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Chapter

PRIVATE INTERNATIONAL INVESTMENT WITHIN THE SUB-SAHARAN AGRICULTURAL MILIEU

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ABSTRACT

Implementing national strategic aid, development, and trade investment in sub-Saharan Africa on the back of new private sector investments and leveraging corporate social responsibility is a growing international trend. International private industries seeking to become involved in the sub-Saharan region will gain from access to existing knowledge, networks, and experience of governments and institutions that have had long-term sub-Saharan involvement, particularly for political access and avoiding common pitfalls. Similarly, a central challenge for sub-Saharan governments is coordination to enable a consistent and balanced private sector investment and associated national returns for critical institutions and infrastructure that stimulate a number of major economic sectors.

Therefore, a two-way communication and understanding between international and sub-Saharan institutions are required at various levels (governments, private sector, etc.) for mutual benefit. This work outlines areas of significant cross-sector collaborative investment opportunities through international private sector entities and notable complexities of agricultural, environmental, economic, and social elements unique to sub-Saharan Africa.

Keywords: Aid; development; investment; agriculture; infrastructure; productivity

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1. INTRODUCTION

The first Parliamentary ‘Inquiry into Australia’s relationship with the countries of Africa’ was released in June 2011 by the Joint Standing Committee on Foreign Affairs, Defense and Trade. The inquiry noted that to distinguish Australia from other ‘Western nations’, a broad strategy comprising aid, development, security, trade, and investment should be implemented through the considerable natural resource investment and experience in corporate social responsibility of Australian companies (Joint Standing Committee on Foreign Affairs Defence and Trade, 2011). This inquiry is simply one of the most recent examples of the long historical list of international governments recognizing the major future potential of the sub-Saharan region as a potential economic power, and also for securing access to African resources in support of national and private interests. Historically, countries including Sweden, Germany, USA, and more recently China, have large interests in sub-Saharan Africa. The renewed surge of international interest, particularly regarding Africa’s landscape as a new source of primary productive wealth (Lynd & Woods, 2011; Opara, 2011), is clearly related to global strategic food, land, water, resources, and energy competition (Godfray et al., 2010). Despite this most recent surge in interest, there is at present relatively little private investment, and rural sub-Saharan populations still often remain in extreme poverty and continue to endure basic food, water, and service shortages (Coungara & Moder, 2011).

Sub-Saharan Africa faces exceptional challenges in relation to rural institutions, infrastructure, and market development (Woodhouse, 2009). Food insecurity persists due to poverty, degraded lands, armed conflict, inadequate infrastructure, outdated knowledge and technology, and poor records of attracting international investment (Olsefski, 2009; Lynd & Woods, 2011). This is despite agriculture typically representing 20 to 40% of collective sub-Saharan national GDP (Godfray et al., 2010), and the past several decades have seen billions of national and international investment aimed at increasing rural sub-Saharan economic development – in many cases for very little obvious result (Opara, 2011). As more than half of the sub-Saharan population lives in agricultural areas, the sector is a fundamental cornerstone of economic development (Rosegrant et al., 2009; Opara, 2011). Over the past 50 years sub-Saharan food crop average productivity has become stagnant while the rest of the world’s agricultural productivity has grown to become three times greater (Rosegrant et al., 2009; Jayne et al., 2010). Yet even the poor sub-Saharan average masks the considerable variability in productivity across the region (Jayne et al., 2010). The region is estimated to represent around 60% of global uncultivated lands, with agricultural productivity potentials at least three times higher than current levels (Opara, 2011). Nevertheless, there remain significant prospects for co-investing in new rural industrial capability that can spur growth that advances both food and water security (Africa Recovery, 2003; McHenry, 2011). As agriculture accounts for 70% of African total employment, 65% of which are women (Opara, 2011), the political implications of involvement in rural regions are considerable. Clearly, political and legal structures have contributed to the underprivileged profile exhibited by many African states (Makinda, 2004), and it is necessary to gather and understand detailed localized politics to avoid implementing inappropriate strategies which misallocate resources (Werblow & Williams, 1998). Thus, international private industries seeking to become involved in Africa will gain from understanding and having access to the enormous number of opportunities through regional knowledge, networks, and experience of African

governments and international institutions with long-term involvement in Africa (Obiyo, 2011). This is particularly crucial for entities seeking to gain political access and to avoid common pitfalls. In this chapter we discuss the significant cross-sectoral collaborative investment opportunity for international private sector involvement in the complex milieu at the agricultural, environmental, economic, and social interface unique to sub-Saharan Africa.

2. RURAL RAIL AND ROAD TRANSPORT INFRASTRUCTURE AND TECHNOLOGY

A comprehensive understanding of rural infrastructure should assist appropriate sequential involvement in rural areas (Crawford et al., 2003). The low productivity of African agriculture has been of concern since at least the 1930s (Woodhouse, 2009). Productivity stagnation is associated with increasingly unpredictable rainfall regimes, limited postharvest technology, low fertilizer use, low irrigation rates, negligible pest and disease control, lack of mechanization, poor transport infrastructure, and generally low rates of new technology adoption (Coungara & Moder, 2011). As such, rural populations tend to cluster around areas with access to services and markets, often near highways and other crucial physical infrastructure which underpin the rural economies (Meeuws, 2004; Woodhouse, 2009; Jayne et al., 2010; Spielman et al., 2010). Poor transport infrastructure reduces competitiveness of all industries in a region (Meeuws, 2004). Outside of South Africa, sub-Saharan rail lines typically involve an isolated single track line connecting a trading centre or mine with a port, with few branch lines with unreliable signaling, leading to major safety concerns (Meeuws, 2004; Bullock & Gwillam, 2009). Historically rural areas of sub-Saharan Africa have been plagued by poor transport infrastructure maintenance regimes, high freight transport costs, and unpredictable railway scheduling (Meeuws, 2004). In response, major sub-Saharan mineral projects, ports, and railroads have seen many institutional changes, including major privatizations and foreign investments (Meeuws, 2004; Bullock & Gwillam, 2009). Whilst several mining companies have proposed long dedicated mineral lines, the benefits of rail for bulk commodity transport such as minerals is less clear for medium-distance general freight requiring road transport to and from railheads. In theory, sub-Saharan railways should be the most economical mode to transport general freight over 500 to 800 km and bulk commodities over shorter distances. However, rail lines with less than 250,000 tonnes of annual traffic at US\$0.05 per net tonne-km only support routine rail maintenance, yet average rail freight tariffs generally range from US\$0.03 to 0.05 per net tonne-km (Bullock & Gwillam, 2009). (Note that the unit 'net tonne-km' represents the load of the freight, as well as the distance travelled on a per km basis). Current backhaul loads in Sub-Sahara are often cement, petroleum products, and general freight (Bullock & Gwillam, 2009; Spielman et al., 2010). New large rail backhaul loads may be fertilizer imports, as existing commercial fertilizers are of limited type and low availability in many regions (Spielman et al., 2010). At present current backhaul loading rates rarely leaves rail lines fully-loaded in both directions. It is common for the high cost of sub-Saharan road haulage between the rail lines and ultimate destination to negate any advantage from using rail. This has resulted in an increase in inter-modal transport competition for industrial-scale transport services (Meeuws, 2004; Bullock & Gwillam, 2009). From an economic perspective, the lower capital costs of road construction

relative to rail for smaller loads would preclude rail investments from annual traffic below two to four million tonnes (Bullock & Gwillam, 2009). Such empty backhauls and small journeys create a transport market open to higher cost manipulation (Lall et al., 2009), and road freight in rural areas tend to backhaul at marginal cost, outcompeting rail for such services (Bullock & Gwillam, 2009). In general, the cost of moving the same tonnage per km in rural Africa is generally around an order of magnitude higher than in the African cities, even with the same vehicle (Lall et al., 2009). While road infrastructure in Africa in general has slightly improved in recent decades with 80% of the arterial roads being in good or fair condition (Gwillam et al., 2009), the quality of the trunk road is often not the primary constraining factor in rural transport, as feeder roads often have a disproportionate bearing on transport costs (Lall et al., 2009). Initial prioritization of investment in feeder roads would be most beneficial in connecting rural areas with high agronomic potential with large populations located near major trade routes and markets (Meeuws, 2004; Lall et al., 2009). As it stands, rural roads in agricultural areas clearly inadequate, with only one-third of inhabitants living within two km of an all-season road, yet consistent road financing is a major ongoing challenge (Gwillam et al., 2009).

Whilst transport infrastructure quality is fundamental, the market structure of the transport industries heavily influences road transport costs and cost recovery (Lall et al., 2009). While initial investment in such 'hard' infrastructure is important, the primary aim is to ensure cost-effective, reliable, and safe transport services over time in a region (Gwillam et al., 2009). The cost of transporting goods in sub-Saharan is highly sensitive to local competition among transport providers at varying scales and diversity (Lall et al., 2009). At present, rural communities are exploited by transport monopolists and commonly pay dearly for transport services (Gwillam et al., 2009). This is despite sub-Saharan trucking operational costs being comparable to the rest of the world, even when 'informal payments' are included (Foster & Briceno-Garmendia, 2009). Therefore, a multifaceted, consistent, and collaborative approach for rural road and rail investments will be required to have the largest influence on regional productivity and market access (Gwillam et al., 2009; McHenry, 2011).

3. TRANSFER OF NEW COMMUNICATION, POST HARVEST AND IRRIGATION TECHNOLOGY IN RURAL AREAS

Farming technology in many regions of sub-Saharan Africa is well behind modern nations with little mechanized production, processing and transport (Opara, 2011). Introducing postharvest technology in developing countries is a major opportunity, as the limited access to suitable knowledge, storage technologies and transport infrastructure often require simple investments in transfer of existing technology (Opara, 2006, 2009; Godfray et al., 2010; Opara, 2011; McHenry et al., 2012). Currently, around 50% of sub-Saharan 'bumper' crops may be lost due to lack of market and post harvest handling technology which limits trade to even nearby villages (Opara, 2011). Many post harvest technologies are public goods (pest management, water harvesting, vegetation management, etc.) and can be relatively inexpensive (Woodhouse, 2009). Without such technology and knowledge many rural agricultural producers may not be able to meet quality, reliability, safety, and

consistency standards even when market access exists (Opara, 2006). Achieving higher agricultural productivity is reliant on also the 'soft' elements of technology investments that are related to local workforce training, skills, and knowledge transfer (Africa Renewal, 2008). The growing rural uptake of new telecommunication technology will likely influence how the sub-Saharan agricultural sector evolves, particularly in relation to value chain finance, management, and market information (Opara, 2006; Mhlanga, 2010). Facilitating a flourishing skilled labor force will be a fundamental challenge, yet is necessary, particularly in the post-harvest technologies and service sectors such as agribusiness and primary product value addition (Mhlanga, 2010).

In addition to food security, recent droughts in Sub-Sahara expose pervasive water insecurity and associated water storage deficiencies (Foster & Briceno-Garmendia, 2009). Only seven million ha of the total 197 million ha of cultivated land in sub-Sahara is currently equipped for irrigation (Rosegrant et al., 2009), and sub-Saharan agriculture has a very low surface water utilization (2-3%) when compared to other nations (Woodhouse, 2009). This is despite the higher profitability of irrigated lands accounting for around one quarter of the value for sub-Saharan agriculture, produced from only 3.5% of cultivated lands (Rosegrant et al., 2009). With best practice water infrastructure investments, a further 5-7 million ha are agro-ecologically and economically viable for small-to-medium scale irrigation schemes (Foster & Briceno-Garmendia, 2009; Rosegrant et al., 2009). An additional 1.4 million ha are amenable for large-scale irrigation schemes that may be retrofitted to existing hydropower stations (Foster & Briceno-Garmendia, 2009; Rosegrant et al., 2009). However, much existing irrigation land (1.7 million ha) has fallen into other uses due to infrastructure maintenance issues (Foster & Briceno-Garmendia, 2009). Experience has shown that irrigation and regional water infrastructure investment decision-making should be as decentralized as possible and focus on economically sustainable operators able to install and maintain water infrastructure, which often precludes small-scale farms (Levite & Sally, 2002; Foster & Briceno-Garmendia, 2009; Rosegrant et al., 2009). Irrigation projects funded by international donors dropped dramatically (~90%) in the 1990s (Rosegrant et al., 2009), and as a result, poorer regions are unable to pay for commercial irrigation water as distribution component costs are between USD2,000 to 3,000 per irrigated ha for small and large-scale operators, respectively (Levite & Sally, 2002; Rosegrant et al., 2009). Therefore, the cultivation of high-value crops, including horticultural products, will likely be required to cover additional costs of irrigating land (Rosegrant et al., 2009).

4. GOVERNANCE, CORPORATE SOCIAL RESPONSIBILITY AND PRIVATE SECTOR

In response to growing community demands and strategic commercial incentives, international companies are assessing social impacts and benefits both during project operations and also after project decommissioning (Solomon et al., 2008; McHenry, 2011). While corporate social responsibilities are usually associated with philanthropy (Kivuiti et al., 2005), private sector returns must be sufficient to justify an investment in social programmes (Bullock & Gwillam, 2009). Such programmes often involve institution building, capacity

strengthening, education and training, regional health, and local infrastructure development (Speelman et al., 2010). As such, collaborative partnerships are often required between companies, stakeholders and governments to meet economic and social needs beyond direct employment, business opportunities, royalties, taxes, and community sponsorships (Department of Industry Tourism and Resources, 2009). However, international corporations' understanding of social impacts is around one decade behind their environmental management practices (Solomon et al., 2008), and while social impact and engagement can be rewarding, it is also challenging (Department of Industry Tourism and Resources, 2009). Private sector transparency is fundamental in social programmes (Jayne et al., 2010), and engagement can be particularly delicate within health, governance, official requirements, and corruption elements, which are not straightforward propositions (Meeuws, 2004).

Broad stakeholder participation is essential to ensure effective social programme decision-making with subsequent implementation monitoring to determine efficacy (Werblow & Williams, 1998). However, to date many enterprises' understanding of social research is mixed, with some suspicion as to how researchers may 'take sides' and potentially hinder development approvals (Solomon et al., 2008). Common gaps in understanding how a 'social license' operates in sub-Saharan include: corporate social approach towards human rights; community and regional development; governance and government relations; careers and training of workers; and proper working conditions including safety, fly-in fly-out, and shift-work arrangements; the participation of women generally (both as workers and as partners of workers); and general social cohesion (Werblow & Williams, 1998; Solomon et al., 2008). Particularly in sub-Saharan Africa, international companies are increasingly required to build regional capacity, identify best practice, transfer knowledge, and facilitate effective public-private partnerships prior to, during, and after an individual projects' operational lifespan (Werblow & Williams, 1998). Clearly, generating appropriately balanced levels of public and private sector investment to accelerate sustainable rural development in sub-Saharan Africa remains a major challenge (Speelman et al., 2010). While the development of African Union has enabled much progress in member nations, decision-makers continue to possess little information regarding the nature of poverty and incomplete knowledge of the processes that affect it (Werblow & Williams, 1998). Yet, effective governance is a necessary pre-condition to successful public good provision and market development (Jayne et al., 2010).

Even resource-rich sub-Saharan countries often lag behind other comparable nations in their basic infrastructure and industry standards. In terms of political reform in sub-Saharan Africa, it is telling that successful implementation has predominantly occurred in sectors that were not strategically important at the time and arose in parallel with government fiscal crises (Jayne et al., 2002). Thus, international investments and policy can facilitate both reform and the transfer of best practice procedures. One example is the mine closure legislation recently developed by the Western Australian (WA) Department of Mines and Petroleum. This legislation may be appropriate for companies involved in WA resources sector to transfer into their African operations. As local African programmes are often under-resourced, private sector investment must be enabled to assist the transfer of best practice and/or reform (McHenry, 2011). Adequate regulatory reform is also required to prevent control by monopolistic behavior (by both government and private entities) (Werblow & Williams, 1998). As such, the large region and diversity of the sub-Saharan region exhibits commensurate opportunities and challenges (Opara, 2011). Crucially, where government

accountability, capacity, co-ordination, and ownership of a programme do not exist, the private sector should carefully reassess involvement (Werblow & Williams, 1998).

5. CONCLUSION

The mixed results of either state-only or market-based policies to support rural development in sub-Saharan Africa necessitates a detailed understanding of locally appropriate options for public and private collaboration. Using sectorally-focused development programmes have the ability to improve the quality of government activities, yet the sectoral approach then becomes conditional on governmental strategy, accountability, capacity, and co-ordination (Kariuki & King'oo, 1998; Werblow & Williams, 1998). Therefore, ideally national governments and their private (national or international) industrial investors should align resources to gain efficiencies in African involvement in development and infrastructure strategies and planning with a wider scope and larger scale. However, a clear and measurable definition of the time-based objective of an investment or intervention is crucial (such as increase food production volumes, reduced food spoilage, increased yields, reduced transport costs, etc.) over a specified period of time (Crawford et al., 2003).

As new investment is central to sub-Saharan development, an active focus on striking an effective balance of private and public partnerships to extract suitable private and public benefits/goods is essential for the region. The central question for global rural development policy in relation to Africa is how to support various national governments and businesses to make the critical institutional and infrastructural investments that can stimulate and sustain appropriate development of the major regional sectors over time (Jayne et al., 2002). In the recent past, the private sector in Africa was inexperienced and undercapitalized (Lynd & Woods, 2011), yet it is now becoming apparent that a closer public sector engagement in political and economic affairs would support a greater private sector investment in Africa. For international private sector interests involved in sub-Saharan countries, the opportunities of proximal European, north African, and Asian markets is a strategic opportunity that will likely require government assistance to secure over time. Therefore, two-way communication and a detailed understanding between international and sub-Saharan institutions are required at several levels (governments, private sector, etc.) for mutual benefit, particularly at the local rural community level. However, many of these opportunities require enormous investments in agricultural and other infrastructure, education, industry, governance, etc., and have notably long lead time horizons (Jayne et al., 2010). Therefore, a correspondingly long-term (>20 years) perspective is necessary for both private entities and governments, and benefits will likely follow if long-term, transparent, and equitable investments are made, and particularly in goods and services that are or close to non-excludable public goods.

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