



## ENHANCING AGRIBUSINESS THROUGH IMPROVED MARKETS, MARKET LINKAGES AND PARTNERSHIPS

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## **ABSTRACT**

The African governments have downplayed the role of agriculture in kick-starting transformation through agricultural based revolution, despite the public declaration and evidence that yields can be dramatically increased if farmers had access to improved technologies and product markets. Agricultural produce markets play a significant role of driving agribusiness and therefore should be developed and managed appropriately. Market development should focus at addressing the glaring obtaining structural, financial and infrastructural challenges through: Exploiting market development opportunities in export–import balance, product transformation and diversification and accelerating input markets through dynamic research; Enhancing market linkages through regional integration and, exploiting opportunities that come with information and communication technology, supply chain management and adoption of pro-poor market access models and; Promoting public-private partnerships and venture mergers to increase operational volumes for better market access. Revolution through agribusiness would generate many progressive jobs in agriculture and move large populations out of poverty. Securing family food supplies through higher yields would enable smallholder farmers to free up land and labour for more profitable agribusiness uses and thus increase farm level revenues. The same would increase local level demand for higher value foods and non-farm goods and services, create additional productive employment in rural areas and improve livelihoods of people depending on agriculture. Agriculture would play its rightful role in financing African economic development, poverty alleviation and enhancing food security for majority of such dependent economies.

**Keywords:** Value chain, Horizontal/vertical integration, ICT, Pro-poor market access models, Trade

## **INTRODUCTION**

African agriculture is at its knees with demographics characterised by rural-urban migration as it becomes increasingly difficult to survive on the farms. Farmers are trapped in production circles that embrace inefficient technologies; characteristic of declining yields evidenced by stagnation of cereals yields in 40 years and with land size shrinking, with diminishing alternative to sustain their livelihoods (Hazell, n.d.). As a result, African countries have been marred with regular incidences of food shortage with food insecurity being very common amongst the economically marginalized. Governments have been relying on concessionary food imports to address the gap. In cognisance of agriculture's contribution to African countries GDP at 25% and being the surest way for economic development and fastest way of alleviating poverty, agricultural revolution is paramount (Schaffnit-Chatterjee, 2014).

As the continent learns lessons across the globe, it apparently turns out that agricultural revolution is essential if only the same is adopted and customized to the African countries' context. Asian cases offer good examples from which the African continent could learn from. The governments allocated 10-15% of the total budget to agriculture resulting to food surplus within 25 years, huge amounts of productive employment in agriculture and allied industries, low food prices, poverty reduction among others (Hazell, n.d.). Contrary, most African governments invest barely 5% of their total budget to agriculture despite their ascent to Maputo Declaration of 2003 that has just been affirmed by the Malabo Declaration of 2014 (Target et al., 2013.). Consequently, the anticipated changes have not been realized with most countries characterized by under developed agriculture sectors with limited investment in irrigation, high transport and marketing costs thus making farming unattractive (Yumkella et al., 2011).

### **Smallholder agribusiness opportunity**

Smallholder farmers comprise of an important farming community segment that cannot be ignored in agribusiness discussions (World Bank, 2007). They account for 80% of all farms, produce the majority of agricultural goods known for its high quality and contribute 90% of total production in some countries- more than 75% of agricultural output in Kenya, Tanzania, Ethiopia and Uganda. Targeting them therefore assures of returns in cognisance of recorded efficiencies in terms of input application and operations

generally. Agriculture and agribusiness economic potential is projected to amount to \$1 trillion in sub-Saharan Africa by 2030 compared to \$313 billion in 2010, thus key in agriculture revolution for development (World Bank, 2013). Agribusiness upstream and downstream accounts for about 78% of global value added in all agricultural value chains. As per capita GDP increases, the share of agribusiness typically rises from less than 20% to more than 30% of total GDP before declining (UNIDO, 2011). Agribusiness focuses on streamlining the entire value chain for enhanced value at each level through a systemic approach consisting of; development of upstream and downstream agribusiness activities and supporting linkage of smallholder farmers to productive value chains (World Bank, 2013). It is key in jumpstarting economic transformation through the development of agro-based industries (AGRA, 2013).

### **Increasing demand for agricultural products**

For sub-Saharan Africa to be able to meet the food demands by 2030, it will need to grow food production by 50% (Grandl et al., 2012). This is amidst many challenges of meagre support to agriculture coupled with population increase at a rate higher than any other part of the world and is currently estimated at 925 million and projected to reach 1.2 billion by 2025 (GHI, 2013). On the other hand, FAO, et al., (2013) reported that 25% of the population was undernourished in SSA with food availability remaining way below the 2500kcal/person/day threshold (FAO and IMF and World Bank, 2010). Further, poverty rate is over 40% in SSA and has changed little over the last one decade (World Bank and MFI, 2010) with these numbers increasing faster in SSA than in any other region in the world. While this is the case, the increasing global demand for agricultural products has resulted into 7% annual increase in global food prices since 2000 (Grandl et al., 2012).

Further to this, there is emergence of global standards in efforts to streamline production systems so as to ensure they are environmentally sound. Global certification schemes such as fair trade have emerged and are estimated to have attracted sales worth \$9 billion in 2012 and projected at \$20 – 25 billion by 2020 while that of organically produced products was projected to have a value of \$88 billion in 2015 which would represent an increase of 48% since 2010 (Grandl et al., 2012). This has resulted from a category of consumers that is demanding safer food especially for fresh food products which account for half of the value of total food and agricultural exports from developing countries and are willing to pay an extra price to ensure food supply chain traceability due to health and social implications.

There is increased consumer demand for differentiated agricultural products as consumers' incomes rise steadily with average per capita GDP forecasted to increase by around 30% between 2010 and 2030 and by 80% between 2030 and 2050 (Schaffnit-Chatterjee, 2014). In addition, according to World Bank, (2013) urban food markets are set to quadruple by 2030 to exceed \$500 billion with more population migrating to urban centres with the current one third of population in urban areas expected to be half by 2035. This will cause an increase in food demand and changes in preference. If it is assumed that per capita consumption is 25% higher in urban areas than rural areas, then world food production would need to increase by 70% by 2050 compared to 2005 levels (Gradl, 2012).

### **Comparative advantage in agriculture**

Vast amounts of uncultivated land in the world are found in SSA estimated at 200 million hectares which is close to half of globally unexploited arable land. Further, SSA hosts 13 major transboundary water basins and uses only 3% of its renewable water resource for irrigation. Currently, irrigation covers 9 million hectares of 200 million hectares of cultivated land in SSA, recording the least globally with Asia being at 44% (Ag Water Solution, 2013). It is reported that better crop irrigation through investments in motorised pumps could generate net revenues of up to \$22 billion per year benefiting 185 million people in SSA (World Bank, 2013).

While agriculture potential between 2001 and 2009 grew globally at 2.5% per year on average, in SSA it grew insignificantly above the global average recording 2.7% (World Bank, 2009). On the other hand,

yield for major crops has slowed sharply in most SSA countries since 1980s. For example, corn yields are at no more than 20% of the potential yields (World Bank, 2013). This could be attributed to exhaustion of green revolution technologies, land degradation, limited application of soil conditioners such as fertilizers with the current application being 13 kg/ha way below the global average of 100 kg/ha, water scarcity and slowed investment in research and development (World Bank, 2009).

About 63% of the population in SSA lives in rural areas deriving their livelihood from agriculture (Schaffnit-Chatterjee, 2014). They employ labour intensive techniques in agricultural farming creating a pool of cheap and affordable labour for agricultural production. Further, Africa's diverse climatic patterns provide opportunity for diversified production (World Bank, 2013). Each country would exploit its productive potential while relying on the neighbouring countries for production of what cannot be comparatively produced within own country boundaries. This will bolster intraregional trade creating opportunities within. It will ensure great returns on investment based on the fact that resources will be focused on producing what is likely to provide better returns than just producing for the sake of it.

### **Private sector interest in African agribusiness**

Foreign direct investment is increasing fast. Net FDI flow to SSA reached \$43 billion in 2013 up from \$6 billion in 2000 (Schaffnit-Chatterjee, 2010). This is triggered by good business environments with opening up of major road networks and plans under way to expand the same. Further, the proximity of African countries to Europe, Asia and even USA markets makes it the ideal point of investments due to assurances on reduced costs of operations (World Bank, 2013). This offers great opportunity for African farmers which could be tapped into.

### **Unlocking potential of agribusiness through improved markets, market linkages and partnerships**

Agribusiness marketing is a series of services offered in moving a product or a service from point of production to point of consumption that are interrelated and whose strength is as strong as the weakest point of the chain link. It entails developing relationship with the consumers so as to meet their needs in terms of quantity and quality in forms, place and time. These relationships are crucial in cultivating value in the exchange process. Marketing is anchored on the 4 marketing Ps and 2Cs, that is, Product, Price, Place and Promotion while the two Cs represent Consumers and Competition. Important to marketing is marketing research which ideally informs one on the market niche, consumer needs, possible competition and the upcoming trends so as to package the product or service to meet the market demands aptly.

### **ADDRESSING THE OBTAINING CHALLENGES FOR SMALLHOLDER FARMERS' MARKET DEVELOPMENT IN AFRICA**

Mainly, four types of markets exist for agricultural produce which include local, sub-national, national and export markets. Movement of produce from one market to another is associated with market information which improves market performance through enabling transparency, competitiveness and efficiency. However, agricultural markets are seasonal and unorganized often characterized with inadequate marketing centres. They are dominated by middle men, price fluctuations and variations in measuring units thus difficulties in creating trust and good will amongst the traders and farmers (Adam et al., 2011). In addition, they have never attained spatial equilibrium and instead are marred with inefficiencies thus affecting their competitive potential. Factors resulting in market under development thus inefficiencies include:

- High marketing costs due to cost of haulage, administrative costs and other informal costs such as side payments at check points.
- Scattered nature of produce with most smallholder farmers marketing their produce individually creating opportunity for exploitation by middle men.
- Risks attached to marketing of perishables due to market infrastructural underdevelopment with post harvest losses amounting to as high as about 70% for perishable goods and about 20 to 30% for non-perishables.

- Inconsistency in production with seasonal variations due to limited use of modern technologies acting as disincentives agriculture production.

For Africa to be competitive in market access, several challenges impeding market development should be addressed. They include: structural, infrastructural, financial and trade related challenges.

#### **a. Structural challenges**

Intra-Africa trade is amongst the key thrusts of the Malabo declaration which unfortunately is considerably constrained by several factors among which is structural issues. Structural challenges could be broadly associated with two major factors, that is, lack of complementarities amongst members of regional economic blocks and the continent's geography. Due to lack of complementarities, most of the products exported by African countries are never in high demand amongst neighbouring countries hindering cross border trade. In addition, very few countries have ventured into product processing which are in high demand within the region. Where processing is taking place, the cost of processing is high thus making it advantageous for African countries to import cheaply manufactured produce from non-African countries. On the other hand, at country level, very minimal efforts have been put in place to guide agricultural production through agro-ecological zoning. As a result various administrative units have failed to exploit their comparative advantage which would in turn facilitate trade within a country.

The continent's geography is another concern. Most African countries are landlocked which means that access to global markets requires the landlocked countries to traverse through other countries' territories. Worse still, some countries such as DRC are as much landlocked since it is more reliable to traverse through other countries than rely on her coastal ports. This in effect results into higher costs of trade incurred during transportation as well as border fees including other administrative burdens reducing their competitiveness. Median landlocked countries cost of transportation are documented to be 46% higher than coastal countries (Adam et al., 2011).

#### **b. Infrastructural challenges**

Infrastructural challenges include challenges associated with transport (poor roads, ports, and railways), communication and power among other infrastructures. Road infrastructures are inadequate to meet the current freight and non-freight demand. They are poorly maintained, are aligned to colonial territories thus less suitable for cross border trade and marred with corruption emanating from illegal check points resulting in high transport costs and delays. On the other hand, the alternative cheap option – the rail infrastructures, are poorly developed and maintained, inefficiently managed and rarely invested in. In addition, port and border traffic are so immense discouraging movement of goods due to port and border congestions and often flawed by corruption.

Most African countries suffer serious power shortages due to inadequate power generation potential to meet the growing demand. Power shortages impede agro-production and processing thus uncompetitive in agri-trade as well as interrupt communication which negatively interferes with trade supply chain. Further to this, telecommunication infrastructures are only available in urban centres and along transport corridors with the majority of producers and traders cut-off with inadequate technical capacity jeopardizing utilization further.

Inadequate market infrastructures and proper post-harvest management practices and related investments have resulted into high post-harvest losses amounting to an average of 10 to 20% for grains prior to processing which amounts to \$1.6 billion per year in Eastern and Southern Africa (World Bank et al., 2011). According to Kamara, et al, (2002), in Africa, large quantities of agricultural commodities produced by farmers tend to rot un-marketed, while the smallholder farmers do not have the necessary infrastructures for timely marketing.

#### **c. Financial challenges**

Access to capital and enabling legal and regulatory frameworks are crucial to opening up local investments in agriculture and thus competitive market access locally and globally. Despite this, financing agriculture has been termed as risky by financial systems requiring close collaboration between public and private institutions so as to cushion each other against affiliated risks. Share of agricultural lending is estimated at 3% for Sierra Leon, 4% for Kenya and Ghana, 6% for Uganda, 8% for Mozambique and 12% for Tanzania (Lowder et al., 2012), thus the need to develop smallholder farmers friendly lending products if they are to access the technologies being innovated.

Recently, financial arrangements targeting the marginalized (women and youths) coupled with development of user friendly financial models (for example village, community banking) has created financial pool for investment in agribusiness. Insurance schemes have also been developed to cushion farmers against any unforeseeable occurrence that may result in crop or livestock failure. However, means of channelling the same and attitude towards agriculture as an investment target needs to change for results to be realized.

#### **d. Trade process challenges**

These include challenges associated with unsupportive legal and regulatory frameworks including tariff and formal non-tariff barriers (NTBs). NTBs include prohibitions, quotas, sanitary standards, rules of origin and import licensing requirements. Some NTBs are important due to public health related concerns and other public policy objectives. However, unnecessary NTBs such as bureaucratic procedures, delays at border points and in release of results and lack of coordination amongst government agencies among many others could cause unwarranted delays and costs constraints if applied inappropriately and unnecessarily.

### **EXPLOITING MARKET DEVELOPMENT OPPORTUNITIES**

#### **Export-import balance**

The sub-Saharan Africa is a major producer of several agricultural commodities. Ghana and Nigeria account for 64% of global cocoa production while Sudan, Chad and Nigeria are the world producers of gum Arabica (World Bank, 2009). In the export market, South Africa and Cote d' Ivore top the list with around \$6 billion followed by Kenya, Ghana and Ethiopia. However, despite the potential, very few countries have experienced an increase in their market shares for export since 1991. In 2011, SSA exported way below its imports at \$43 billion and \$34 billion respectively curtailing its ability to generate foreign exchange and exposing itself to vulnerability from volatile global prices. In addition, while in 2000, EAC was a global net exporter, 15 years down the line, it is a net importer of beans and other staples valued at \$50 billion per year that could be produced locally. Such imbalances if addressed could create opportunities for agribusiness since the potential as earlier on explained are immense.

#### **Product transformation**

The global agro-industries have diversified significantly over the last decade towards processed and high value horticultural products (World Bank, 2012 and Panel, 2013). Despite this, unprocessed commodities and horticulture constitute the vast bulk of SSA's agricultural exports. Unprocessed commodities accounted for 86% of exports to China in 2008 and horticulture accounted for 51% of exports to India in the same year (UNIDO, 2011 and IMF). Ironically, Africa imports nearly \$400 million of processed fruit juices and canned fruits and vegetables and yet fruits and vegetables often go to waste due to lack of refrigeration facilities and poor road infrastructures. Upgrading of value chains through processing, packaging, quality and branding has resulted into rapid growth of global markets. About 80% of the value in global food industry is in value added components especially with the buyer driven value chains, which questions the place of traditional markets in the current context (World Bank, 2009). Importantly, simple value addition initiatives, that is, cleaning, packaging and freezing products are estimated to have increased Kenya's export value in fresh vegetable sector by 250% (World Bank, 2013) thus key in commercializing agriculture. Sri-Lanka earns 75% more from her tea industries due to value addition

compared to EAC which exports 15% more tea than Sri-Lanka. SSFs producing traditional export crops like coffee and cocoa can capture higher value markets through quality upgrading, branding and certification. This provides for economic diversification which is a key engine to growth given the price volatility surrounding commodity markets and given the tendency of resource exports to drive up the real exchange rate and inflation a scenario known as “Dutch Disease” (ADB, 2013).

### **Market diversification**

Trade negotiations internationally are vital for successful agribusiness. Through trade negotiations, African produce could easily access markets thus addressing one of the core factors for sustained agribusiness. The WTO, report of 2008, demonstrated worrying statistic indicating that agricultural exports were ranked least of exports from African countries at 8.5%, manufactured goods at 19% while oils and mining products accounted for more than two thirds of all exports between 2005 and 2007. By locking into the multilateral trade system some emerging economy countries (Brazil, India and China) are increasingly using trade negotiations and agreements to promote growth thus benefiting from multilateral and bilateral trade agreements; a lesson for SSA countries to learn and emulate. SSA could tap onto the emerging Asian and Latin American markets such as India, China and Brazil. In 2012, exports to these countries accounted for one third of SSA exports. China alone absorbed as much as the European market did. Imports to China from Africa increased tenfold during 1990 to 2008 to \$3 billion while that of India increased sixteen fold to \$1.4 billion, a scenario that is even much better presently due to good bilateral relationships with African countries.

### **Accelerating inputs market in Africa through dynamic research system**

Inputs market in Africa are estimated to increase from about \$8 billion a year in 2010 to \$35 billion a year by 2030 (Grandl, et al., 2012). Facilitating farmers’ access to output markets for their agricultural produce will create demand pull for upstream markets that provide farmers with relevant inputs for agricultural production. To help boost demand for input products and services, companies should work with partners along the entire value chain to ensure access to high quality inputs and facilitate access to finance for purchase of the inputs (Christen and Anderson, 2013).

Dynamic research is essential at this point to guarantee workable, recent and reliable technologies and products (World Bank, 2013). Research should be informed by actors need so as to avoid existence of many unused technologies as the case has been. There is need to migrate research institutions from providers of technologies to institutions that offer timely solutions. In addition, actors based innovations should be integrated within the research systems so as to ensure holistic and development of superior products. This way they are able to move from being product providers to system and solution creators.

While great opportunities exist in use of quality produce, the 2007 Tanzania’s Poverty and Human Development Report revealed that 77% of Tanzanian farmers were not using improved seeds while in SSA, 80% of seed used by farmers was collected from the farm compared to a worldwide average of 35% (Gradl, et al., 2012). Evidently, access to improved farm inputs could turn around the situation of low yields in SSA. In Tanzania for example, smallholder farmers were able to improve yields by 50 to 60% due to use of improved pest and disease resistant and drought tolerant seeds. The results were even better in the north where households living standards improved by 17% (Gradl et al., 2012). This shows great market opportunity for improved seeds as well as other agro-chemicals. On the other hand, crop losses due to pests and diseases during production vary globally but on average stands at 50% for wheat to more than 80% for cotton production. With use of crop protection, agro-chemicals actual losses for wheat and cotton could reduce to about 26 to 40%. This is a significant reduction that could see farmers and inputs suppliers benefit.

## **ENHANCING MARKETS LINKAGES FOR SSA AGRICULTURAL PRODUCTS**

### **Regional integration and local markets**

Disturbing statistics indicate that only about 10% of agricultural trade is currently within Africa, which has been limited by among many other factors to, membership to multiple, competing trading blocs, which for example has cost EAC business firms' trade opportunities worth \$22.7 billion between 2005 and 2012. Trade within Africa should be enhanced through elimination of multiple unnecessary check points. Corruption along border points should be dealt with. Harmonization of standards is important to ensure harmony in operations thus encouraging trade (World Bank, 2013). Other opportunities lie within the trading blocs, they have enhanced trade interactions amongst member countries and streamlined tariffs and eliminated non-tariff barriers that have hindered trade within. Despite this, Kenya's and Uganda's trade with COMESA, valued at \$8 billion and \$3.4 billion respectively, was equivalent to only 7% and 7.5% respectively of their external trades. There is need to tap onto regional opportunities that exists for cooperatives and farmer groups. For example, Kenya accounts for more than 35% of Uganda's international trade, 13% of Democratic Republic of Congo, and 30% of Burundi's thus an indication of immense potential for trade within Africa.

For regional integration to make meaningful impact it should be interpreted beyond elimination of barriers to trade lenses to focus on other restricting factors. These could include: harmonizing standards and regulatory frameworks, reducing restrictions on financial capital and labour mobility, adoption of common approaches to fiscal and monetary policies, promoting peace and conflict prevention, pooling investment in cross border infrastructure for transport, power and communications. Integration should be carefully analysed so as to take cognisance of other hindrances that may not be explicit.

Different forms of integration exist, which include:

- Free trade area: Require countries to eliminate tariff barriers amongst members including a grace period for those in sensitive sectors. FTA member countries maintain independent tariff and trade agreements with non-FTA members.
- Customs union: Includes common external tariff agreements between FTA members and non-FTA members. Launch of common custom unions grew the intra-EAC trade from \$1.6 billion in 2005 to \$5.5 billion in 2012. During that period, intra-EAC trade to total regional trade grew from 7.5% in 2005 to 11.5% in 2011 (UNIDO, 2011).
- Common market: Extends principles of integration beyond tariffs to other factors of production by creating an enabling environment for free movement of labour and capital as well as business development crucial for trade liberalization.
- Economic and monetary union: Entails adoption of common monetary and fiscal policies to some extent even common currency.

The other opportunity exists within countries. There is an emerging market niche within local spheres of African countries. Urban markets will increase fourfold by 2030 while chains of super markets and food joints are coming up (World Bank, 2013). The explosion of urban markets provides immense opportunities for upstream and downstream agribusiness industries. The demand for inputs will increase as the demand for increased productivity sore up as the urban consumers demand more processed and convenience food thus increasing the level of agro-processing. According to McKinsey, (2010) the growth of these sub-sectors is estimated to be equivalent to one third of the increase in value of agricultural production and thus poses great opportunities for agribusiness growth in Africa.

### **Information and communication technology**

Market information services play a critical role in enhancing efficiency of marketing systems. Market information products include market news, market analytical reports and business report. Lack of access to timely and reliable market information is an entry barrier to trade. Studies in Uganda (rural maize farmers) demonstrated how access to market information resulted in higher farm gate prices and improved farmers' relative bargaining power. While in Niger, use of mobile phones to disseminate market information resulted into reduced price dispersion across markets by 10%. Further, in Ethiopia in efforts to develop an efficient grain marketing system, a study commissioned results showed that increasing

traders and farmers awareness of prices across the country promoted grain system efficiency thus helping stabilize prices over space, improving farmers decision and confidence regarding what to plant, how much to invest, when and where to market their produce, promoting a competitive market system for the benefit of producers and traders. Market information services are also important in helping governments address food insecurity problems since price shoot for certain products and in certain areas would signal food shortfall (Magesa et al., 2014).

ICT is emerging as a means of collecting market information, packaging and disseminating the same. However, to date, the majority of smallholder farmers rely on word of mouth from other farmers, traders and sometimes through extension officers. Such information is usually disseminated periodically such as once a week. This indicates serious challenges in dissemination of market information which limits market participants' ability to make informed decisions. It is thus imperative that market information is available to limited market participants in urban areas who have access to modern means of dissemination. This therefore contributes to unequal and inequitable distribution of information thus marginalization of some market actors (Adam et al., 2011).

Use of emails and internet is spreading steadily in developing countries with some farmers embracing this technology. For example in Zambia, market information is available on Zamnet through website of the national farmers union. Available AMIS provide farmers with information on agriculture and marketing ranging from information on inputs, markets and prices at different markets. Privately operated AMIS offers a broad scope of services which including advertising opportunities and additional services at a fee offering them financial sustainability. Examples include e-soko based in Ghana and active in 16 countries across Africa and Info trade in Uganda and Monabi. Recent development in AMIS have seen emergence of commodity exchange services (ACE) which are MIS which combine market price information with commodity exchange information. This allows farmers to deliver produce directly to traders with cash exchange without using intermediary brokers. Countries that have launched ACE include Malawi (MACE in 2004), Zimbabwe (ZIMACE), Ethiopia (EXC in 2008), Zambia (ZAMACE in 2007) and Kenya. Commodity exchange facilitates transparency and price discovery through centralizing trade in commodities and reduces transaction costs associated with identifying market outlets, inspecting product quality, finding buyers and sellers and the numbers of intermediaries farmers and traders use and saves on time. Reduced transaction costs and enhanced information flow improves returns to traders and farmers and reduces price dispersion across markets and short term price variability (Adam et al., 2011).

ICT has facilitated online knowledge access intensifying use of information and knowledge thus product differentiation and specialization through incorporation of innovative inputs onto product development. It has also facilitated linkage to knowledge, communication and human intelligence enabling new types of innovation in management, organization and business models. It has contributed to reduction of transaction costs through inventory controls, quality controls, access to wider market space and global networking (Gradl, et al., 2012). It has provided information channels that have facilitated decoupling of information from its physical repositories to permit access and transmission resulting into transformation of traditional agro-enterprises by innovatively creating new markets, products and services that did not initially exist. It has aided growth of agribusinesses through networking which provides a platform for exchange of experiences, options and opportunities for mutual cooperation and technology transfer. An example includes the Mkulima Young face book page operated from Kenya where consumers and producers are able to interact freely.

### **Pro-poor market access models**

Agricultural product marketing takes place at every stage of the value chain. Ensuring efficiency and smallholder inclusion at each stage is very essential. Every actor should be generating profits as the case should be for small holder farmers. The discussion below proposes models through which smallholder farmers and other actors could collaborate for enhanced market access (Gladl and Jenkins, 2011).

### **Contract farming, nucleus and out growers' model**

Contract farming and out grower schemes have provided opportunities to SSFs in Africa by facilitating guaranteed access to specific markets. They guarantee market and price for products of certain quality and standards. The upstream producers usually benefit with inputs and advisory services but have an obligation to adhere to given management practices. Evaluations of this industry have showed immense benefits to small-scale farmers with even spill over benefits to the community at large (Mangnus and Piter, 2001). Contractual arrangements facilitate vertical integration of value chain actors, as the players operating at different levels of the value chain interact for the mutual benefit of each other. As the agro-processing company gets the produce from the farmers, the farmers are assured of a market and thus their production becomes market oriented. Such interactions across the chain ensure production of high value produce that best suits consumer demands. Such integration has resulted into enhanced efficiency along the value chain through timely delivery of produce and knowledge and experience sharing (Key and Runsten, 1999). However, contractual engagements are constrained by several factors which include: poor enforcement of contracts, high transaction costs especially when dealing with many unorganized smallholder farmers, strict demand for consistency in quality, food safety and due diligence amongst others, poor business ethics in cases of non-payment, delayed payments or reduced payments, high rate of produce rejection by the agribusiness firms and weak bargaining position by farmers (Kirsten and Sartoriusk, 2002). By addressing these challenges, contract farming and out grower models would facilitate effective and inclusive agribusiness.

### **Producer business group model**

The producer business group model is an agribusiness model tailored to serve the interest of smallholder farmers. It takes the form of a cooperative model but emphasises on strong institutions from the grass root level that link up at different levels for business purpose. Such institutions strengthen value chains especially the links between producers, processors and shippers (Markelora and Meinzen-Dick, 2009). Through these institutions, farmers are able to access resources, markets and service providers at reduced costs by exploiting economies of scale. The arrangement adopts a 3 tiered approach as described below:

**Level 1:** Transformation of Common Interest Groups (CIGs) into Producer Business Groups (PBGs). Several CIGs join under a business orientation principle to form a PBG. PBGs are groups of farmers who have a common interest within the specified region of operation. At this level, production is emphasised due to guaranteed market and good prices that can supply an agro-investment with the raw materials.

**Level 2:** PBGs are linked together to form Community Based Enterprises (CBEs) owned by a community in form of a cooperative or some community based private enterprise and registered accordingly. Membership to CBEs is from PBGs and they conglomerate with a purpose of pooling their produce together and sell collectively/bulking. Designation of collection centres and condition for deliver/intake are specified and adhered to by all farmers, in keeping with the need to stick to set standards.

**Level 3:** The CBE then supply the farm produce to the Agribusiness Enterprises that is at the highest level owned by a registered legal entity. The share holding could be by the members of the CBE, while in some cases, the latter may register their interest as cooperatives and still conduct the envisaged business, if the volumes and consistency of supply guarantees effectiveness and efficiency. This gives the community power to make key decisions on the investments in the long-run unlike the short-run where the investment is very risky. For instance farmers may choose to engage in agribusiness enterprise that majors on value addition so as to increase market possibilities and commodity prices, thus the income to the farmers and by extension loyalty to the process.

### **Market access business model**

The model promotes provision of market services at a cost. The cost is usually through commissions, SMS subscriptions fees or margin of sales. The services provided include: Market intelligence, product

market opportunities and transaction security services. All the value chain actors are clients and thus the network comprises of clients, network members and service providers. It is organized into four levels:

**Level I:** Information Board Managers (IBMs) with direct contact with farmers and traders

**Level II:** Market Access Companies (MACs) which manage a local network of IBMs

**Level III:** Regional Managers (RMs) comprising of individuals with high business skills coordinating large numbers of MACs and sourcing for large volumes of produce for large buyers. They also mentor their MACs and IBMs

**Level IV:** National Marketing Companies (NMCs) who provide member RMs with market intelligence and business to business meetings and learning platforms

### **Supply chain management**

According to Christopher (1998), supply chain management entails management of downstream and upstream suppliers and customers to deliver superior customer value at less cost to supply chain as a whole. It is principled on value chain vertical coordination where actors along the chain continuum be they suppliers or consumers' interact. The interaction is guided by contractual agreements, partnerships or collaborations. The important roles of supply chain management include (Kaufman, 2000): Reduced operational costs, Decreased procurement costs, Reducing marketing costs and; Lower distribution costs. Supply chain management helps farmers identify new markets, inputs, extension services, credits and new products. This reduces resource constraints for farmers and reduces production and marketing risks which are essential in agriculture sector due to its risk averse nature.

## **ENHANCING MARKET ACCESS THROUGH PARTNERSHIPS**

### **Partnerships**

Partnerships are great avenues for addressing challenges constraining the agriculture sector. However some considerations should be borne in mind for successful partnerships, which include: Harnessing expertise from different levels; Make venturing into agriculture attractive for private sector actors; Demand driven approaches and; Community involvement through their organizations.

Avenues to foster public-private collaboration include stakeholders' platforms. These platforms offer opportunities for market actors' empowerment as well as improving access to markets, services and research results. The diverse participation in the platforms enrich the partnership discussions by embracing mutual understanding, creating trust, setting priorities, defining roles and engagement modalities. Such platforms perform three main functions namely:

- Enhancing competitiveness of smallholder farmers by stimulating joint innovation and formulate demand for research,
- Improve coordination and governance in market chain development through articulation of business standards and matching demand with supply and,
- Development of information services.

On this basis two types of platforms exist. The commercial platform which brings together market chain actors such as FOs, traders, processors, researchers, NGOs among others. The focus of this platform is creation of new products, market niche development and advocacy. The second form is local platforms which bring together actors from delimited geographical production areas in form of government authorities, NGOs and FOs. The focus of this platform is on market coordination, empowerment of FOs and access to financial and agricultural services. At the national level, the two forms of platform interact with public, academia and research organizations which play an important facilitatory role (Devaux et al., 2011). Public-private partnerships could be useful along the entire chain in both structural and service provision. Structural based partnerships would include: farm to market roads, wholesale markets and trading centres, water for irrigation, agro-processing and information communication technology. For public-private partnerships in marketing to be effective, there is need for efficient strategic planning, attract private actors into agriculture market provisions through relevant risk management measurers and financial support in efforts to cushion them and enabling regulatory frameworks (Warner and Kahan

2008). Participatory market chain approach focuses on social learning, building trust and fostering joint action amongst chain actors. It is conducted in phases: Identification of different market chain actors; Market analyses and; Implementation of joint innovations - New products, technologies and institutions.

## **VERTICAL AND HORIZONTAL INTEGRATION**

Horizontal and vertical integration is very essential in agricultural product marketing as it enhances competitiveness through economies of scale. Through strong farmer organizations from grassroots to national levels and even international levels would imply greater influence for appropriate legal operating environment thus ensuring the legal and regulatory frameworks are suitable for farmers to continue practicing agriculture and access the best markets. It also increases their chances of venturing into high end value chain activities as they are able to access. The majority of services which they could not otherwise access as individuals. Forms of merging include horizontal, vertical and conglomerate as discussed by Pilsbury and Meaney (2009):

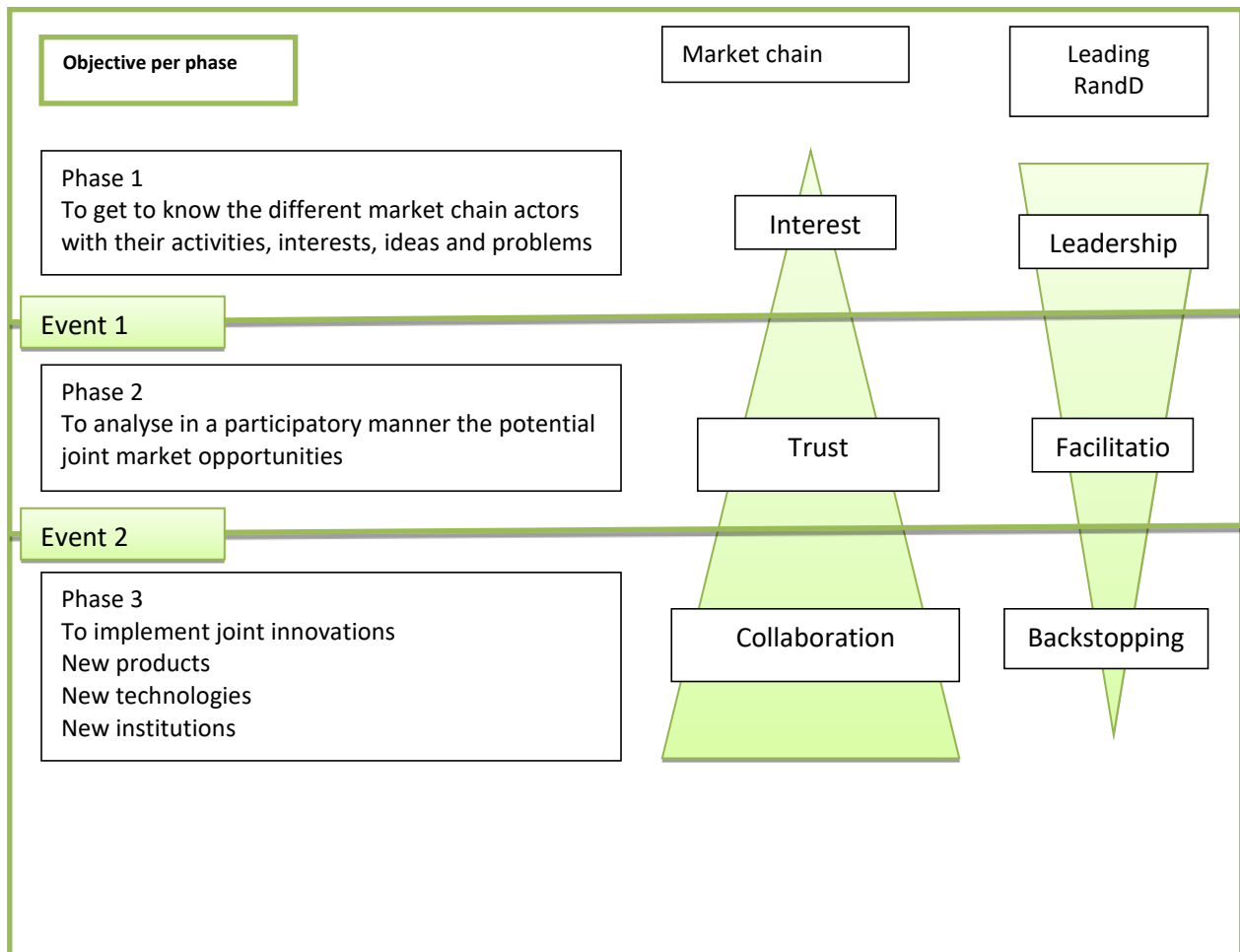
**Horizontal mergers:** Horizontal merging occurs when organizations operating at the same level of the supply chain join together. The relevance of merging is basically to reduce competition through elimination. It is feasible to merge if the business potential for merging offsets the cost of merging. This could be through better pricing than it would feasibly be possible without merging.

**Vertical merging:** This occurs when organizations operating at different levels of the supply chain merge. Vertical merging is advantageous only if may not be economically viable for customers of the merged firms to acquire the produce from other sources. That way the merged firm could increase their prices and still perform very well in the market.

**Conglomerate merger:** This could be through firms that are offering the same product but operating at different geographical markets. Ideally the firms are non-competing since they operate in different markets. Though this is the case, the merging increases market opportunities for the firms as they are able to tap onto the diverse markets where each has previously been dominating.

## **CONCLUSION**

Agricultural revolution is not only timely but necessary to enable African governments tap onto the immense potential that exist in the continent. Agribusiness offers strategies for economic diversification, structural transformation and technological upgrading all necessary for agricultural revolution. Successful agricultural revolution requires knowledge, capabilities and adaptability. Empowering and recognition of local smallholder farmers is critical as they make up the biggest market of all agricultural inputs and offer products for formal and informal markets. Actors should organize themselves in readiness to conduct real business along the APVC and embrace partnerships. They should seek to enhance value at every stage so as to consistently deliver products to the markets, with proven quantity and quality. Improving the marketing system and enhancing market access is the key to unlocking the potential in the agricultural sector and should form the corner stone of agricultural revolution discussions. It will unlock upstream and downstream agribusiness initiatives, giving actors courage risk and try opportunities.



Source: Warner and Kahan 2008

## RECOMMENDATIONS

The ongoing reforms at all levels (sectoral, country, sub regional and international) should be hastened to pave way for robust agribusiness systems within African agricultural systems. Countries should position themselves to take advantage of the existing agribusiness potential globally. These reforms include:

- Consolidation of multiple regulations which bestow various authorities with similar functions resulting in conflict in execution of mandate which may derail the agriculture revolution. Further, out-dated regulations should be revised to address current issues and ensure inclusivity for all actors and issues along the agricultural value chains
- Support investment in agriculture by allocating adequate resources to the agriculture sector. Research, development and dissemination should be at the top of the agenda. It is the engine to transforming agricultural sectors and causing the much needed revolution. Appropriate systems to ensure consideration of actors' needs should be put in place.
- Production efficiency needs to be enhanced through facilitating smallholder farmers access to relevant modern superior inputs needed for the anticipated agricultural growth.
- Trade barriers across countries, regionally and internationally should be streamlined to facilitate regional integration and take advantage of globalization for the benefit of agribusiness industries.
- Downstream interventions have been ignored for a long time. It is time that investors, donors and governments focused on this critical segment of the agricultural value chains.
- Capacity building of value chain actors more so smallholder farmers on entrepreneurship to enable them adopts agribusiness principles necessary to survive in the changing agro-markets.

- Accessible finance access models should be devised to ensure inclusion of marginalized segments of the societies to participate in agribusiness by empowering them with the key resources for uptake of agribusiness opportunities.
- Partnerships through value chain vertical and horizontal integration and PPP are paramount and should be embraced.

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