



Policy Analysis and Advocacy Programme (PAAP)

Electronic Newsletter

3 May 2013

Volume 16 Number 8

OPPORTUNITIES FOR AFRICA IN UNLOCKING THE VAST POTENTIAL OF AGRIBUSINESS

There is evidence that good policies, a conducive business environment, and strategic support from governments can help agribusiness in Africa reach its potential. The continent is now at a crossroads, from which it can take concrete steps to realise its potential or continue to lose competitiveness—missing a major opportunity for increased growth, employment, and food security.

Agriculture and agribusiness together are projected to be a US\$1 trillion industry in Sub-Saharan Africa by 2030 (compared to US\$313 billion in 2010), and they should be at the top of the agenda for economic transformation and development. Agribusiness can play a critical role in jump-starting economic transformation through the development of agro-based industries that bring much-needed jobs and incomes. Successful investments in turn stimulate agricultural growth through the provision of new markets and the development of a vibrant input supply sector.

After decades of neglect, agriculture is again receiving attention from governments, investors and other partners, but their attention should extend to agribusiness. The attention focused on production agriculture will not achieve its developmental goals in isolation from agribusinesses, ranging from small and medium enterprises (SMEs) to multinational companies. The challenge is thus threefold: (1) develop downstream agribusiness activities (such as processing) as well as upstream activities (such as supplying inputs), (2) develop commercial agriculture, and (3) support and link smallholders and SMEs to productive value chains.

Agriculture and agribusiness together account for nearly half of gross domestic product (GDP) in Africa. Agricultural production is the most important sector in most countries, averaging 24% of GDP for the region. Agribusiness input supply, processing, marketing, and retailing add about 20% of GDP. Global experience suggests that with growing incomes and urbanisation driving the commercialisation of agriculture, the shares of both downstream and upstream agribusiness activities are poised for rapid growth.

Agricultural value chains are very diverse. Many have dualistic structures serving different markets—an informal sector, which often serves low-income consumers, and a formal sector, which accommodates high-income consumers and exports. Major opportunities exist to drive agribusiness development by upgrading informal value chains and linking them to formal value chains.

Strong growth opportunities for agribusiness

Both domestic and global markets are experiencing strong demand, which is likely to continue even as domestic demand accelerates. In the 1980s and early 1990s, when many African countries liberalised

their markets, declining world commodity prices negated many of the rewards expected from liberalisation. The return to economic growth in Africa since the 1990s, burgeoning urbanisation, and buoyant global commodity markets now provide unprecedented market opportunities to develop a competitive agribusiness sector.

Urban food markets are set to increase fourfold to exceed US\$400 billion by 2030, requiring major investments in processing, logistics, market infrastructure, and retail networks. The growing middle class is also seeking greater diversity and higher quality in its diets. The most dynamic sectors overall are likely to be rice, feed grains, poultry, dairy, vegetable oils, horticulture, and processed foods for import substitution, along with the traditional tropical exports and their derived products (especially cocoa, rubber, cashews, and palm oil), together with some higher-value horticultural crops, fish, and biofuels for export.

Most countries have a comparative advantage in agriculture. Africa has more than half of the world's agriculturally suitable yet unused land, and its impressive water resources have scarcely been tapped. Although rapidly growing local and regional markets could be partly and efficiently sourced from imports, its abundant natural resources, large and exploitable yield gaps, and an improving investment climate open major opportunities on the supply side, too.

Private sector interest in African agribusiness is unprecedented. The past decade has witnessed an upsurge, including interest from foreign investors and investment funds. International investors actively seek alternative venues to Asia and Latin America as a new source of supply and an opportunity for higher, risk-adjusted returns. The challenge is to harness this interest in ways that generate jobs, provide opportunities for smallholders, respect the rights of local communities, and protect the environment. Going forward, a key challenge is to curb speculative land investments or acquisitions that take advantage of weak institutions or disregard principles of responsible agricultural investment.

The size of the agricultural and agribusiness sector

The role of agribusiness increases with rising incomes. Globally, agribusiness is about 78% of value added in the agricultural value chain, but this share varies widely across income levels. The ratio of value added in agribusiness to that in farming is 0.6 in agriculture-based countries (in other words, most of Africa), but the ratio increases to 2 for transforming countries (mostly Asia), 3.3 in urbanised countries (mostly Latin America), and 13 in US.

The share of upstream and downstream agribusiness in total GDP rises to as much as 30% in middle-income countries, even as the share of primary agricultural production in the economy is falling rapidly. These trends reflect the commercialisation of farming to meet rising demand from urban consumers, leading to higher use of purchased inputs; increased services for machinery repair, finance, and retail; and much greater demand for processing, packaging, and transportation.

The growing role of processing is evident. Notwithstanding the low share of agribusiness in the value chain in Africa, a sizeable share of African manufacturing is based on agricultural raw materials. In the least developed countries, agro-processing accounts for 68% of the manufacturing value added.

The share of agro-industry in manufacturing value added is typically one-third to one-half and sometimes higher agriculture is highly diversified. Compared to Asia, where cereals made up 35% of agricultural value added prior to the Green Revolution, cereals make up less than 20% in West and Central Africa. The remaining value is from other staples (especially roots and tubers), horticulture, export crops, and livestock. Even among cereals, no single crop predominates in Africa, unlike rice and wheat in Asia. In Africa, maize is followed by sorghum, millet, and rice, and all are important.

Structure of agribusiness

The value chains are mostly made up of micro, small, and medium enterprises. The participants may consist of these, and semi-industrial and industrial enterprises distinguished not only by size but by their sources of labour, capital intensity, and the type of market they reach. In West Africa, 75% of agriculture-related firms are SMEs, 20% are semi-industrial, and 5% are industrial.

Employees are typically family members, and 50%–90% are women. The structure is determined by many factors and the organisation of value chains can differ substantially according to whether products are undifferentiated (bulk commodities) or differentiated primary products, semi-processed products, or ready for consumption, with quality and standards increasing in importance along that spectrum.

A further determining factor is the shelf life of a product. Many agricultural products require tight vertical coordination, either because they must be processed immediately after harvest (tea, sugarcane, and oil palm are some examples) or they have a relatively short time to reach the consumer before quality deteriorates and wastage sets in (as with fresh fruits, vegetables, and livestock products). Vertical coordination can sometimes be achieved in spot markets, but more often it requires contracts, joint ventures, or fully integrated operations. Horizontal coordination is often valuable for aggregation and realising market power, as with sales of products or bulk purchases of inputs or services.

This type of coordination typically is achieved through professional associations, cooperatives or joint ventures. The value chains are dualistic. Kenya's informal dairy value chain, for example, comprises smallholders and SMEs that provide 86% of the milk supply and delivers raw milk to lower-income consumers through small vendors. At the same time, larger dairy farms and processors provide pasteurized milk and processed dairy products via cool chains for sale to higher-income urban consumers through supermarkets. Likewise, despite a large and successful fruit and vegetable export chain dominated by medium to large enterprises, over 95% of them are produced for domestic markets and handled largely by an informal value chain of smallholders and SMEs.

Dualistic supply structures also exist where a few large firms (plantations) provide a bulk commercial product alongside an artisanal sector serving local rural markets and higher-income urban consumers. A good example is palm oil in West Africa, where oil harvested from wild trees and processed traditionally commands a higher market price.

Development impacts from investments also depend on interactions between informal and formal value chains. The sheer size of the informal ones means that progress cannot be made without improvements in performance. Such progress is essential to generate employment and foster inclusiveness, and it often requires informal value chains to link with formal value chains to gain vital capital, skills, know-how, and market contacts. Horticulture offers good examples of how connecting smallholders to more demanding domestic and export markets for horticultural crops injects new skills and provides new markets. At the same time, the investments that bring radically new technologies and organisational innovations can threaten existing SMEs that are unable to adapt quickly enough. The nascent supermarket revolution is one example. Other examples of these tensions and appropriate policy responses are noted throughout this report.

Strong market demand

Strong demand is driving global food and agricultural prices higher. Following a long period of decline, global prices have broadly risen since around 2000 in response to continuing growth in demand, rapidly rising use of biofuel feedstocks, and slowing growth in yields.

The same combination of population growth and rising incomes and urbanisation will continue to drive demand, especially for vegetable oils, horticultural crops, and livestock products (with derived demands for feed), as well as some industrial inputs, such as rubber. High energy prices and national biofuel mandates place a substantial additional burden on agricultural markets to provide biofuel feedstocks.

Supply issues are also driving up prices. Among the major crops—especially rice and wheat—global yield growth has slowed sharply since the 1980s in most countries due to the exhaustion of Green Revolution technology, a slowdown in research and development (R&D) spending in many countries, and increasing land degradation and water scarcity. Climate change is creating new uncertainties about future yields, given the projections of potentially large negative effects from climate change in many developing regions.

Water scarcity has become a major constraint because of competition from rapidly growing industrial sectors and urban populations. Given demand trends, all supply projections indicate that prices will be higher and more volatile relative to the past decade but probably lower than current high prices. In this new market climate, Africa has great potential for expanding its food and agricultural exports. Almost all successful cases of African agricultural exports involve commodities—cocoa, coffee, cotton, tobacco, tea, groundnuts, cashews, rubber, and more recently horticultural crops—that tend to be grown in restricted areas with specialised agro-climatic characteristics, which limits global supplies.

Many of these commodities also require large amounts of labour and/or land for production or processing, which gives a clear advantage to African producers with plentiful low-cost labour and/or land. In the long run, given the more favourable outlook for world markets, African countries with relatively good land and water resources and low population density should be able to tap booming markets in rice, maize, soybeans, sugar, palm oil, biofuel, and feedstocks and emerge as major exporters of these commodities on world markets, following the example of recent successes in Latin America and Southeast Asia.

With urban food markets set to quadruple over the next two decades, domestic and regional markets offer the most attractive opportunities in the medium term. Domestic and regional markets for food staples are already large in Africa, but they are growing rapidly, fueled by population growth and rising incomes. A rapidly increasing share of output will be commercialised as the continent becomes more urbanised. The urban population is projected to double by 2030, and with per capita income growing by 4% per year. If business as usual persists, imports will contribute significantly to those markets, despite the inherent comparative advantage of many African countries.

The explosion of urban markets provides unprecedented opportunities for upstream and downstream agribusiness industries. Urban consumers' demand for more processed and convenience foods will generate demand for the food manufacturing and services sector. It is estimated that the growth of these sectors will be equivalent to about one-third of the increase in the value of agricultural production. A more commercialised agricultural sector also generates demand for upstream industries providing seed, fertiliser, machinery, and associated services.

The diversity of Africa's agriculture and climate provides major opportunities for regional trade. At around US\$1 billion, the total intra-regional trade in food staples is a tiny fraction of the US\$25 billion food import bill. Many of the same food crops are grown throughout large parts of Africa, yet clear differences between countries in patterns of comparative advantage provide opportunities for regional trade. New markets are also emerging.

Recent initiatives to scale up production of biofuels using sugarcane, cassava, palm oil, and jatropha in Sub-Saharan Africa provide new markets for these commodities. It has been estimated that the regional biofuel market could reach US\$11 billion by 2030. An additional consideration is that most countries

enjoy special trade preferences with the European Union (EU), and a significant share of agribusiness investment in the region aims to produce biofuels for export to that market.

Positive factors on the supply side, too Africa is land rich. At a time when much of the world, especially Asia, faces an acute scarcity of land and water to expand agricultural production, Africa has an abundance of both. Almost half of the world's uncultivated land considered suitable for expanding crop production—nearly 450 million hectares that is not forested, protected, or densely populated—is in Africa. This area is more than double the currently cropped area. Just eight countries contain two-thirds of this uncultivated land (Sudan, South Sudan, D. R. Congo, Mozambique, Madagascar, Zambia, Angola and Tanzania), although it is often in places far from ports and roads.

Africa has scarcely tapped its water resources. It uses less than 2% of its renewable water resources, against a world average of 5%. Irrigation development, at less than 5% of cultivated area, lags behind every region of the world by far. Three countries (Sudan, South Africa, and Madagascar) account for two-thirds of the currently irrigated area, and only about half of this area is equipped for full or partial irrigation. Total economically exploitable irrigation potential is estimated to be at least 39 million hectares—four times the current level. Although a number of basins are experiencing or approaching water scarcity, the problem generally is not absolute scarcity as much as a lack of storage capacity.

Crop yields are way below potential. Crop models show that current maize yields reach only 20% of potential yields and that cash crops yields reach 30%–50%. These gaps far exceed those in other regions. Hundreds of thousands of on-farm demonstrations using “best bet” technologies for maize also suggest a wide yield gap of 60%–80%. An important consideration, however, is that Africa will be affected more than any other region by climate change. Large areas of Southern Africa are already subject to more frequent drought and heat stress. Another consideration is Africa's high level of post-harvest losses, which were recently estimated at around 15%–20% for cereals and higher for perishable products.

A better policy environment and strong private sector interest

The macro-economic environment for business investments has improved dramatically. From the 1960s to the 1980s, poor macro-economic policy was especially damaging to a tradable sector such as agriculture, along with high taxation of the sector. In 1980–1984, governments plundered African agriculture with an average price of exportables that was only about half of the world price equivalent; this fell to a 19% equivalent tax in 2000–2004 but remained the highest of any region. Although policy reform at the macro level is unfinished in much of Africa, overall investment incentives have improved dramatically.

Reforms at the sectoral level have also progressed but at a much slower pace. Most parastatal operations in agricultural markets have been scaled back. Even so, market interventions in several countries in the form of border restrictions and government purchases and sales of food staples continue to undermine private investment in food markets. Likewise, public expenditures on agriculture, which declined to only 4% of budget expenditures in the early 2000s, are only beginning to rise. Part of the increase has been in the form of input subsidies, however, rather than investments in public goods such as roads and R&D.

Africa has significant locational advantages, real and potential. Much of Africa is physically close to big markets in the Middle East and Europe. Some countries already capitalise on low backhaul air freight charges to Europe to export horticultural products. Better road networks and transport corridors are opening new markets; examples include exports into the Persian Gulf market from western Ethiopia via Port Sudan and the nearly completed Abidjan–Lagos highway. The creation of regional free trade zones progressed significantly—including the Economic Community of West African States (ECOWAS),

Common Market for Eastern and Southern Africa (COMESA), and Southern African Development Community (SADC)—although much remains to be done to make them truly operational. Special EU and US trade preferences provide further opportunities in new products such as biofuels and horticultural crops.

Private investment into emerging agribusiness markets is booming. Agriculture and associated industries are now favoured sectors for foreign direct investments, private equity investments, and sovereign wealth funds. Total foreign direct investment flowing into agriculture and agribusiness in developing countries was estimated at around US\$13 billion for 2006–2007. While much of this investment is targeted to Brazil and other Latin American countries, investors are also flocking to Africa, which received about US\$ 1 billion in that period.

Investment has been even more active since the 2008 food crisis, especially direct investment in farmland, although often to the detriment of local communities.²¹ While non-governmental organisations (NGOs) fostering private sector partnerships are enthusiastic about the interest of private investors, experience shows that speculative land investments do not automatically benefit local populations and end up compromising the rights of local communities.

Potentially large development impacts from inclusive growth

Agribusiness in Africa will undergo a major structural transformation in the coming years. To generate the jobs, incomes, and food so badly needed by Africa's growing population over the next 20 years, agro-industries need to undergo a structural transformation as profound as that required of farming. As discussed, the transformation of agro-industries and farming are inextricably linked, and the growth of vibrant agro-industries is essential to offer employment for the large number of smallholder farmers who are unlikely to farm their way out of poverty.

Agro-based industry can kick-start the development of broader manufacturing. On the one hand, agro-industry encourages locally based supply chains to develop; on the other, the agricultural sector provides material inputs for most early stage manufacturing, such as food processing, textiles, and leather. The lack of cheap and reliable supplies of such inputs is often the single largest constraint on the development of a competitive light manufacturing sector.

Agro-based industries can also provide the skills, services, and infrastructure for wider industrial development, especially if they are clustered. Examples include the palm oil clusters in Southeast Asia, which have led to downstream food industries; the maize-soy-poultry complex behind growing poultry exports from Thailand and Brazil; the sugarcane cluster in Brazil, which supplies the ethanol industry; and Pakistan's textile exports based on domestic cotton. In Brazil, it is estimated that districts where rapid sugarcane expansion occurred have built infrastructure and experienced an economic growth rate that is 0.5 percentage points higher than in comparable districts with little or no expansion. Such clusters are in their infancy in much of Africa.

Dynamic value chains that link to smallholders have the broadest benefits. Given the dominance of smallholders, broad-based economic growth will depend on connecting smallholders to markets. The state's failure to provide basic agricultural services, along with the lack of financial markets for deepening investments, opens opportunities to enter into contractual and other types of partnerships with smallholders to source raw materials. This setup works best where immediate post-harvest aggregating, processing, packing, or shipping facilitate the enforcement of contracts, such as with sugarcane, tea, oil palm, and fresh horticultural and dairy products.

Where smallholder production is not efficient, agribusiness investments can create good jobs. Smallholders find it difficult to participate in some industries in which demanding standards prevail, such

as fresh horticultural and floricultural exports, or in which processing benefits from large-scale production, such as sugarcane. These industries are typically labour intensive, however, and create jobs. For example, horticulture requires 3–5 times more labour per hectare than traditional smallholder agriculture. Even large-scale plantations such as sugarcane and oil palm plantations can be quite labour intensive. Realising the benefits of these industries requires investors to respect the land and water rights of local communities, uphold labour standards, implement appropriate environmental safeguards, and build “social capital.”

Other regions provide good examples of industrialization based on agriculture. In Thailand, successful agribusiness and agro-industry helped reduce rural poverty sharply from 60% in the 1960s to 10% in recent years. Malaysia and Indonesia also have become global players in agricultural markets while sharply bringing down poverty. Within Africa, Kenya and (until the 2000s) Côte d'Ivoire have had the most developed commercial agricultural and agro-industrial sectors and have provided many lessons for other African countries.

While this provides an optimistic view of the potential role of agribusiness in generating growth and employment in most African countries, it also recognises the challenges in realising that potential. The report does not pretend to provide a blueprint for moving forward, as constraints are specific to countries, regions, and value chains. Rather, based on international experience, it discusses ways of removing some of the more pervasive constraints.

The report, "Growing Africa: Unlocking the Potential of Agribusiness", by Derek Byerlee, Andres F. Garcia, Asa Giertz and Vincent Palmade, was published by The World Bank. It is available at <http://goo.gl/XBblB>

COMMUNICATION

Consultancy on Dairy Policy Options

ASARECA is seeking to engage a regional resource person to coordinate technical working groups developing policy options for animal feeds and forages, animal registration and breed performance evaluation, and movement of heifers and germplasm. The **full terms of reference** will be available on www.asareca.org after **6 May 2013**

Visiting Scholars Programme

The **African Economic Research Consortium (AERC)/Journal of African Economies** 2013-2014 Visiting Scholars Programme provides for short-term fellowships at **Centre for the Study of African Economies (CSAE), University of Oxford**. The programme enables the Fellow to distill a publishable journal article from their research and participate in the intellectual life at CSAE. Fellows are expected to attend all CSAE seminars and to present their own research in at least one of them. **Applicants** should have a PhD in Economics, affiliation with an academic institution or research centre in Sub-Saharan Africa, and publications in refereed journals. **Applications** should include: A letter stating what the applicant will do while at Oxford including proposed title(s) of paper(s) and outlines, if available; a copy of any completed AERC project reports; and a CV. They should be addressed to: Director of Research, AERC, Mebank Tower, Milimani Rd, P. O. Box 62882 City Square, 00200, Nairobi, Kenya. Tel: 254-20-2734150/3/7 or 2734163/6; fax: 254-20-2734170/3; e-mail: research@aercafrica.org. The closing date is **31 July 2013**.

PAAP received this announcement from AERC, which is gratefully acknowledged

Scholarships

College of Agricultural and Environmental Sciences, Makerere University received a grant from the Next Generation Cassava Breeding Project (NextGen Cassava) to support a number of students for a **Master's degree in Plant Breeding and Seed Systems** at the university for **2014/2015**. To be eligible, the applicants must be from Kenya, Rwanda, South Sudan and Tanzania, and be aged 35 years and below. They should have at least a first degree or its equivalent in Agriculture or a Bachelor of Science or Forestry or an equivalent. Those already working with the National Agriculture Research Institutions, Universities, Ministry of Agriculture and/or agriculture sector related government ministries will have added advantage. Submit an application letter, a copy of academic transcripts, a brief CV of not more than 2 pages, full contact addresses of three referees, and a brief letter of why they should be considered and research area of interest for the MSc. thesis. Send applications to: Att: Dr. Richard Edema, Coordinator (M.Sc. Plant Breeding and Seed Systems) Programme, CAES, Makerere University, P.O.Box 7062 Kampala. Tel: 256-77-2314511/079-3529838/075-0589335; e-mail: redema12@yahoo.com. **Deadline is 30 June 2013.**

PAAP received this announcement from CAES, Makerere University, which is gratefully acknowledged

Research call

Through the **Canadian International Food Security Research Fund**, the Canadian government will invest **CA\$62.5 million** to focus on improving food production and distribution in developing countries. **Project budgets** will be in the range of **CA\$1 million to CA\$5 million**. Through this call, the Fund is looking to harness the best of the private, public and non-governmental sectors to expand its research portfolio and lay the groundwork for scaling-up research results and innovations within a country, across a region, and possibly, across continents. For the Call for Concept Notes and associated documents, and application form, visit <http://goo.gl/BhjC1> Deadline is **5 June 2013**.

PAAP received this announcement from Pascal C. Sanginga, IDRC, which is gratefully acknowledged

Course

World Bank Institute announces a course **Climate-Smart Agriculture through Sustainable Land-Water Management**, which be held from **4 –22 November 2013**. It provides practical knowledge about how climate change is likely to impact agriculture, food production and security, and what actions can be taken to increase productivity, and build resilience to mitigate the negative impacts. The focus is on a few aspects relating to the triple-win nature of agriculture and good landscape management, through managing land and water, illustrating "how-to" achieve them with practical examples. It is targeted at leaders, policy analysts, professionals and practitioners who work on agricultural production, land and agricultural water issues. For more information on the course costs and mode of application, log on to <http://einstitute.worldbank.org/ei/course/climate-smart-agriculture-through-sustainable-land-water-management> Applications end on **28 October 2013**

PAAP received this announcement from The World Bank, which is gratefully acknowledged

This newsletter is an attempt to use e-communications to provide to a broad audience within and outside Eastern and Central Africa a mechanism for distribution and exchange of information relevant to agricultural policy issues. This newsletter is being sent to you as PAAP's stakeholder. We want to respect your privacy and desire not to have your e-mail inbox filled with unwanted correspondence. If you do not want to receive this newsletter please send us a note at paap@asareca.org, and we will remove your name from the distribution list.