceived, the Development Corridors strategy anticipated functional and transparent public-private partnerships that would build the secondary and tertiary infrastructure needed to open up the corridors' surrounding rural areas for agribusinesses and other SMEs and create better access to urban, regional and global markets for farmers and other rural businesses. In practice, corridor development has focused on large infrastructure and major anchor investments, leaving agriculture largely out of the planning. Unless connections to agriculture are planned, they do not happen, and agricultural stakeholders have begun to see the corridors as something that drains resources away from them, rather than something that provides them with opportunities. The systems to generate agricultural opportunities—as well as the systems to move food—are cross-border enterprises, requiring the right policies and a careful pairing of public and private investment that go far beyond the sometimes ad hoc and often country-focused reach of most national governments and the bilateral and multilateral donors.

### *Soft Infrastructure*

While national governments are addressing some of the physical infrastructure issues surrounding the corridors, soft infrastructure challenges—better laws, regulations, certification systems and other government policies and programs relating to import and export, setting up a business, making better quality and higher yielding seeds available, meeting quality and food safety standards, etc.—require much greater attention and are likely to have the greatest impact on regional trade and development of the corridors.<sup>30</sup>

Policy and regulation are major challenges for most corridors, and much attention has focused so far on border crossing procedures.<sup>31</sup> Experts estimate that only 25 percent of the delays on the corridors are due to hard infrastructure, while 75 percent of the delays are caused by soft infrastructure challenges and poor trade facilitation.<sup>32</sup> While focusing on trade facilitation alone will not generate sustainable development benefits through the corridors,<sup>33</sup> trade facilitation is critical to movement along the corridors.

The World Bank estimates that it takes longer and costs more to both export and import goods in Africa than anywhere else in the world, with more documents and duplicative paperwork required and multiple, overlapping policies and agencies involved.<sup>34</sup> Each day of customs delay reduces export volumes by 1 percent on average.<sup>35</sup> Landlocked countries experience trade transaction costs that are more than double those in other developing countries and more than triple those in developed countries.<sup>36</sup>

Once again, these burdens weigh most heavily on the agricultural sector.<sup>37</sup> Numerous checkpoints along transport routes, which connect landlocked countries to ports, add to transport delays, running up costs and hampering trade.<sup>38</sup> An additional day's delay due to transport and customs issues can cause exports of time-sensitive agricultural goods to decrease by seven percent.

Many corridors, again critically but sometimes too narrowly, focus a significant amount of attention on trade facilitation, including the quality and competitiveness of transport and logistics services, the capacity and condition of public infrastructure and regulation of transport services along the corridors.<sup>39</sup> Some corridors have succeeded in improving customs and transport policies, including through customs automation and one-stop border posts. For example, the Maputo Development Corridor<sup>40</sup> and Trans-Kalahari Corridor,<sup>41</sup> both of which are discussed in greater detail below, have succeeded in simplifying cross-border and customs procedures and significantly reducing delays at the border.<sup>42</sup> Another innovative approach to improve customs and transport is to move as many of these functions away from the border as possible.<sup>43</sup>

Other corridor efforts for improving trade facilitation have been met with mixed success. Both the Central and Northern Corridors continue to experience long transit times and high costs, and both have had relatively slow growth despite the fact that they are essential regional trade routes.<sup>44</sup> Multiple weighbridges exist along the Northern Corridor, and up to 27 police controls have been reported between the Mombasa port and the Ugandan border.<sup>45</sup> The Northern Corridor has been effective in driving implementation of a regional transit regime at the national level, however, helped by its transition to more fully integrate the private sector.<sup>46</sup>

In Western Africa, steps are being taken to remove customs check points, particularly in Ghana through legislation to reduce the number of authorized check points between the port of Tema and the border with Burkina Faso.<sup>47</sup> Also in Western Africa, a coalition of companies and international institutions, including Unilever and the World Bank, has launched a project to improve customs administration in the Economic Community of West African States (ECOWAS) region along the Abidjan-Lagos Corridor,<sup>48</sup> with the goal of reducing customs and transport barriers.<sup>49</sup> The North-South Corridor has improved movement of goods along the corridor through both development of trade-related infrastructure, including roads, bridges and ports, and through better trade facilitation measures, including one-stop border posts and enhanced capacity in trucking and shipping agencies.<sup>50</sup>

Non-tariff barriers are much more significant than tariff barriers, although some tariff barriers continue to exist, particularly in agriculture. For example, Tanzania has almost completely liberalized trade in agricultural goods with the East African Community (EAC) but continues to maintain restrictive tariffs on almost all food products from the Southern African Development Community (SADC). Ghana also maintains relatively high tariffs on diary, maize, rice and palm oil.<sup>51</sup> SADC has restrictions on significant products like sugar, which are scheduled to phase out within the next few years. Ethiopia also maintains high tariffs on agricultural trade within the region and with the rest of the world. On the other hand, Mozambique and Rwanda have relatively low agricultural tariffs.<sup>52</sup> Removing these barriers to trade within Africa will be critical to both economic development and food security.

Of the main African regional economic communities, agricultural and food trade has increased within the Common Market for Eastern and Southern Africa (COMESA) and SADC, remained relatively stable in the EAC and decreased within ECOWAS.<sup>53</sup> It is notable that some of the early SDI corridors have been promoted in Eastern and Southern Africa, the same regions that have shown growth in agriculture and food.

In addition to customs, non-tariff barriers remain in regulatory and certification regimes, particularly with respect to food safety and certification of seeds and other agricultural products. Governments often apply these sanitary and phytosanitary (SPS) standards arbitrarily or lack the technical capacity to implement laws consistently and in a business-friendly way. Numerous standards also exist, creating a complicated web for agribusinesses to navigate. Not only must agricultural products conform to very detailed SPS standards for specific products and type of industry (e.g. separate rules apply for organic or fair trade production), these standards vary from country to country

and are supplemented by separate standards imposed by the private sector. Additional standards to ensure product safety, or technical barriers to trade (TBT), are imposed as well.<sup>54</sup> As commodities are transformed into higher value-added products, many standards become more exacting, and adequate transport and storage become even more critical and expensive. Like other policy issues, food safety and product standards are increasingly being dealt with on a regional level, and both policy reform and capacity building are necessary to make regional SPS systems work to the advantage of agricultural development. Within African regions, countries do not tend to recognize the inspection processes and SPS regimes of neighboring countries, despite regional trade agreements requiring this type of treatment.<sup>55</sup>

Of course, soft infrastructure barriers do not only exist within Africa, international barriers exist and limit trade as well. Internationally, SPS standards can also be a significant barrier to growth in the African agricultural sector, due both to their complexity and the number of overlapping standards. With exceptions, while many of the actual European and U.S. food safety, animal and plant health requirements are not fundamentally different, U.S. and European regulators have imposed differing requirements for demonstrating compliance with these rules.<sup>56</sup> This points to a needless lack of coherence between rules intended to achieve the same ends, which increases the burden of compliance for developing country exporters. While the science underpinning these rules is critical to food safety, in many cases, the processes for implementing the rules could be streamlined and made more transparent. SPS issues are just one example of international barriers to trade and agricultural development along the corridors. Others, including restrictive market access practices, are discussed in greater detail below. Markets are only as effective as the policies that create them, and open international markets could make a critical difference in improving African farmers' opportunities and livelihoods.

With the right support, governance and participation, the Development Corridors provide a viable means for overcoming some of the seemingly intractable problems of political will and governance that have bogged down previous efforts at regional integration and policy change in Africa. The Development Corridors are by definition economic markets that cut across borders and political alliances rather than being yet another set of political entities themselves. Their success will depend largely upon the ability of governments to target the hard and soft infrastructure constraints and policy challenges outlined above. Investors and donors will pay close attention to this factor in determining where to focus resources.

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### **Corridor Governance: Maputo and Walvis Bay**

**R**ecent experience with the Maputo Development Corridor (MDC) and the Walvis Bay Corridor is instructive and offers important lessons, especially regarding the need for active donor participation in insisting on improved business conditions and resources to integrate agriculture into the planning, implementation and governance of the corridor from the beginning. Maputo also provides a historical example of the staggering economic impact and success that can result from addressing hard and soft infrastructure challenges.

The Maputo Development Corridor (MDC) was the first SDI launched by South Africa, Mozambique and the Southern African Development Community (SADC) in the mid-1990s to upgrade the existing transport corridor between Maputo and Johannesburg. It was designed to revitalize southern Mozambique's economy after years of civil war and bring benefits to South Africa in the wake of apartheid<sup>57</sup> by linking ports and airports with many industries, including iron and titanium mines, a steel plant, an aluminum smelter, a fertilizer complex and tourist facilities. The MDC set out to rehabilitate regional infrastructure, in cooperation with the private sector, maximize investment along the corridor, increase social development, and further policies that would promote participatory government.<sup>58</sup> The core initiative featured public-private partnerships that upgraded road, rail, port, electricity

supply lines, border crossings and airport facilities and thus greatly reduced transport and transiting costs. The Maputo Development Corridor also successfully addressed policy barriers, including measures at the border.

The MDC was launched with funding from the Governments of South Africa and Mozambique, BHP Billiton, Mitsubishi and the International Finance Corporation.<sup>59</sup> Between 1996 and 2005, the MDC attracted over \$5 billion in private sector investment along the corridor, according to a UN estimate. This included a \$200 million hydroelectric project on the Zambezi River and the \$50 million development of a new tourism route from South Africa to Mozambique through Swaziland.

Overall, the MDC's staggering economic success is attributed in large part to high-level political support from both President Mandela and President Joaquim Chissano of Mozambique and the relationship between them, as well as focused private sector participation. But critics of the corridor note difficulties engaging and coordinating stakeholders in affected local communities and question the degree to which the MDC promoted community development, particularly in Mozambique where the capacity was lacking to fully coordinate and assess the implications of projects along the corridor.<sup>60</sup> Managed by a private sector entity that is widely considered to be the most efficient of the corridor managers, the management team had no mandate or resources to densify or to incorporate agriculture.

Another largely successful SDI corridor initiative is the Walvis Bay Corridor, which consists of three trade routes, including the Trans-Kalahari Corridor, linking the Walvis Bay port to neighboring countries. Like the Maputo Development Corridor, the Walvis Bay Corridor has been particularly active, in part due to the strong public private partnership that runs the corridor.

Recently, corridor management on both the Central and Northern Corridors has expanded to include SDI involvement in an effort to create true Development Corridors with the goal, particularly along the Central Corridor, of unlocking the region's substantial agricultural potential.<sup>61</sup> However, the South African SDI unit is under-resourced, and progress has been very slow.

The successes of the Maputo and Walvis Bay Corridors, while significant, have provided only a glimpse of the potential the corridors hold. Now, with the new focus within Africa and among the donors on food security, there is a very real possibility of harnessing the new surge of resource-based investment in sub-Saharan Africa for agriculture-led growth and food security, making the Development Corridors approach timelier than ever.

This will, however, require learning the lessons from past experience in order to use the Development Corridors effectively as a fulcrum for a widespread transformation of African agriculture to promote greater food security and broad-based benefits.

### *Lessons Learned*

The Development Corridors could be a means to transcend Africa's political geography and vast expanse. With resource scarcity and the attraction of Africa's mineral wealth once again triggering investments in infrastructure in support of extractive industries, a new opportunity is presenting itself.<sup>62</sup>

In seizing upon this new opportunity, the lessons of past corridor development are instructive. While it was successful in generating infrastructure investment, the Maputo Corridor underperformed in using that infrastructure investment to generate broader-based welfare gains. Additionally, wrangling over budgets and cost sharing between customs unions and ports, arguments over the railway rate-structure and other problems resulted in slower progress than the "fast-track" Maputo's founders had originally envisioned. However, as business expectations and demands continue to grow, the pressure on government officials to move faster increased and because it has become a huge economic growth engine for both countries, governments have responded.

Leaving aside the limitations mentioned earlier, the Maputo Corridor did demonstrate that the overall Development Corridor strategy, if further developed to include a broader range of stakeholders and if replicated throughout sub-Saharan Africa, could accelerate the adoption of regional policies and practices that would significantly improve the business climate, stimulate business efficiency, promote growth and productivity in agriculture and reduce rural poverty. They could provide a focal point for Pillar 2 of CAADP —focused on trade capacity and market access—and for NEPAD’s continuing efforts to bring business into agricultural development efforts.

Regardless of whether policy change needs to happen at the local, national, regional or international level, political will is perhaps the most critical factor. The Maputo Corridor was particularly successful due to active, high-level support by the heads of state involved. Sustained participation at this level, along with dedicated resources and staff and a willingness to expend political capital to ensure the cooperation of different levels of government and stakeholders would be critical to help make the G20’s commitment to dramatically increasing food security in Africa a success. But the political will must also extend to the bilateral and multilateral donors, who must better discipline themselves in terms of focus and insist upon an urgent and robust process to improve business conditions and remove barriers as investors, farmers and others encounter them.

In addition to the support of national governments, NEPAD, CAADP and the RECs should be given the support they need to play a more active role in corridor governance, processes and implementation. The new NEPAD understands agriculture, is committed to a different future for rural Africans and recognizes the critical role business and civil society can play in helping make that a new future a reality. NEPAD has also initiated reforms to the CAADP process to ensure that CAADP’s four pillars work across their individual missions and do not create more stovepipes. In its report last year on Pillar 2, the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN), an independent not-for-profit policy analysis group in South Africa, recommended that Pillar 2 focus on the corridors as the way to implement their goals under the market access part of their mandate. Development Corridors can provide a necessary impetus to the RECs’ work to achieve regional market development. While numerous regional agreements exist to remove market barriers, implementation of these agreements is weak and inconsistent, due both to limited political will and lack of technical capacity. Further, many countries are party to several different RECs, creating numerous, overlapping obligations. With strong participation by business focused around tangible economic opportunities and real demand, the Development Corridors can sometimes push forward regional reforms in a way that the RECs cannot.

The corridors could play a role in organizing donors to work together around a shared goal, each playing the role and taking on the job that they are meant to do to please their constituencies back home. After years of staying out of agriculture, donors are directing their energy toward agriculture, now widely seen as the key to Africa’s future. But increasing harvests without developing ways to store, transport, process, add value to and market those harvests is both short-sighted and unsustainable. Using the corridors as a way to organize broad-based stakeholder demand and expectations could also go a long way toward re-aligning government priorities with the priorities of business development, including farmers and agri-processing.

The corridors could also fill in the gaps left by a fragmented international system that has yet to create sufficient mechanisms to successfully guide and prioritize its infrastructure lending and agricultural support to underpin a holistic response to Africa’s food crisis through more rapid development and growth. Without such a systemic approach, food production, marketing and consumption on the continent will remain unsustainable, lacking viability when the donors depart, as has happened in Africa in the past.

The corridors could demonstrate to Africans the benefits of more forward-looking policies in trade, investment and sound regulatory systems to promote food safety. One of the lessons of the failure of the Doha Development Round of global trade talks at the World Trade Organization (WTO) is that without a viable development plan that links more liberal trade policies with reliable opportunities for economic growth and food security, trade liberalization will not garner the support required to override entrenched interests that have always blocked reform. One way to

affect Africa's trade policies and productivity investments is to use concrete business opportunities within Africa to create more "demand driven" trade policies. These business opportunities can also be an action-forcing event to demonstrate that a better business climate, including investment and trade policies, would create more opportunity for more people, which in turn will lead to more prosperity and stability.

While the African corridors have shown some notable successes, they are not yet being fully utilized especially in addressing Africa's growing food security crisis. The corridors will not realize their full potential unless the issue of governance is properly resolved and until, and, with participation from new, more creative actors, they find ways to bring in and balance the voices of diverse stakeholders, particularly in agriculture. International donors and policymakers have a significant role to play in supporting the Development Corridors.

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## The Way Forward

**M**any past efforts at promoting agricultural development and regional markets in Africa have failed. Without an understanding of what has changed in Africa and what has not, current initiatives run the risk of repeating past failures by continuing to look for "silver bullets" or making false "either/or" choices between business investments and social programs. Instead, what is needed is a relatively clean and practical way to coordinate between private and public investment, and a way to fast-forward learning on removing barriers to growth in food production and markets, business best practices, transparency efforts, policy change, improved accounting, and anti-corruption measures. This needs to happen throughout Africa, particularly between countries, if there is to be a regional approach.

The challenge is to use Africa's resource boom to generate broad-based economic development as the real underpinning of food security in the continent. But opening up and linking the corridors for multiple uses requires new ways of thinking and acting. It will require a concerted and coherent effort—a real partnership among Africans, businesses, public agencies and other civil society players and the aid and service providers working with them. Experts agree that the potential economic returns on Africa's mineral wealth are high enough to provide a window for capturing value that, through active pursuit of the Development Corridor vision, would allow for the financing of core infrastructure needed to exploit natural resources, provide a fair return to investors *and* support Africa's entry into a broader range of economic activity.

These were the conclusions reached by a team organized by the William & Flora Hewlett Foundation in 2007 as the result of a series of consultations—which involved hundreds of conversations with government officials, practitioners, agricultural businesses, and civil society representatives in Africa, the United States, and Europe—over two years.<sup>63</sup> The team wanted to understand how "outsiders" concerned with what they saw as both an impending food security crisis and an enormous opportunity presented by the current commodity boom for the development of Africa's food production and consumption systems could work to bring more discipline to donor investment and policy in Africa.

The Hewlett Foundation team concluded that building on Nelson Mandela's vision and the work that is being done by African leadership organizations—NEPAD, CAADP, and the RECs—and more enlightened country leadership on the Development Corridors was the best possible way to provide the integrated approach necessary to transform Africa's agricultural productivity, trade and food security. The corridors approach would provide a means to promote new ways to fast-forward agricultural development in Africa, develop a demand-driven approach to trade policy toward Africa, and, finally, develop closer working relationships with the private sector at the ground level.

At the same time, African leadership organizations, as well as national governments must stay in charge of Africa's development. African expertise must be developed and used at every stage along the way so that corridor

development also provides a means of building the human resource base and strong institutions Africa will need for the future. African governments and leadership organizations must seek to establish the conditions that would make this possible. But Africa's food future is now, and we must support them in picking up the pace. Once a serious effort is underway, there are many ways in which "outsiders" committed to Africa's development can help.

Africa does not have the deep bench strength in managerial capacity, political negotiation, technical expertise and economic institutions that was available during major continental-scale development efforts of the past, such as the New Deal in the United States which gave rise to the Tennessee Valley Authority or the rebuilding of war-ravaged Europe during the implementation of the Marshall Plan. Africans need a way to reduce the time and lower the transaction costs required for building relationships with new external players and new relationships with traditional ones as well as a more straightforward, cohesive and transparent relationship between Africans and the business, investment, foundation and NGO communities who want to work with them.

Furthermore, it is also important that the capacity exists to extend the benefits of economic growth to those who have been previously left out—including small farmers, SMEs and impoverished communities.<sup>64</sup> Successive waves of investment need to come in to create the linkages that are key to densification and to put together successful partnerships. Experience shows that successful densification will not happen automatically, especially when the anchor investments are in mining. And, if agriculture is meant to benefit, its requirements must be integrated into the planning process from the very beginning which in turn requires a committed relationship between those in charge of the corridors and the country-level government agencies in charge of building and maintaining the feeder roads necessary to the success of small farmers. It is also necessary for the donors who provide the infrastructure and other resources for building and extending the corridor to insist on policy and regulatory change that allows efficient cross-border commerce as a condition of the investment.

In summary, though sound in concept and offering great potential for long-term benefits, Africa's Development Corridor strategy will not realize its promise of sustainable, broad-based economic growth and poverty reduction unless an interlocking set of challenges can be resolved. These challenges revolve around governance, the integration of agriculture, stakeholder and business participation, and a focused means to remove barriers to success that arise along the way.

### *Governance*

While no single practical model for corridor governance exists, the more transparent and well-governed the corridor—as Maputo and Walvis Bay illustrate—the greater its chances of long-term growth and success. Historically, spatial development programs used successfully elsewhere have worked well when they have had clear policymaking authority with sufficient checks in place to make sure it was used well. London's Canary Wharf is one example, and it has created wealth in part because the policymakers with responsibility for the initiative had broad authority to construct and implement development plans, while, at the same time, remained subject to strong oversight from public institutions that could intervene if they overstepped or were not fulfilling their mandate.<sup>65</sup> Further, the initiative had strong incentives to benchmark progress.

The mechanisms for bringing national government leadership, local leadership and the African leadership organizations together to hammer out agreements on how the corridors will work are sorely lacking in Africa. There are even fewer opportunities for government officials from different ministries involved in infrastructure decisions, farmers unions and other business groups to come together to guide decisions on the corridors. Often, these civil society groups lack the financial resources, analytical capacity, and advocacy skills needed to be effective. And the farmers, entrepreneurs and companies who will carry out densification often need help "putting the pieces together" to take advantage of market opportunities. These are voids in Africa's governance infrastructure that must be filled for the Development Corridors to succeed.

The South African SDI of the Department of Trade and Industry, working closely with NEPAD, provides virtually all of the “public governance” on the Southern African corridors. The SDI has a small, deeply committed and knowledgeable set of experts who typically are placed on corridors as corridor managers for two years and then rotated elsewhere as the corridor countries begin to take over. These corridor managers have few of the resources that real development authorities have, but the SDI has been critical to corridor management and is currently one of the only “official” organizations whose first objective is the developmental success of the corridors. While NEPAD and the SDI have, importantly, brought development concerns to the table, as a governance structure this has limitations that need to be addressed.

For example, neither entity has the necessary authority or political buy-in to intervene at national and regional levels where policies are made, to remove barriers when the national or regional governments refuse to do so.<sup>66</sup> African SDI corridor managers also generally lack a strong institutional context from which they could initiate a process to consider and balance stakeholder concerns, which is a particularly important aspect of corridor governance. As noted above, other management authorities have at their disposal top notch assistance to make financial arrangements, structure concessions and other private sector relationships and investments, ensure the engineering integrity of the infrastructure, enforce planning requirements and convene other agencies of government that are not available to the SDI, NEPAD or most of the corridors throughout Africa. In addition, they have no real control over the allocation of public agricultural, food security and logistics investments necessary to, for example, build feeder roads to ensure that more remote villages and poorer populations are able to benefit from new access to markets. Finally, they do not have the time or resources to manage business participation in their corridor governance model and therefore at this point have no direct participation.

The corridor managers are legitimately concerned about businesses distorting the process and without robust stakeholder participation and transparency it is difficult to avoid corruption. However, by leaving business out of the process those working on the corridors deprive themselves of critically important opportunities, skills and relationships. And the so-called “bad actors” simply continue to operate outside of the process and do what they want anyway.

Since most corridors have different goals to advance and need to be an integrating force on the individual corridors,<sup>67</sup> better governance is necessary. Many recommend that this be a simple function, while some experts suggest a slightly more involved governance structure that coordinates among government stakeholders and core constituencies in addition to maintaining a secretariat to coordinate the corridor’s activities.<sup>68</sup> But in order to work, the governance structure cannot be totally dominated by governments.

A private-public governance structure or platform would help fill these voids. The creation of such a platform is uniquely a donor task because it involves empowering private citizens to act on their own behalf to make the government system and the economic system work for them. This is not a role national governments, regional economic communities or continental organizations in Africa are equipped to play. And citizens and civil society groups in Africa typically lack the financial resources and other capacities to do this well on their own. By providing a platform for building consensus and vision for the Development Corridor investments, such a partnership can also help African governments to align external investments with their own priorities.

Better corridor governance could serve as a focal point for food security and poverty alleviation initiatives if the right combination of interventions and partnerships could be created following the example of other successful regional development efforts. These have worked in large measure because of strong political backing, a good system of governance, stakeholder participation, transparency and the ability to time and package investment. As Canary Wharf’s success illustrates, it is necessary to push the political process and build in “good conditionality,” i.e. incentives, benchmarks and standards among the corridor stakeholders that would provide some of the authority and expertise with appropriate checks and balances to protect the less powerful stakeholder along the corridors.

This approach to the Development Corridors would help develop and strengthen regional governance as both a by-product and requirement of its success, but several elements are necessary to make this approach a success.

### *Integrating Agriculture*

Thus far, even the most successful corridors have only been partial successes in terms of integrating agriculture. Maputo is a good example of a public-private partnership that can coordinate among stakeholders to advance the various goals of the corridor. But, as noted above, it too did not successfully integrate all stakeholders or extend to agriculture.

The private sector is beginning to view agricultural investment differently. Investors are increasingly interested in investment in agriculture, previously viewed as offering lower returns and being prohibitively “risky,” particularly if there are ways to mitigate risk through the right policies and the balance between public and private investment. This shift will help integrate agriculture more significantly in the Development Corridors, where substantial investment is needed in additional infrastructure, including secondary and tertiary roads to connect farmers to markets, railways and better port facilities, along with agro-processing and storage facilities.<sup>69</sup> This investment could piggyback onto public and private investments in infrastructure and onto new business activities stimulated by the Development Corridors.

These new dynamics around agriculture have also shifted focus to small farmers in a way that is new in the history of the Development Corridors. When the Development Corridors were first tested, the only efforts to integrate small farmers were on a project-by-project basis, but this proved much too slow to effectively capture the momentum behind anchor projects and related investments, and small farmers were ultimately left behind. New ways of integrating small farmers into commercial arrangements like contract farming and outgrower models—which is now the standard in a number of industries including, notably, sugar—were also not fully tested or understood.

As markets develop and the chances to reach more consumers increase, so must farmers’ ability to produce more efficiently and to meet new market specifications. With increased demand in the market comes increased demand for market information and business services as well. Persuading companies to buy supplies locally, process more in-country, and even hire labor locally requires education and negotiation. The opportunities for business expansion and densification are greater if civil society organizations and like-minded businesses work together to promote greater transparency, improve the investment climate, reduce trade barriers, and, ultimately, focus government attention on removing other barriers to more diversified economic growth.

To date, the most significant effort to organize the corridors around agriculture by an outside entity have been the Southern Agriculture Growth Corridor of Tanzania (SAGCOT) that extends from the port of Dar es Salaam into Zambia and the Beira Agricultural Growth Corridor (BAGC) in Mozambique with connection into Zambia as well. The private sector is very active and, with the World Economic Forum (WEF), is driving activity and coordination on both corridors. Critically, the SAGCOT has support from the Tanzanian Government at the presidential level. So far, both corridors have struggled with the issue of how to engage agricultural stakeholders more broadly, and both are still searching for the right governance structure.

Since none of the corridors thus far has sufficiently integrated agriculture, new systems of governing the corridors will be required in order to make the corridors live up to their development potential. Multi-stakeholder coordination must include coordination with those who stand to benefit from the corridors but don’t have significant political muscle (e.g. rural communities, farmers associations, SMEs, etc.). Additionally, the development aspects of the corridor—including a focus on agricultural development—will not materialize unless concerted attention is given to building this into the governance structure.

Using the Development Corridors as a way to reach small farmers in remote areas requires other capacities and skills that many governments do not have. The Development Corridors approach is only effective where there is

true economic potential and untapped demand in the market. Private sector resources must be marshaled, either through public-private partnerships or direct investment, to unlock this potential and demonstrate the possibility of commercial returns. Public sector resources, always scarce, have to be prioritized and focused. Successful Development Corridors also require a commitment at the highest levels of all countries involved to remove the barriers that will prevent the corridor from becoming an efficient and safe way to transport goods and people.

### *Stakeholder Participation*

The question arises as to how public and broader stakeholder input should be organized, taking into account the public's voice without putting unreasonable burdens on investors. As Maputo and Walvis Bay—together with more recent efforts in Mozambique and Tanzania—illustrate, while the private sector is absolutely critical to the success of any corridor initiative it cannot be the principal organizer of stakeholder participation or corridor governance.

This is especially important in the food security context since transparency and public scrutiny will be the most important lever against corruption and incompetence. Again, Canary Wharf is illustrative in that the policymakers tasked with the spatial development project had the broad authority to organize—and sometimes override—this input, but all the while remaining subject to checks on that authority to make sure it is not abused.

Making the corridors work for agriculture will require including the voices of farmers of all sizes and a way to assess and prioritize demand. A transparent and accessible process that builds stakeholder participation into the conversation from the very beginning is critical. This means providing a space to exchange information, work out conflicts and build connections between producers and the businesses that will ultimately buy, process and transport their products along the corridor. Farmers, business people and other civil society groups must be at the table and empowered to respond to the opportunity the corridors can provide. These stakeholders—the people who will make densification happen—must be in a position to guide secondary and tertiary infrastructure investment so that it meets their needs. They must be in a position to advocate for needed policy changes to foster economic activity and to hold corridor managers and politicians at all levels accountable for implementing the corridor concept in a way that really is pro-poor. And they must have access to the business services, information and relationships they need to thrive.

### *Private Sector Leadership*

Bringing business to the table—and ensuring that emerging opportunities in agriculture have a voice and a seat at the table with more established business—will be critical in pushing for the right policies to support Development Corridors. Business has been the engine of development in all economically developed nations, but true development that benefits the poorest relies on connections between the poor and business opportunities that will impact them. Without a reliable way to make these connections, farmers and other small businesses cannot gain from the opportunities that are being created in more densely populated areas.

However, business interest on the corridors can be an irreplaceable driver of political will to remove the barriers to successful business formation and operation, especially those which involve unequal power relationships such as exist between business and small farmers. However, businesses also have a great deal more clout in demanding better business conditions and services than do small farmers and, as mentioned earlier, when well structured, new forms of integration between businesses and small farmers that are beneficial to both are being developed and tested—although at this time there is no organized space for business, investors and the NGO sector to come together so that each can do its part and learn from the other on a more systematic basis so that learning can be more widely shared.

The corridors provide a perfect venue for this to take place but it will require a number of donors and governments to come together with NEPAD and the RECs around developing some kind of corridor governance and learning mechanism and supporting it over a long period of time. As better models for corridor governance are tested that

address the issues outlined above, some mechanism that ensures better interaction between business and government—with government responsive to the needs of businesses large and small—will be important. Business also needs to be brought to table in a competitive way, with a process on each of the corridors to ensure this and bring in the part of the business sector that is not well represented, namely smaller businesses and SMEs.

### *Removing the Barriers: TransFarm Africa*

Viable Development Corridors that lead to the development of regional food economies will need a consistent, transparent system for addressing and removing specific market barriers along the corridors, along with methods of mitigating risk to encourage the right kinds of partnership and corridor arrangements in support of broader development.<sup>70</sup> Business will be a necessary force to generate policy change, and policies should be market-led and “demand-driven,” *i.e.*, linked to specific economic opportunities and the barriers that stand in their way.

This need for a focused effort to remove barriers to transformative agricultural development along the corridors is where TransFarm Africa’s policy work is centered.<sup>71</sup> TFA is based on the premise that, in order to sustainably develop, Africa’s agricultural sector needs both capital investment—in particular in agribusinesses that build and integrate the sector by exploring new opportunities, closing gaps in value chains and equitably connecting small farmers into commercial systems—and the targeted removal of policy and market barriers that stand in the way of unlocking Africa’s agricultural potential. Increased investment and policy change are very closely linked, and one will not move forward without the other. Policy barriers can present a tangible risk to investors and restrict growth in the African agricultural sector, limiting the opportunities investors and farmers will pursue and directly affecting the ability of farmers to stay in business, expand their operations, and innovate in socially beneficial ways, including working more closely with smallholders and addressing climate change.

TFA is taking the Development Corridors as a framework and to date has focused its work around two specific corridors, namely the Beira Corridor in Mozambique and the Central Corridor and Southern Agricultural Growth Corridor of Tanzania (SAGCOT). TFA’s experience has been that, once again, the challenge will be to find the right balance of public and private organization on the corridors that can bring in agriculture in an equitable way. In the case of SAGCOT, the backing of the Tanzanian president is significant, but now that additional resources are going into the corridor, the governance and coordination challenges are becoming more acute. On the Beira Corridor, more concerted political support will be needed in order for the corridor to be a success. Several concrete policy obstacles have surfaced that threaten to block significant investment on the corridor. If these barriers are not addressed, the overall success of this corridor will be limited.

TFA’s approach is demand driven, removing barriers facing real investments on the ground, delivering results first on a small scale for individual businesses, as the best way to mobilize and excite stakeholders for more ambitious regional projects. TFA’s barrier removal work happens in three stages: identify barriers, remove those barriers, and then scale up or institutionalize the policy responses that successfully removed the barriers in order to make the benefits more widespread. In developing and testing a demand-driven approach to policy change which has direct application on the corridors, TFA’s “Removing the Barriers” program is identifying and addressing real and practical challenges in the agricultural sector, many of which are often beyond the immediate control of the businesses affected by them. In every case, TransFarm Africa is guided by a “demand-driven” approach to policy change that starts with the very specific on-the-ground needs faced by actual agribusinesses.

This model has been tested in Tanzania with TFA’s investment in Mtanga Farms Limited, a mixed farming operation near the town of Iringa in the highlands of southern Tanzania. Potatoes are a fairly popular crop in Tanzania, especially among women growing them to feed their families. They can be hearty and nutritious, but—especially in tropical climates—are prone to virus, fungus and various pests, some of which are carried from one generation to the next in the planting material. This hurts performance and dramatically reduces yields. Because their yields are so low, Tanzania’s 150,000 smallholder potato producers could not keep up with booming demand;

trucks filled with potatoes arrived daily from South Africa and went back empty. Seeing the opportunity, the entrepreneurs, farmers and investors who own and manage Mtanga Farms Limited identified clean stock being used successfully by farmers in neighboring Kenya and attempted to import a commercial quantity to begin supplying the Tanzanian market. Tanzanian authorities told them that the importation was illegal unless they were willing to conduct extensive field trials that would take years.

The TFA team, led by Dr. Eugene Terry, a world-recognized expert on agricultural development and seeds, and including a trade lawyer and the farm's lead investor, worked with Mtanga to identify and address each specific barrier encountered. After numerous bureaucratic hoops—some of them generated on the Kenyan side—officials allowed the seed potatoes from Nairobi to enter the country legally and agreed that Mtanga could shorten its field trials from five seasons to just one. Results from the first year's trial were beyond what they had hoped for: 40-50 tons per hectare, ten times the national average. From the experiences of successfully removing the barriers in the Mtanga case, TFA is now beginning a regional seed registration and transfer harmonization effort that will benefit the whole East African region and could eventually be replicated in other parts of Africa.\*

Within sub-Saharan Africa, the corridors are increasingly helping to organize a more empowered and diverse business class to push for the type of policy change needed to realize new business opportunities and expand those that currently exist. Successful Development Corridors will encourage the development of a diverse productive structure within the African agricultural sector, including policies that support value-added processing and manufacturing. They will also leverage the strengths of the private sector, governments, the RECs and other stakeholders to best allocate resources, address market constraints, make possible unrealized opportunities and enhance farmers' connection to commercial systems and capacity.

#### *Donor Interventions and Policies*

The Development Corridors also present a much-needed framework around which to focus and prioritize international donor policies and interventions.<sup>72</sup> International efforts to increase trade with Africa and achieve and sustain greater food security have fallen short for numerous reasons. But perhaps the most enduring is the lack of attention to building efficient regional systems to move people, goods, services and information from Africa's vast countryside to cities and coastal areas and across borders where there are markets and opportunities for business.

While policy change within sub-Saharan Africa is critical to food security and sustainable economic growth, the right international policy tools are needed to encourage this change on the ground. The global attention to food security provides new hope to help put Africa on the path to sustainable economic growth and greater food security, but the window of opportunity provided by the L'Aquila agreement and individual donor efforts, including the U.S. Feed the Future program, will not remain open for long.

An opportunity exists to channel international resources to help Africa build true Development Corridors, which would require strategically using donor funds to promote private sector investment in new models that integrate small farmers, traditional risk mitigation and creative ways to allow investors to work in "pre-competitive" situations and with small farmers. Agricultural investment in the continent, and especially investment that involves small farmers, is perceived as particularly risky. Instead of skirting the perceived risks of investing in agriculture, donors should help mitigate them by using policies and investment capital to encourage private sector investors to take more risks themselves to experiment with new models, including those that will closely involve small farmers and innovatively mitigate climate change. TFA has proposed that the International Finance Corporation, for example, could use food security funds to provide capital alongside tangible agricultural investments that would

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\* See TransFarm Africa, *Removing the Barriers to African Farm Prosperity: Combining Investment and Policy to Establish a Seed Potato Industry in the Iringa Highlands of Tanzania—The Case of Mtanga Farms*, May 2011, [www.aspeninstitute.org/sites/default/files/content/images/ghd/Mtanga\\_May\\_9\\_2011.pdf](http://www.aspeninstitute.org/sites/default/files/content/images/ghd/Mtanga_May_9_2011.pdf)

mitigate risk by addressing barriers to investment and building technical capacity needed for enterprises to succeed. Donor resources could also be used catalytically to invest with patient and reduced cost capital in things that are necessary to involve small farmers in African agriculture, piggybacking on large commercial investments and ensuring links between smallholders and commercial systems.

In addition, the current policies of developed countries as they impact Africa have been problematically even wrong-headed in promoting emerging opportunities and addressing trade barriers. At a recent meeting of the WTO General Council, the Zambian Trade Minister, Felix Mutati, asked WTO members to make the Development Corridors part of international trade and development policy with sub-Saharan Africa. Responding to this challenge would make a significant difference in Africa's own efforts to build regional markets, increase economic opportunities and improve food security. This will require a shift in how trade and development policies, which currently are often poorly coordinated and even inconsistent, are developed and applied. With the Doha Round no longer pulling significant international energy and resources, the time is right for new leadership on trade policy with Africa from the United States and other developed country trading partners.

First, a critical lens needs to be applied to current developed country trade policies with Africa. For example, despite U.S. development attention to Africa, U.S. trade policy continues to restrict opportunities in key commodities such as sugar through a burdensome system of tariff-rate quotas.<sup>73</sup> Not only is sugar an important source of export revenue, with strong international demand, it is central to the livelihoods of thousands of smallholder farmers who produce it through outgrower arrangements. As the European experience with lifting sugar quotas has shown, opening international trade in sugar could generate desperately needed jobs and regional growth in Southern and Eastern Africa in particular.<sup>74</sup> Further complicating markets, not only is trade in sugar and other commodities like dairy restricted, any products containing sugar and dairy is restricted as well, thwarting opportunities for value-added production. For example, one of Western Africa's main crops, cocoa, is mainly exported in its raw form for value-added production into chocolate elsewhere.

The European Union's Economic Partnership Agreements (EPAs) are also problematic and have been found to limit rather than encourage future African regional trade, curtailing one of the most important avenues for growth. Many African countries have protested strongly against these agreements, stressing their inappropriateness given the underdeveloped nature of African regional markets and institutions. Despite such a strong reaction to the EPAs model, however, it holds particular appeal with developed country policymakers due to its reciprocal obligations. Regardless of whether trade preferences or more reciprocal arrangements are used, a new approach to developed country trade policies with Africa is badly needed.

This new approach on trade should have several elements, and TFA is in the process of convening a multi-stakeholder process to develop these further and integrate them into the corridors. It should recognize potential for growth in African agriculture and encourage new opportunities rather than locking in trade provisions that maintain a discriminatory status quo. Encouraging innovative opportunities in agriculture, like Mtanga Farms discussed above, should be the priority, and trade and development policies could be reoriented to help other such opportunities thrive. As Mtanga has shown, policy approaches must be specific and demand-driven rather than broad and aspirational if they are to make a difference.

The new approach should also make African regional market development a priority and not pit African regional communities against one another. In contrast to the new European trade policy with Africa, the U.S. African Growth and Opportunity Act actually treats the entire region largely the same, simplifying and encouraging opportunities for regional market growth. The case could and should be made for treating the region as a whole both in bilateral trade relationships between Africa and its trading partners and at the WTO.

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## **Conclusion**

**A**frica can and must avoid an intractable food crisis and set out instead on a path to sustainable development. The Development Corridors are the way forward. Just as corridors spurred development in ancient Rome, industrializing Europe and the United States in the twentieth century, they hold great promise for agricultural growth, food security and broad-based economic opportunity in Africa. The African Development Corridors present a market-focused framework for infrastructure development and policy change that transcends some of the complicated political geography, and the business demand around corridor development has already been shown to be a powerful tool in addressing regional trade barriers that limit so much of the continent's economic potential and opening markets.

Public funds to support the corridors are critical, but they need to be used strategically, leveraging private sector investment and being judiciously applied only where and when needed most. The right international trade and development policies are also critical, and the time is right for a new approach that will support rather than undermine development of Africa's regional markets and use trade policy to encourage the development of new innovative opportunities in agriculture rather than preserving an outdated status quo that does not work to Africa's advantage. With the right mix of governance, political will and policy support, both within Africa and internationally, the Development Corridors really do have the potential to spur regional market development and unlock the potential for a dynamic agricultural sector capable of delivering real food security on the African continent and beyond.

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## Endnotes

<sup>1</sup> Farming First has produced a very useful interactive map of food security initiatives currently underway around the world, which can be found at [www.farmingfirst.org/foodsecurity/](http://www.farmingfirst.org/foodsecurity/)

<sup>2</sup> International Food Policy Research Institute, “Assuring Food and Nutrition Security in Africa by 2020” (2004).

<sup>3</sup> The Intergovernmental Panel on Climate Change warned in its 2007 report that by 2020 climate change could lead to a 50 percent cut in rain-fed farm yields in many African countries (Intergovernmental Panel on Climate Change, *Climate Change 2007 Synthesis Report*, 2007). As much as 96 percent of African agriculture is rain-fed rather than irrigated.

<sup>4</sup> For example, political borders “separate surplus millet and sorghum producers in southern Mali and Burkina Faso from deficit markets in half a dozen surrounding countries; surplus maize and bean producing zones of Uganda from deficit markets in Kenya, southern Sudan and Rwanda; food surplus northern Mozambique and southern Tanzania from intermittently deficit markets in Malawi and eastern Zambia; and livestock exporters in Mali, Mauritania, and Niger from coastal markets all across West Africa.” Haggblade, 2010.

<sup>5</sup> Regional trade in agriculture has increased from 15 percent to 19 percent; regional trade in food has increased from 15 percent to 20 percent.

<sup>6</sup> In some countries, up to 90 percent of rural livelihoods are focused around agriculture. World Bank, *World Development Report 2008: Agriculture for Development*, Washington, DC 2008.

<sup>7</sup> World Bank, *World Development Report 2009: Reshaping Economic Geography*, Washington, DC, 2009.

<sup>8</sup> Vivien Foster & Cecilia Briceño-Garmendia, PowerPoint presentation based on *Africa’s Infrastructure: A Time For Transformation*, World Bank, 2009. Presented March 2010.

<sup>9</sup> Peter Hall, “World Cities, Mega-Cities and Global Mega-City-Regions,” 2004 Globalization and World Cities (GaWC) Annual Lecture, Loughborough University: January 2004.

<sup>10</sup> John Arnold, “Best Practices in Management of International Trade Corridors,” The World Bank Group, Washington, D.C., December 2006.

<sup>11</sup> Bruce Stokes, “Failure to Launch,” *National Journal*, February 12, 2011.

<sup>12</sup> Rachel Tate “Can Development Corridors Now Produce Sustainable Domestic Outcomes in Mozambique?” BISA Conference Paper, April 25-27, 2011.

<sup>13</sup> Dave Perkins and Glen Robbins “The Contribution to Local Enterprise Development of Infrastructure for Commodity Extraction Projects: Tanzania’s Central Corridor and Mozambique’s Zambezi Valley,” Making the Most of Commodities Programme (MMCP) Discussion Paper No. 9 March 2011.

<sup>14</sup> Perkins and Robbins (2011).

<sup>15</sup> NEPAD Spatial Development Programme Description and Implementation Arrangements, July, 2006.

<sup>16</sup> “Trade Facilitation to Promote Intra-African Trade,” Committee on Regional Cooperation and Integration, Addis Ababa, Ethiopia, March 24-25, 2005.

<sup>17</sup> Transport costs can account for up to one-third of GDP and can represent much of the export value for many landlocked countries. In Rwanda, for example, transport costs account for up to 40 percent of the value of coffee exports. “Land Transport for Exports: The Effects of Cost, Time and Uncertainty in sub-Saharan Africa,” Washington, DC: U.S. International Trade Commission, 2009.

<sup>18</sup> Paul Collier, *The Bottom Billion*, Oxford University Press 2007.

<sup>19</sup> Nuno Limao and Anthony Venables, “Infrastructure, Geographical Disadvantage and Transport Costs,” Mimeo, World Bank, Washington, and Columbia University, New York (2000).

<sup>20</sup> Perkins and Robbins (2011).

<sup>21</sup> Limao and Venables (2000).

<sup>22</sup> In 1999, 34 percent of the paved roads and 68 percent of the unpaved roads in the COMESA region were in poor condition. *Supra*, Note 19.

<sup>23</sup> Van Dijk, (2011).

<sup>24</sup> Souleymane Coulibaly, “Landlockness, Transit and Road Quality in West Africa,” HEC University of Lausanne and TEAM, University of Paris, November 17, 2004.

<sup>25</sup> The Central Corridor connects the port of Dar es Saalam to the region’s Great Lakes hinterland, extending into Rwanda, Burundi, the Democratic Republic of Congo and Uganda.

<sup>26</sup> The Northern Corridor connects landlocked Eastern and Central Africa, namely Burundi, the Democratic Republic of Congo, Rwanda (by road) and Uganda (by road and rail), to the port of Mombasa in Kenya, with links into Northern Tanzania, Southern Sudan and Ethiopia as well.

<sup>27</sup> World Bank, “Non-Tariff Measures on Goods Trade in the East African Community,” Synthesis Report Prepared for the East African Community, September 29, 2008.

<sup>28</sup> *Id.*

<sup>29</sup> UNECA, Economic Report on Africa “Developing African Agriculture Through Regional Value Chains,” Chapter 4, “Challenges to Agricultural Development in Africa,” 2009.

<sup>30</sup> *Supra*, Note 30.

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- <sup>31</sup> Arnold, (2006).
- <sup>32</sup> LM Harmon, B Simataa and A van der Merwe “Implementing Facilitation on Trade and Transport Corridors,” Proceedings of the 28<sup>th</sup> Southern African Transport Conference (SATC 2009), Document Transformation Technologies, Pretoria, South Africa, July 6-9, 2009.
- <sup>33</sup> Productivity enhancement, trade development and the development of secondary feeder roads to facilitate densification are critical to SDIs and Development Corridors. Thomas (2009).
- <sup>34</sup> *Supra*, Note 30.
- <sup>35</sup> Simeon Djankov, Caroline Freund, Cong Pham, “Time Costs as a Barrier to Trade,” World Bank Policy Research Working Paper 3909 (2009).
- <sup>36</sup> Gael Rabelland, Jean-Francois Marteau, Charles Kunaka, Jean-Kizito Kabanguka, Oliver Hartmann, “Lessons of Corridor Performance Measurement,” Sub-Saharan Africa Transport Policy Program, Discussion Paper no. 7 Regional Integration and Transport – RIT Series, May 2008.
- <sup>37</sup> Weak infrastructure and intra-regional trade barriers particularly impact agricultural trade, as do low technology, poor skills, high internal taxes, continued dependence on a small number of commodities, high transport costs, the spread of HIV/AIDS and pricing and marketing policies that penalize small farmers. Todd Moss and Alicia Bannon, “Africa and the Battle over Agricultural Protectionism,” Washington, DC: Center for Global Development, 2009.
- <sup>38</sup> While the costs of transport delays are significant, the benefits of reducing transport times can be immediate and transformative. Mali and Senegal signed a border cooperation agreement that reduced the number of checkpoints from twenty-five to four, and transport time quickly went from seven to ten days to just one or two. “Doing Business in Landlocked Economies,” Washington, DC: World Bank Group, 2009.
- <sup>39</sup> Arnold (2006).
- <sup>40</sup> The Maputo Corridor connects South Africa’s Gauteng industrial center with the Maputo port in Mozambique, linking to Swaziland, Botswana and Zimbabwe as well.
- <sup>41</sup> The Trans-Kalahari Corridor is one of the three corridors that make up the Walvis Bay Corridor. It connects Johannesburg and Pretoria through Botswana and Namibia, linking to Zambia and Zimbabwe as well.
- <sup>42</sup> See, e.g., Arnold (2006).
- <sup>43</sup> Arnold (2006).
- <sup>44</sup> Arnold (2006).
- <sup>45</sup> *Supra*, Note 19.
- <sup>46</sup> Adzigbey, Kunaka and Mitiku (2007).
- <sup>47</sup> Rabelland, Marteau, Kunaka, Kabanguka, and Hartmann (2008)
- <sup>48</sup> The Abidjan-Lagos Corridor connects Cote d’Ivoire to Nigeria and passes through Ghana, Togo and Benin.
- <sup>49</sup> It is currently more expensive to move product from Abidjan to Lagos than to import the same product from China or India. See Business Action for Africa, Business Partnerships for Development in Africa, December 2010.
- <sup>50</sup> The North-South Corridor has been supported by donors including DFID, the U.S. Department for International Development (USAID) and the Japan International Cooperation Agency (JICA).
- <sup>51</sup> Van Dijk (2011).
- <sup>52</sup> Van Dijk (2011).
- <sup>53</sup> Van D (2011).
- <sup>54</sup> For example, coffee exports to the European Union require compliance with complicated SPS and TBT measures (including labeling and packaging requirements), and individual member countries can impose different standards, as do different trading partners including the United States. United Nations Conference on Trade and Development, “Rwanda’s Development-Driven Trade Policy Framework,” New York and Geneva: 2010.
- <sup>55</sup> For example, this is a particular problem in the EAC. See, e.g., *supra*, Note 30.
- <sup>56</sup> For example, a recent study examining the SPS regimes in the United States and Europe for both green beans and shrimp (products commonly exported by developing countries) highlights unnecessary differences in U.S. and European approaches that complicate the export of these products, particularly for producers hoping to serve both markets. Currently, exporting horticultural products to the EU is relatively easy, while exporting seafood is more difficult; the reverse is true of the U.S. market. Linda R. Horton and Elisabethann Wright, “Reconciling Food Safety with Import Facilitation Objectives: Helping Developing Country Producers Meet U.S. and EU Food Requirements Through Transatlantic Cooperation,” Washington, DC: International Food and Agricultural Trade Policy Council, 2008.
- <sup>57</sup> Monty Roodt “The Impact of Regional Integration Initiatives and Investment in a Southern African Cross-Border Region: The Maputo Development Corridor,” African Sociological Review 12, 1, 2008, pp. 88-102.
- <sup>58</sup> Adzigbey, Kunaka and Mitiku (2007).
- <sup>59</sup> Reference to K Dunn and J Hertz, “Renationalization, the State and Human Security, Development in Africa: Thoughts for Advancing the Debate,” in A. Grant and F. Soderbaum, New Regionalism in Africa, Op cit, p. 189 in Tate (2011).
- <sup>60</sup> Thomas (2009).
- <sup>61</sup> Gold mining in Tanzania will be the Central Corridor’s anchor investment. The Northern Corridor’s Council of Ministers also mandated that it be transformed into a Development Corridor using SDI, and a new Northern Corridor Agreement was signed in 2007 to this end. See Perkins and Robbins (2011) and Adzigbey, Kunaka and Mitiku (2007).

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<sup>62</sup> Paul Collier, “The Coming Scramble for Africa’s Resources Needs a New Rulebook,” *Europe’s World*, May 20, 2011.

<sup>64</sup> Rosalind Thomas, “Development Corridors and Spatial Development Initiatives in Africa,” January 2009.

<sup>65</sup> Based on conversations between Susan Sechler and Simon Zadek.

<sup>66</sup> See Non-Physical Barriers to Foreign Direct Investment and Trade for SADC Development Corridors, Draft Final Report, Prepared for SDI Programme by CSIR Transportek and Consilium Legis February 11, 2005.

<sup>67</sup> Different corridors have different and often goals, including agricultural development, trade facilitation and development. Several, including the Abidjan-Lagos Corridor, which is the busiest corridor in Western Africa connecting the five countries of Cote d’Ivoire, Ghana, Togo, Benin and Nigeria through the ports of Abidjan, Accra, Lome, Cotonou and Lagos, and the Walvis Bay Corridor, address health concerns as well as economic priorities and place a high priority on addressing the transmission of HIV/AIDS along the corridor. Adzigbey, Kunaka and Mitiku (2007).

<sup>68</sup> Yao Adzigbey, Charles Kunaka and Tesfamichael Nahusenay Mitiku, Institutional Arrangements for Transport Corridor Management in Sub-Saharan Africa, Sub-Saharan Africa Transport Policy Program, SSATP Working Paper No. 86 October 2007.

<sup>69</sup> The Commission for Africa estimates that between \$20-40 billion is needed to build and upgrade Africa’s infrastructure networks, with an additional \$40 billion per year needed for upkeep. “Our Common Interest: The Report of the Commission for Africa.” London: The Commission for Africa, March 2005.

<sup>70</sup> Perkins and Robbins (2011).

<sup>71</sup> The Hewlett Team was led first by Ann Tutwiler (Director of Agricultural Markets at the Hewlett Foundation, now Deputy Director General of the FAO); and then by Kurt Hoffman, former director of the Shell Foundation and currently president of Enterprise Answers and Susan Sechler, senior advisor to the Hewlett Foundation, now managing director of TransFarm Africa, Inc. The team also included Julie Howard, the president of the Partnership to Cut Hunger and Poverty in Africa, now deputy coordinator for development, *Feed the Future* at USAID; Dr. Eugene Terry, agriculture and development specialist and senior technical advisor for TransFarm Africa, Inc.; Katrin Kuhlmann, resident fellow at the German Marshall Fund, now senior fellow and director of TransFarm Africa “Removing the Barriers” at the Aspen Institute and Adjunct Professor of trade and development at Georgetown University Law Center; Joe Guinan, consultant to the Hewlett Foundation’s Global Development Program and a fellow at the German Marshall Fund, now director of the TransFarm Africa Initiative at the Aspen Institute; Leanne Sedowski, program associate at the Hewlett Foundation and now a program officer at the Aga Khan Foundation; Mimi Alemayehou, consultant to the Hewlett Foundation, now executive vice-president of OPIC; Ambassador John Simon, consultant to the Hewlett Foundation, now founding partner of Total Impact Advisors and senior financial advisor for TransFarm Africa, Inc; Jason Clay at World Wildlife Fund; and Simon Winter, senior vice-president of development at TechnoServe. Some of our corridor experts include Dr. Paul Jourdan, deputy director general in charge of special projects at the Department of Trade and Industry and former CEO of Mintek, now vice-chairperson of COEGA Development Project; and Dr. Rosalind Thomas, Director of NEPAD Regional Integration and Trade, now senior program advisor for TransFarm Africa activities at the NEPAD Business Foundation. Our financial experts and partners are Bim Hundal, Clemens Calice and Christopher Egerton-Warburton, partners at Lion’s Head Global Partners. During the course of the 4 year consultation leading to the formation of TransFarm Africa, we took the time and got the advice from a diverse set of stakeholders and experts in Africa, the United States and Europe and we would like to thank all of you for your assistance. Recent contributions have been made by Scott Andersen and Jung-ui Sul at Sidley Austin LLP, Kerri Wright Platais, and Peggy Clark and Fatoumata Barry at the Aspen Institute.

<sup>72</sup> The Central, Northern and Abidjan-Lagos Corridors, among others, highlight the importance of donors in encouraging multi-state corridors when countries might be initially reluctant to act before the regional benefits become apparent. Adzigbey, Kunaka and Mitiku (2007).

<sup>73</sup> The United States restricts opportunities to export sugar and other commodities through a burdensome system of tariff-rate quotas that make it either impossible or commercially unviable to access the U.S. market, often despite significant U.S. demand. The current U.S. tariff-rate quota system for sugar gives quota allotments based on trade flows between 1975-1981, when the sugar market was last relatively “open.” Based on this measurement, countries with an exportable surplus of sugar like Zambia do not receive a quota share at all. Mozambique, which is also competitive in sugar, receives a small quota share, but with out-of-quota tariffs approaching 200 percent and the impact the tiny quota has on shipments (i.e. shipping such a small amount may not be feasible or commercially viable), this does not make much of a commercial difference.

<sup>74</sup> As a direct result of Europe’s announcement of its Everything But Arms (EBA) program, which would, over time, grant least developed countries duty-free, quota-free access to the European market, Mozambique’s sugar trade with Europe went from zero in the year 2000 when EBA was announced to over 130,000 metric tons in 2008, with steady increases each year. Investment and job creation quickly followed the announced change in trade policy, and South African-based investors have opened several new mills in Mozambique alone.