Prospective of Agribusiness for the Future sub-Saharan Africa

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Abstract
African agriculture is beneficial to the whole world and concern for the future of African agriculture is a global issue. This paper looked into the future characteristics and picture of the African agribusiness of tomorrow by examining present trends and implications. The information presented was derived from reputable literature. Descriptive statistics and qualitative analysis were used. The paper examined agricultural transformation, land trade, prospects for increasing farm lands, prospects for using contact farming, production of certain underutilized and neglected crop species and maximizing opportunities offered by globalization and trade liberalization. The paper opined that the future of African agriculture is bright because of ongoing African agricultural transformation, global interest in African agriculture and fiscal policy reforms.

Introduction
Agriculture is undoubtedly the most important sector of most non-oil exporting African countries. It has continued to support livelihoods despite the effects of climate change (Mkpado, 2013). During the second half of the 19th century, a growing number of African smallholders became involved in international trade due to increased demand for tropical products, for example, the increased export of crops such as cocoa, groundnuts and palm oil from West Africa (Beintema and Stads, 2006). However, the introduction of the Structural Adjustment Programme (SAP) in Africa in 1986 led to an increased nominal but not real income of farmers as the quantity exported was relatively small when compared with the actual quantity that would generate income to match the inflationary rate due to the exchange rate differential. Mkpado (2010) suggested that farmers were better before the liberalization.

African countries do share a number of worrisome agricultural characteristics and trends, such as a high degree of production variability, relatively low crop yields and dependency on primary exports with low income elasticity and high price volatility Mkpado (2013). Relative to other developing regions, African's agriculture is undercapitalized, uncompetitive and underperforming. The sector is relatively weak as its productivity lags behind other regions and its often declining performance is symptomatic of the myriad challenges it faces. The longer it takes to address these problems, the less competitive agriculture becomes. The food security situation in the continent shows the need for faster transformation of the sector at least to reduce the net importation of food; in China, on the other hand, agriculture has contributed to world food security by using less than 10% of the world's arable land to feed more than 20% of the world's population (CDAC, 2010). What is the future of African agribusiness? Are there reasons to be hopeful?

Objectives and Methodology
This paper aimed at peering into futuristic characteristics and picture of the African agribusiness by examining some facts. The information presented was derived from reputable literature. Descriptive statistics and qualitative analysis were used in the study. The paper included examination of agricultural transformation, share of agricultural products in trade, prospects for increasing farm lands, prospects of using contact farming, production of certain under utilizes and neglected crop species (UNS) and maximize opportunity offered by globalization and trade liberalization.

Results and Discussion
Agriculture transformation in Africa
Transformation is needed to enable agriculture to account for the greater part of the gross domestic product (GDP) of African states, increase the income of about two-thirds of the labour in Africa, provide foreign exchange through increased export and raw material for agro-based industries, contribute to world food

security, health and environmental sustainability, constitute markets for industrial goods and serve as a natural resource endowment for tourism and a channel for rural development, poverty reduction and the achievement of Millennium Development Goals (MDG). The outstanding performance of agriculture in poverty and hunger reduction has been recorded in China. CDAC (2010) noted that China's agricultural and rural development over the last 30 years has fuelled its economic development and contributed to the most rapid reduction in income poverty in human history.

The need for agricultural transformation is not only to achieve millennium development goals by providing food to improve nutrition and income to reduce poverty. The transformation is also needed to absorb effectively at least the 10% of national budgets to be allocated to the agricultural sector and yield over 6% average annual growth in agriculture output at the national level in line with the Comprehensive African Agriculture Development Program (CAADP) objectives (Maluleke H, 2010; USAID, 2009). African agriculture needs transformation to contribute to global food security and maximize the opportunities offered by UASID, IFAD, NEPAD and FAO and others, including initiatives to end hunger, improve value chain in agriculture and other efforts made by countries in Africa. Transformation is required for the implementation and success of the African Green Revolution and CAADP.

Prospective for increasing land holdings of African farmers and irrigation

Arable land varies in its 'edaphic' characteristics; the most important aspect of arable land is that it is a land mass that can support crop growth. Increases in arable land may be as a result of cultivating some marginal lands; this may imply reduction in yield. Large arable land masses are desirable in Africa because most of her farmers are small-scale farmers and extensive cultivation dominates agricultural enterprises.

FAO (2004) examined the distribution of available arable land in the world. The result showed that Latin America and the Caribbean had 166 million hectares (ha), sub Saharan Africa 1031 million ha, East Asia 366 million ha, South Asia 226 million ha, Near East and North Africa 99 million ha, industrialized countries 874 million ha, and Transition countries 497 million ha. The result showed that Africa ranked 2nd in arable land distribution. This shows the great potential Africa has in agricultural production. For 2009/2010 sub-Saharan Africa possessed a total of 201,546 ha (45.2%) of the total world uncultivated land of 445,642 ha while Latin America and the Caribbean had 123,345 ha (27.7%) and the rest were very negligible. Thus Africa has great potential in land resources for agricultural transformation (Klaus et al, 2011).

Agricultural transformation can provide opportunities for increasing irrigation facilities and farm size. Available irrigated land in Africa is small when compared with other countries or regions of the world. According to FAO, (2001) the Near East had 10 million hectares (mha) of irrigated field in 1990 which was the least for the cropping season, Africa had 14 mha, Latin America 16 mha, Developed countries 98 mha and Asia 112 mha. Asia thus, led the world in irrigation. In Africa, from 2001-2005 only 28250 ha in Central Africa, 195 ha in East Africa, 3422178 ha in North Africa, 7573 ha in Southern Africa and 3109 ha in West Africa were under irrigation. For the same period Turkey, Thailand and Argentina had 4185910 ha, 4985708 ha and 1767784 ha under irrigation respectively (FAOAQUASTAT 2009). Increasing farm size is possible in Africa given the fact that the continent has the highest uncultivated land and very low farm holdings. African farmers ranked among the lowest farm holdings in the world. According to Klaus *et al.* (2011) Central America farm holdings were 10.7 ha, Europe 32.3 ha, South America 111.7 ha, Southeast Asia 1.8 ha, Sub-Saharan Africa 2.4 ha, and United States 178.4 ha.

Decreasing Employment Trend

African employment in agriculture, although highest in the world, is showing a decreasing trend (Table 1). This is an indication of the possibility of increasing available land per farmer. Pooled African data showing the percentage of agricultural labour to all sectors showed that from 1980 to 2010 data ranged

from 66.47% to 53.31%. One of the reasons for the decreasing trend is low per capital real income among farmers (Mkpado 2010; Salami, Kamara and Brixiova, 2010). The decreasing trend could indicate that agriculture is releasing labour to other sectors. Analysis of the labour employed across African zones showed that East and Central had the highest proportion of labour in agriculture. Their record was closely followed by the West African Zone. Employment in West African agriculture ranged from 63.63% to 48.75%; a decreasing trend was also observed. The need for Africa to drastically reduce the proportion of her labour force employed in agriculture is shown by the fact that other developing economies such as those of America, transition economics, the Caribbean and developed economies had a very low proportion of their labour force employed in agriculture. For developed economies, it ranged from 9.3% to 3.34%. Very high levels of technological advancement and capitalization in agriculture are required for Africa to release her labour employed in agriculture to other sectors. The capitalization of African agriculture can be met through increased Official Development Assistance (ODA), Foreign Direct Investment (FDI) and fiscal policy reforms aimed at increasing agricultural funding. The release of labour should increase per capita land ration among farmers.

Table 1: Percentage of labour force employed in Agriculture to all sectors

Economies	*1980-1985*	*1986-1990*	*1991-1995*	*1996-2000*	*2001-2005*	*2006-2010*
Transition economies	21.31489	19.65478	17.68747	15.81035	13.82977	12.31629
Developed economies	9.035517	7.491692	6.173701	5.017448	4.089222	3.339536
Developing economies: Africa	66.47482	63.937	61.22481	58.43483	55.67633	53.31351
Eastern Africa	81.44997	80.89442	80.35084	79.36221	77.49637	75.71704
Middle (Central) Africa	73.50778	72.60318	69.81424	66.29299	62.62228	58.63438
Northern Africa	49.49413	43.74447	38.72039	35.31406	31.96311	29.02962
Southern Africa	23.75995	20.54523	17.21302	14.55998	12.34776	10.51967
Western Africa	63.63551	60.0194	56.38423	52.37912	48.74603	45.97805
Developing economies: America	31.0878	26.59136	22.98892	20.43943	18.09902	15.77959
Caribbean	34.60516	31.28365	28.45237	26.3467	24.62031	22.83562

Source: UNCTAD data base, 2011

Prospects of contract farming

Arrangement between farmers and organizations to produce certain crops is contract farming. It has successfully enabled smallholders in developing countries to commercialize their farming operations through the creation of market linkages, both domestic and international. Numerous case studies involving various agricultural commodities (e.g. tea, sugarcane, cotton, oil palm, oilseeds and rice) done in several developing countries in Africa, Asia, Central and Latin America have shown that smallholders have benefited from contract farming through the access of production inputs, output markets, market development, rural development and other less tangible benefits (Elepu and Nalukenge, 2009; Masakure and Henson, 2005; Eaton and Shepherd, 2001)

In Uganda, contract farming has been traditionally restricted to plantation crops (sugarcane and tea) where out-growers have been supplementing production of large processing agribusiness firms such as Kakira Sugar Works, Sugar Corporation of Uganda Limited, Kinyara Sugar Works, and Kasaku Tea Estate. However, other agribusiness firms such as British American Tobacco, Nile Breweries, Uganda Breweries, Outspan Enterprises Limited, Mukwano Industries, Bee Natural Products, Ugachick, and some co-operative unions have also extended contracts to smallholders to ensure a continuous supply of critical inputs (Wiegratz et al., 2007;

Nalukenge, 2005a&b; and Tulip and Ton, 2002). Contract farming has spread to other agricultural commodities, namely cotton, tobacco, sunflower, maize (quality protein maize), sorghum (*Epuripur*), cotton, coffee, sesame, oilseeds, rice, honey, and poultry. Some of these contract farming schemes have been credited for playing a key role in increasing the profitability of crop farming, reducing marketing risks, and above all opening up new markets for non traditional agricultural exports both at domestic and international levels (Wiegratz et al., 2007). Given the benefits accruing to smallholder farmers from engaging in contract farming, it can be argued that it is crucial in the commercialization of agriculture and poverty reduction.

Increased production of certain under-utilized and neglected crop species (UNS)

Africa is blessed with many crop species, most of which are underutilized. One of the advantages of UNS is that most are indigenous and as such adaptable to the environment. The challenge is helping the populace to see the nutritional and organoleptic attributes of such crops to increase their demand and open another opportunity for investment, employment and improved welfare. It could go a long way to sustaining Africans' food sufficiency; neglected and underused plant species are part of a rich economic, social and cultural diversity and many have the potential to play a much more important role than they do today in sustaining livelihoods and human wellbeing and in enhancing ecosystems, health and stability (GFNUS, 2010)

Improved Science, Technology and Innovations

Africa has a good opportunity to exploit global trends in science, technology and innovations to improve agricultural productivity especially biotechnology, information and communication technologies (ICT). Biotechnology can develop new products from existing agricultural production and optimize food processing. It can also be used to fight pest and diseases. The cost of processing and transmitting information and thus facilitating access to information about agricultural technologies and market opportunities to farmers in Africa can be drastically reduced by using ICT (ECA. 2007). It may even solve some climate change problems.

Increased Funding of Agricultural Research and Extension Services

African agriculture is undercapitalized and funding from domestic resources is very limited. The African government has the opportunity to exceed the minimum 10% recommendation by New Economic Partnership for African Development (NEPAD) (Mkpado, 2013). This is crucial given that the agricultural underemployed constitute the largest labour force in Africa which can be mobilized for improved productivity in other sectors. Improved agricultural education and extension in Africa is essential and can benefit from the funding because the majority of farmers possess few educational qualifications.

Maximize the opportunity offered by globalization and trade liberalization

Africa needs to maximize the returns from trade liberalization by increasing economic growth through trade, importation of machineries, inputs and generation of income from tariff as well as improved exports. For instance, the Nigerian Government has commenced a series of programmes to increase exports of agricultural produce especially cassava (Mkpado, 2010). UNECA (2009) noted that Cameroon reduced or waived import taxes on equipment, tools and goods required for research and oil exploration. In Liberia, the President announced plans to reduce trade tariffs as well as the ECOWAS trade levy. Tunisia increased allotments for export business travels and Mali introduced measures to refund to mining companies the value added tax (VAT) and import duty due on 2006/2007 gold operations. In Madagascar, the Central Bank devalued the local currency to restore export competitiveness. Within Africa, a number of trade blocks such as COMESA- Common Markets for East and Southern Africa, CENSAD -The Community of Sahel-Saharan States, EAC- East African Community, ECCAS -Economic Community of Central African States, ECOWAS- Economic Community of West African States are itemising policy options to their trade competitiveness UNECA

(2009). Each African country and trade block needs to determine the options best suited for their economic growth and implement them. A number of international organizations such as IFAD, World Bank, IDRC, DFID, and USAID are funding many African agricultural projects and programmes. For instance, USAID (2006) has noted efforts made by the United States government initiative to end hunger in Africa, focused on smallholder-based agriculture and designed to increase agricultural growth and rural income by harnessing the power of new agricultural production and processing technologies, improving the efficiency of agricultural trade and market systems, building the capacity of community and producer-based organizations, and integrating vulnerable groups and countries into sustainable development processes. This should be encouraged. Many companies in Africa tend to prefer importation of raw materials. Contract farming can be used to redress this trend. African legal facilities can be used to create an enabling environment for contract farming. Contract farming and collective action can help incorporate smallholders into high-value supply chains that require specialized inputs and the sale of specialized market outputs at guaranteed prices.

Improved land trade

The interest in Africa is because the continent has the highest potential cultivable land, despite the fact that large gaps exist in productivity, with current farmers achieving less than 30% of potential yields in most of sub-Saharan Africa. In 2009/2010, sub-Saharan Africa possessed 45.2% of the total world uncultivated land, while Latin America and the Caribbean had 27.7% and the rest had negligible proportions. Low population density from 2000 characterises countries selling more land like Madagascar, Sudan and Mali. Food security concerns triggered by food price hikes in 2007 and 2008, energy and bio-fuel, non agricultural commodities, expected returns, emergence of carbon markets and host country incentives were factors that seem to underpin the land acquisitions. Who are the land demanders and what are their types of business? A first group includes governments from countries initiating investments, which, especially in the wake of the 2007–08 food crisis, are concerned about their inability to provide food from domestic resources. A second group of relevant players are financial entities, which in the current environment find attractive attributes in land-based investments. The third had greater concentration in agro-processing and technical advances that favour larger operations. Traditional agricultural or agro-industrial operators or traders may have an incentive to expand their scale of operations or integrate forward or backward and acquire land by purchase or lease. Increased investors' interest in agriculture including food crops and bio-fuel, provides opportunities to Africa with large primary sectors and high levels of rural poverty, gaps in productivity and large amounts of land with deficiencies in technology, capital markets, infrastructure, or public institutions, including property rights, to ameliorate the situation through dynamic trade gains and development of strong institutions and legislative processes. Possible benefits for a number of countries is the proportion of the total transferred/acquired area allocated to domestic investors which has ranged from 97% to 7%, with Nigeria and Sudan having the highest from 1990–2006, land fees, commitments on investment, employment and infrastructure development, tariff from emerging exports and imports. This can provide the opportunity to set a new record because decades of low investment in the agricultural sector of developing countries has led to stagnant productivity and low production levels, thereby creating a pressing need for more capital. The FAO has calculated that a minimum of US$ 30 billion of additional funds are needed annually in order to achieve the goal of halving the world's hungry by 2015. There is need to use local content in terms of raw materials and labour which can be ensured through legislative processes. This will help to make positive externalities reach Africa which will in turn lead to development; provided investment protection policies are put in place.

Conclusion

African agriculture needs transformation in order to meet its future prospects. It needs to improve outcomes of land trade, increase farm lands, efficiently engage in contact farming, produce certain under-utilized and neglected crop species and maximize opportunities offered by globalization and trade

liberalization. Human capital, institutional transformation and technological change are needed to earn increased foreign exchange through increased export of semi or fully processed agro-based materials, contribute to world food security and health, environmental sustainability, constitute markets for industrial goods and serve as a natural resource endowment for tourism and a channel for rural development, poverty reduction and help achievement of Millennium Development Goals (MDG). The increasing interest in global land trade and contract farming in Africa can improve agribusiness practices in Africa. Many international organizations in the developed world and those of Africa are providing funds, technical knowhow and modalities for improved African agriculture. This paper is of the view that the future of African agriculture is bright because of the ongoing African agricultural transformation, global interest in African agriculture and improving fiscal policy reforms.

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