

ENHANCING THE TRADABILITY OF AGRICULTURE IN SUB SAHARAN AFRICAN

MATOVU PATRICK JORAM¹

DRAFT PAPER

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¹ Research, Planning and Business Development Department, Uganda Revenue Authority

ABBREVIATIONS AND ACRONYMS

AoA	Agreement on Agriculture
CAP	Common Agricultural Policy
CMB	Coffee Marketing Board
COMESA	Common Market for East and Southern Africa
EU	European Union
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
LDCs	Low Developed Countries
LMB	Lint Marketing Board
NEPAD	New Partnership for Africa's Development
ODA	Official Development Assistance
OECD	Organization of Economic Cooperation and Development
SSA	Sub Saharan Africa
UBOS	Uganda Bureau of Statistics
USD	United States Dollars
WB	World Bank
WTO	World Trade Organization

ABSTRACT

Although tradability of agriculture is still low among SSA countries, Agriculture continues to be an integral activity in Sub-Saharan Africa. Agriculture represents 20% to 30% of GDP in Sub-Saharan Africa, 50% of her exports and in some cases, 60% to 90% of the labor force in SSA countries are employed in agriculture.

However, Agriculture in the SSA is carried on subsistence basis, with a precarious growth rate. In most countries, it is yet to reach the sustained 6% annual rate estimated by NEPAD as necessary to meet the Millennium Development Goal of cutting poverty in half by 2015. The OECD however asserts that Africa has the potential to become an agricultural super bloc, if it utilizes its existing potentials like; unlocking the wealth of the savannahs, fully mechanization of agriculture, improved access to credit by farmers and other key factors.

Although current efforts in the SSA region are geared towards structural transformation in industrialization and services, it is unlikely that these efforts will succeed without substantial growth of agriculture. The opportunities for agricultural development through trade exist and form a greater comparative advantage in tradability of agriculture in SSA.

Therefore for agriculture to develop, a renewed emphasis is required on policies and on building appropriate institutions to boost agriculture right from the parent producers to exporting/selling channels, just like it is in leading agricultural producing nations in the world.

In addition; it should be noted that growth is not produced by passive “let the markets work”, that is policies that do not include critical public investment and state interventions. Therefore, the major lesson that emerges from country experiences is that for agricultural growth to occur, a number of factors need to be in place which addresses the “handicap” of the rural sector in terms of infrastructure, social services, technology, marketing infrastructure, and seasonal credit availability, along with the building of an appropriate institutional environment.

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1.0 Introduction and Rationale

Sub-Saharan Africa is a geographical term used to describe the area of the African continent which lies south of the Sahara or those African countries that are fully or partially located south of the Sahara including the Sahel Zone. The Sahel is the transitional zone between the Sahara and the tropical savanna (the Sudan region) and forest-savanna mosaic to the south. The Horn of Africa and large areas of Sudan are geographically part of Sub-Saharan Africa, but also part of the Arab world (OECD, 2002).

Below is a list of the countries that are considered to be under the designation of Sub-Saharan Africa.

Angola	Gabon	Niger
Benin	The Gambia	Nigeria
Botswana	Ghana	Rwanda
Burkina Faso	Guinea	Sao Tome and Principe
Burundi	Guinea-Bissau	Senegal
Cameroon	Ivory Coast (Cote d'Ivoire)	Seychelles
Cape Verde	Kenya	Sierra Leone
Central African Republic	Lesotho	Somalia
Chad	Liberia	South Africa
Congo, Republic of	Madagascar	Swaziland
Congo, Democratic Republic of The	Malawi	Tanzania
Cote d'Ivoire	Mali	Togo
Djibouti	Mauritania	Uganda
Equatorial Guinea	Mauritius	Zambia
Eritrea	Mozambique	Zimbabwe
Ethiopia	Namibia	

1.1 Role of Agriculture in Sub Saharan Africa

Agriculture has always been an integral activity in Sub-Saharan Africa. Sub-Saharan Africa has more variety of grains than anywhere in the world (Nicholas et al 2007). Agriculture represents 20% to 30% of GDP in Sub-Saharan Africa, 50% of her exports and in some countries in the SSA, 60% to 90% of the labor force are employed in agriculture. Most agricultural activity in Sub-Saharan Africa however is subsistence farming.

Despite the fact that agriculture is carried out on Subsistence basis in most SSA countries, the OECD says Africa has the potential to become an agricultural super bloc, if it can unlock the wealth of the savannahs; allowing farmers to access agricultural credit, mechanizing agriculture and other factors. (OECD, 2009)

1.2 Motivation of the paper

Apart from a few countries like South Africa, Zambia and Botswana which don't entirely rely on Agriculture; most economies in Sub Saharan Africa rely on agriculture and are strengthening their economies to be fully Agro based² economies (Kofi Konadu Apraku,2007). Despite this, tradability of agriculture however has remained low in the region and agriculture has continued to be carried out on a subsistence³ basis with much emphasis being put on production of staple food crops for local consumption than producing cash crops for sale. A few Agricultural cash crops are however produced and exported by countries within SSA although their production is characterized with fluctuating production figures and the respective outputs are exported in primary or semi processed form which attracts little value consequently leading to low agriculture yields. A look at Uganda for instance, one of the SSA countries shows that export figures of her traditional⁴ exports have not had considerable increases and in some cases have had a negative trend as presented in the table below.

Table 1: Production figures of selected cash crops in Uganda; for 2004 to 2008

Commodity	Unit	2003		2004		2005		2006		2007	
		Vol	Value	Vol	Value	Vol	Value	Vol	Value	Vol	Value
Traditional Export Crops	USD										
Coffee	Tonne	146,299	100,233	159,983	124,237	142,513	172,942	126,887	189,830	164,540	265,853
Cotton	Tonne	16,762	17,755	29,293	42,758	30,403	28,821	18,480	20,474	16,230	19,571
Tea	Tonne	36,669	38,314	36,874	37,258	36,532	34,274	30,584	50,873	44,015	47,629
Tobacco	Tonne	24,669	43,042	27,843	40,702	23,730	31,486	15,794	26,964	26,384	66,301

*Source: Uganda Coffee Development Authority (UCDA), Uganda Tea Authority, B.A.T (U) Ltd
Values: in USD*

This has thus presented a setback of not only hindering agricultural trade development but also stagnating efforts on enhancing economic growth within the region since improved tradability of Agriculture is one of the channels sought to enhance economic growth within the region. This paper thus intends to look at ways of enhancing tradability of agriculture in SSA by identifying the bottlenecks and suggesting ways on how tradability of agriculture can be enhanced in order to foster development in Sub Saharan Africa.

² Agro based economies are economies whose production output both locally and what is sold outside constitutes majorly of agricultural produce and thus agriculture is the biggest contributor to their GDP

³ Subsistence agriculture is self-sufficiency farming in which farmers grow only enough food to feed their families. The typical subsistence farm has a range of crops and animals needed by the family to eat during the year

⁴ Traditional Exports are products which have historically featured as, and been the main stay of the export menu of Uganda as primary/raw material exports, for instance coffee, tobacco and cotton.

1.3 Objectives

- Examine the potential that exists for increasing comparative advantages of tradability of agricultural products within SSA countries
- Identify the barriers existing against the realization of these comparative advantages and trade potentials for boosting Agriculture in SSA
- Propose trade Policies that can be adopted to address the barriers that are hindering tradability of Agriculture in SSA

1.4 Structure of the paper

This paper is structured as follows; section 1 gives an overview of the SSA and the role of Agriculture in the development of the region. It later evolves to bring in the motivation of the research paper and its key objectives. Section 2 talks about Agriculture production in the SSA with a particular emphasis on the East African region and the Ugandan economy. This section later shows the existing potential comparative advantages for promoting tradability of Agriculture in SSA. Section 3 provides an outlook on the existing barriers against the realization of the suggested comparative advantages and it also provides global best practices from which SSA can benchmark and later a conclusion is provided in section 4.

2.0 Agricultural Production:

2.1 In Sub Saharan Africa

Although tradability of Agriculture has offered opportunities for growth and development in all parts of the world, the hopes and promises attached to rapid liberalization of agricultural trade and finance have not so far been fulfilled in many developing countries, and particularly so in the SSA. In fact, the latter are increasingly becoming marginalized, especially in agriculture (F. Zaal, 2009).

Countries in the SSA particularly LDCs face many difficulties, both internal and external, in their efforts to develop their agriculture and to achieve their objectives of poverty reduction through improving food security and increasing export earnings. At the same time, with the growing integration of markets due to Economic Globalization⁵ and liberalization, their economies (SSA) face a more fiercely competitive external trading environment as they continue to export a limited range of primary commodities that are highly vulnerable to instability in supply, demand and a decline in terms of trade.

⁵ Economic globalization refers to the integration of national economies into the international economy through trade, foreign direct investment, capital flows, migration, and the spread of technology.

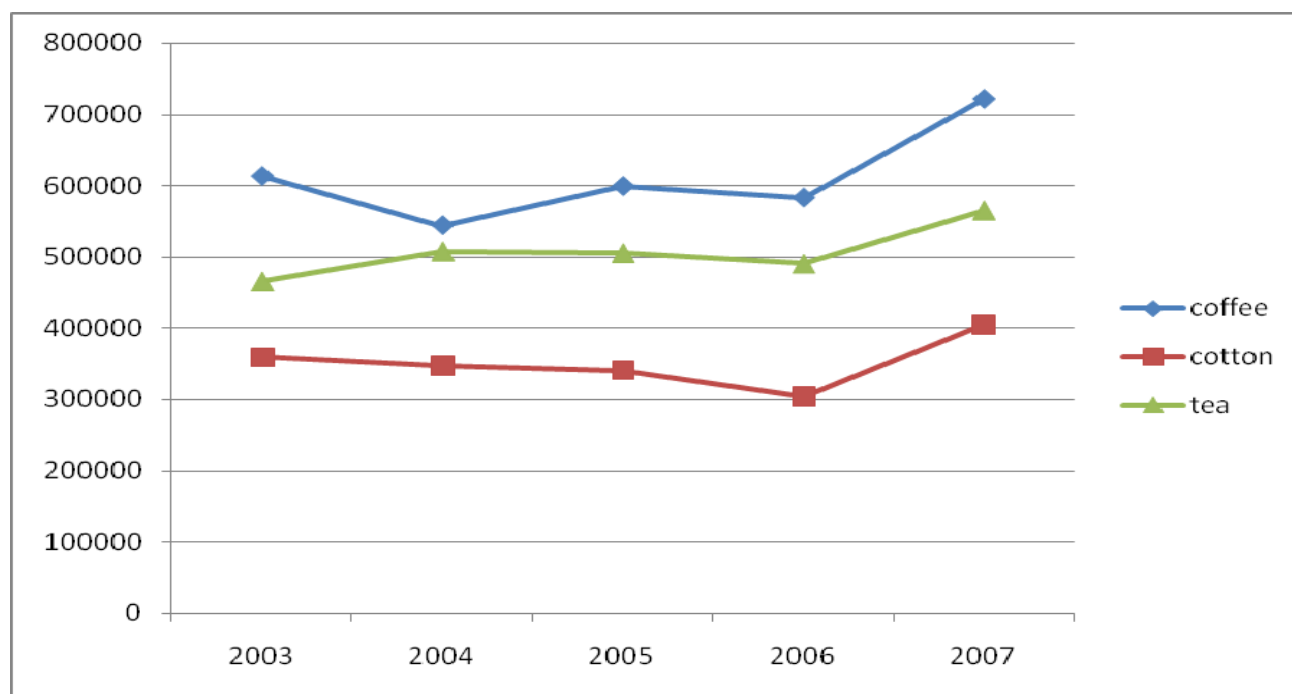
Despite the above, agriculture is growing in SSA, although the growth is precarious. In most countries, it is yet to reach the sustained 6% annual rate estimated by NEPAD as necessary to meet the Millennium Development Goal of cutting poverty in half by 2015. Growth needs to be accelerated, secured and used more effectively to promote broadly shared development (NEPAD, 2006).

2.2 In East Africa

The economies of East Africa are dependent on agriculture. Agriculture as practiced in these countries is largely subsistence and cash crop farming is still on a smaller scale although it is mainly geared for export to foreign countries particularly European Markets. Currently, the leading cash crops exported from East Africa are coffee, tea and horticultural products, which all end up in Europe.

Thus access to the European market is a critical determinant of the success or failure of the agricultural export sector of the countries of East Africa (Nicholas al et 2007) although the European Union is presently reforming its agricultural sector as embodied in the Common Agricultural Policy. Therefore to continue benefiting and competitively accessing this European market, the East African states must come up with an offensive and defensive strategy of which providing better quality products and sustainable supplies should be among the key strategies.

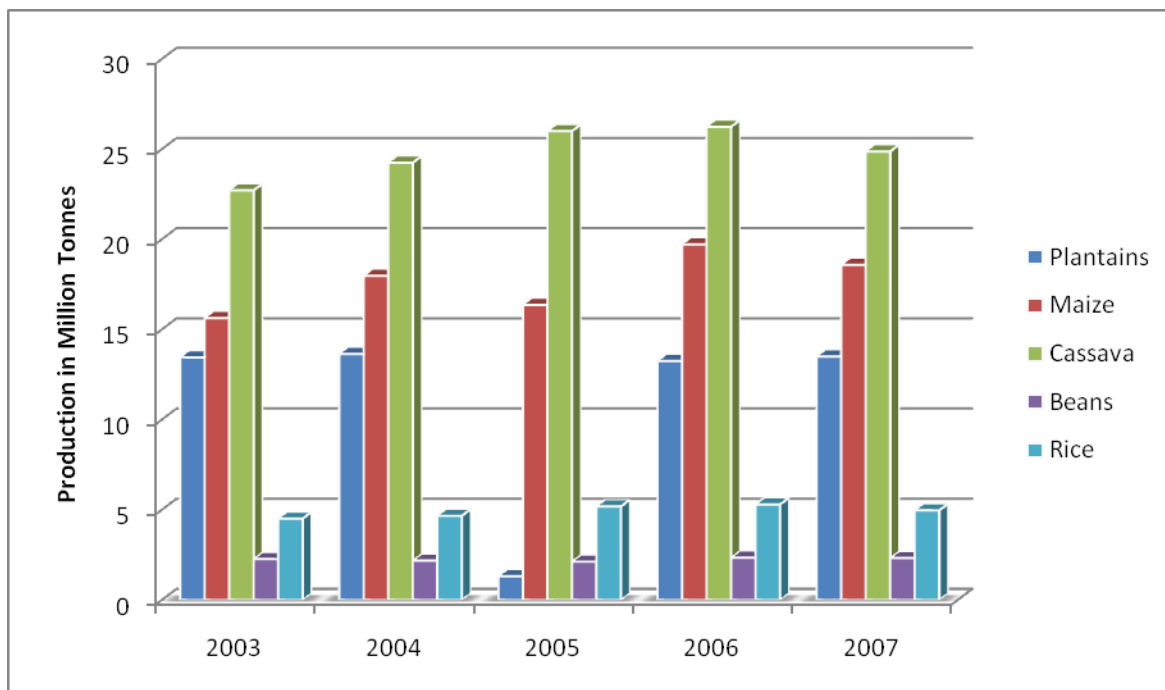
Figure 1: Production Trends of Selected Cash Crops in East Africa: 2003 to 2008



Source: Figure presented from FAO statistics, 2009b

From the figure above, production trends for the period considered have been unsteady with large production volumes reported for coffee (above 500,000 Metric Tones throughout the period). For all the three selected cash crops however, between the years 2006 to 2007, a positive growth was reported although not that significant. However, when compared with staple food crop production, food crop production has been above two Million tons per year which justifies that a lot of emphasis is put on food crop agriculture which is for domestic consumption other than cash crop production.

Figure 2: Food Productions of Selected Staple Food Crops in East Africa; 2003 to 2007



Source: Figure presented from FAO Statistics

2.3 In Uganda

While agriculture accounted for 56% of the Ugandan economy in the mid 80s, with coffee as its main export, currently it only accounts for about 23% of gross domestic product (World Bank, 2009). Much as its dominance in the Ugandan economy has declined, agriculture still plays an important role, directly or indirectly, by providing a livelihood to almost 90 percent of the population. Export figures of both the traditional and nontraditional⁶ exports shows that Uganda’s export base is still dominated by agricultural products although there are a few non-agricultural products as presented in the table below:

⁶ Non-traditional exports are exports other than the unprocessed traditional exports.

Table 2: Uganda's Traditional and Non-traditional Exports by Value and Volume for 2003 to 2007

Uganda: Traditional and Non-Traditional Exports by Volume and Value (US\$ '000)											
Commodity	Unit	2003		2004		2005		2006		2007	
Traditional Export Crops		Vol	Value	Vol	Value	Vol	Value	Vol	Value	Vol	Value
Coffee	Tonne	146,299	100,233	159,983	124,237	142,513	172,942	126,887	189,830	164,540	265,853
Cotton	Tonne	16,762	17,755	29,293	42,758	30,403	28,821	18,480	20,474	16,230	19,571
Tea	Tonne	36,669	38,314	36,874	37,258	36,532	34,274	30,584	50,873	44,015	47,629
Tobacco	Tonne	24,669	43,042	27,843	40,702	23,730	31,486	15,794	26,964	26,384	66,301
Non-Traditional Exports											
Maize	Tonne	60,298	13,724	90,576	17,896	92,794	21,261	115,259	24,114	101,233	23,816
Beans and other Legumes	Tonne	18,070	5,235	26,233	8,968	28,332	8,693	27,087	8,162	22,532	10,099
Fish and Fish products	Tonne	26,422	88,113	31,808	103,309	39,201	142,691	36,461	145,837	31,681	124,711
Cattle hides	Tonne	18,565	4,925	18,502	5,409	25,349	7,064	22,214	8,032	20,942	18,114
Sesame seeds	Tonne	4,108	2,183	4,283	2,788	7,412	4,779	7,568	4,547	5,945	5,447
Soya beans	Tonne	592	87	468	118	574	126	3,048	609	5,798	1,331
Soap	Tonne	11,402	5,553	16,281	7,708	17,072	7,194	11,681	5,530	28,109	14,324
Electric Current	000 Kwh	217,486	13,778	193,104	12,075	62,577	4,465	53,019	4,855	65,927	8,696
Cocoa beans	Tonne	4,328	7,001	5,155	6,801	7,600	9,638	7,632	10,016	9,404	15,936
Cobalt	Tonne	-	0	438	11,548	582	14,320	861	18,063	684	17,325
Hoes and hand tools	'000	407	580	180	348	466	1,159	68	518	55	1,117
Pepper	Tonne	103	176	394	368	817	594	218	189	194	256
Vanilla	Tonne	91	13,546	71	6,120	234	6,135	195	4,808	422	6,262
Live animals	'000	8	61	37	130	12	29	0	28	23	1,551
Fruits	Tonne	425	436	1,297	917	3,061	1,158	7,821	1,167	7,361	1,976
Groundnuts	Tonne	4	7	1	1	22	23	63	8	101	148
Bananas	Tonne	1,646	110	1,792	850	2,196	806	494	127	1,151	430
Roses and Cut flowers	Tonne	5,636	22,080	6,092	26,424	6,162	24,128	4,989	20,987	5,267	22,782
Ginger	Tonne	13	15	14		8	78	4	12		
Gold and gold compounds	Kg.	3,478	38,446	5,465	61,233	4,241	73,072	6,937	122,579	3,602	65,783
Other Precious Compounds	Kg.	22	13,612	0	4,713	2	6	20	117	4	43
Manufactures/Other Products			77,193		114,507		183,935		257,345	477,077	413,546
Petroleum products	Litre	63,645	27,901	65,277	27,904	74,380	32,015	81,977	36,401	87,148	38,553
Sorghum	Tonne									141	23
Plastic Products	Tonne									8,476	8,276
Animal/Veg. Fats & Oils	Tonne									47,491	62,850
Sugar & Sugar Confectionary	Tonne									72,772	33,451
Iron & Steel	Tonne									43,674	40,469
Total			534,106		665,090		812,857		962,193		1,336,668

Source: Statistics by Uganda Export Promotions Board

The EU and COMESA states are Uganda's major exporting partners and this has been ongoing since 2001. For example, in 2005, the EU constituted 31.1% of Uganda's total export share and was followed by COMESA which accounted for 30.7%. North America and the Asian continents constituted 2.3 and 7.5% respectively (UBOS, 2007)

Agricultural production which is based primarily on small-scale agriculture remains a mainstay of the economy. Uganda's main food crops have been plantains, cassava, maize, sweet potatoes, millet, sorghum, beans, and groundnuts. Major cash crops include coffee, cotton, tea, and tobacco.

Table 3: Production figures of selected food crops grown in Uganda in the year 2009

Commodity	Production (1000 Tonnes)	Imports (1000 Tonnes)	Formal Exports	Imports as % of Apparent Consumption	Formal Exports as % of Production
Maize	1230	33	47	2.7%	3.3%
Cassava	4986	-	7	0.0%	0.1%
Plantains	9110	-	-	0.0%	0.0%
Beans	446	3	19	0.7%	4.2%
Rice	105	63	18	42.0%	16.7%
Wheat	17	365	1	95.8%	7.4%
Others	8867	523	513	5.9%	5.8%
Total	24761	986	598	3.9%	2.4%

Source: FAO, 2009b and FAO, 2009C

Note: *Apparent Consumption is defined as production plus imports minus exports and non-food uses.*

2.4 Existing Comparative advantages for tradability of agriculture in SSA

Although tradability of agriculture is still very low among SSA countries, Agriculture remains the basic pillar of the economies of SSA. About, 30 percent of GDP, more than 40 percent of exports and around 70 to 80 percent of the workforce rely on agriculture (World Bank 2009). Even if structural transformation towards industry and services will ultimately result in a decline of agriculture's relative importance, this will not be possible without substantial growth of agriculture. The opportunities for agricultural development exist and form a greater comparative advantage in tradability of agriculture in SSA, among these includes the following outlined below;

2.4.1 Major agricultural demand and market trends in SSA

Worldwide, market trends for agricultural products are nowadays considered attractive; prices are projected to be 10 to 20 percent higher than in the past decade (OECD and FAO 2009). This is thus a fundamental paradigm change from years ago when it was generally assumed that the long-term negative price trends and terms of trade against agriculture which prevailed for the last century or more would continue.

Several factors have been pointed out to contribute to this new prospect and among these factors include: Continuous population growth in developing countries, urbanization, increasing incomes and changing dietary patterns in favor of food products have steadily increased demand for agricultural products. It is assumed that world food production has to increase by 70 percent until 2050 in order to meet the ever growing population (FAO 2009b). Thus SSA should utilize this opportunity since it will strongly contribute to the projected increase in demand for agricultural products.

Also in regard to the above, until the year 2050, the SSA population is projected to more than double to almost two billion (FAO 2009a). African cities are also projected to grow by five to six percent annually. This resulting demand growth is favoring African producers who have a favorable selling position due to local preferences for and non-tradability of demanded food (e.g. local tubers and cereals).

2.4.2 Africa's advantages for agriculture

Although the past track record of agriculture in SSA is not very encouraging, many SSA countries have revealed comparative advantages for agricultural production, and many more have potential advantages (OECD 2008; FAO 2009). Most of the countries which do not dispose of mineral resources have relied, and still heavily rely, on agriculture for exports where some products have maintained considerable market shares – most important are cocoa, coffee and cotton, followed by sugar, tobacco, tea, peanuts, natural rubber and bananas (Ngand Yeats 2008). FAO statistics (2007) show that three countries from the SSA were among the leading producers of cocoa beans and in coffee production, there was Ethiopia, as presented in the table below.

Table 4: Top ten producers of Cocoa beans worldwide for the year 2007

Rank	Country	Production(MT)
1	Ivory Coast*	1384000
2	Indonesia	740006
3	Ghana*	615000
4	Nigeria*	500000
5	Brazil	201651
6	Cameroon*	179239
7	Ecuador	85891
8	Togo*	78000
9	Columbia	39904
10	Paper New Guinea	37300

Source: FAO Statistics 2009

* Means SSA Country

The above successes are all important as they are mostly achieved against declining world market prices. In addition, many of those countries in SSA that do have mineral resources such as the Democratic Republic of Congo, Angola, Sudan, Nigeria or Zambia have huge untapped agricultural potentials which once utilized will provide a significant back up for trading of Agriculture.

In addition, SSA as a whole, together with South America, has the largest land reserves, and many of these reserves don't fall into (protected) forest areas (OECD and FAO 2009). For example, in the Guinea Savannah regions alone, only 10 percent of 600 million hectares of cultivable land are presently exploited (FAO 2009b). The potential for increasing yields is also very high. For instance, the gap between average maize yields and yields achieved under good management conditions on demonstration plots amounts to 250 to 500 percent in several African countries (World Bank 2007). With improved low external input technologies, high yield increases can be achieved too.

In addition to the above, SSA has a large untapped irrigation potential, at least in some regions, although information on this are not very reliable. In contrast, for non-agricultural products SSA seems to have lost competitiveness. The share of manufactures in GDP declined from 11 percent to 7.5 percent between 1970 and 2006 (World Bank 2008). Except for a few countries (like South Africa and Mauritius), manufactures do hardly figure as exports. Asian countries, notably China, have taken the lead in manufacture exports since the 1960s, and at present it is unlikely that SSA will gain back market shares – thus SSA should only endeavor to promote agriculture other than industrialization since it is endowed with huge potential for agricultural production and sustainability.

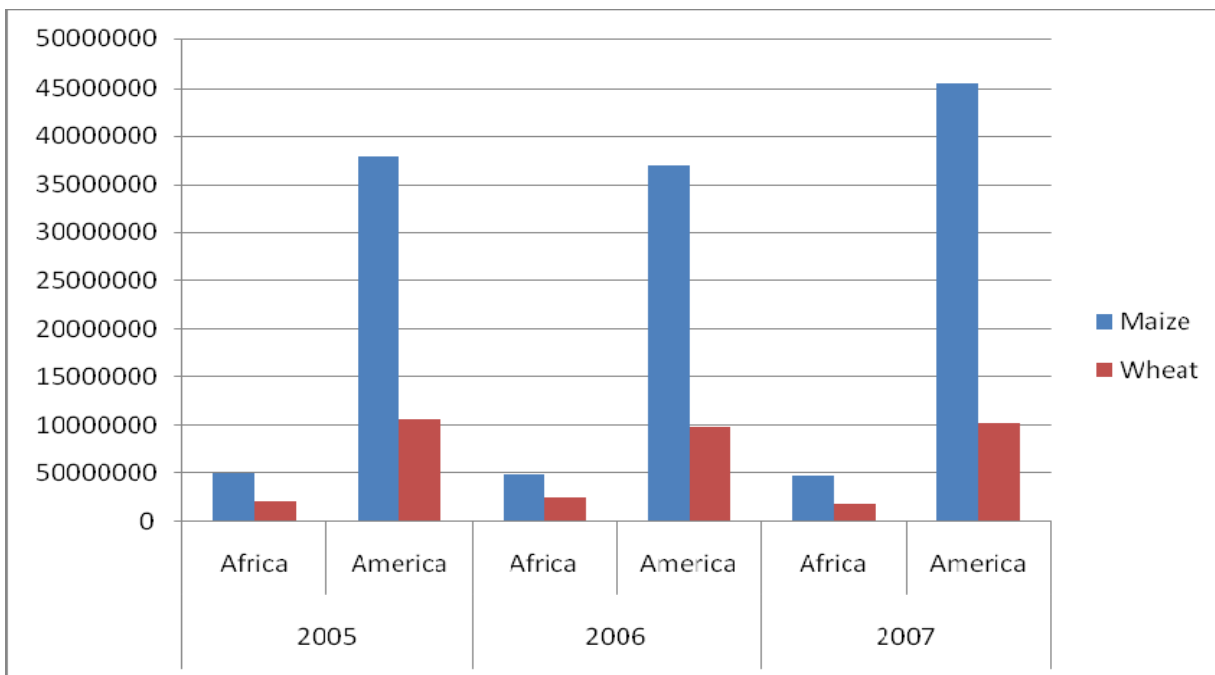
3.0 Existing Barriers against the realization of comparative advantages

Although the previous section argued, “African agriculture is a sleeping giant” (OECD 2008, 7), there are numerous obstacles to release this potential and among these include:

3.1 Poor Historic Record of Agricultural Production in SSA

The historic track record of African agriculture is quite bad. Production may have grown in physical terms, but less than in most other world regions, and basically due to area expansion. Yields are stagnating and per capita production has declined over decades (FAO 2009a). A snap shot of only two selected food crops; that is maize and wheat show a big variation in production between Africa and America as per the figure below.

Figure 4: Production of Wheat and Maize in Africa and America for the period 2005 to 2007



Source: Figure from FAO statistics 2009(a)

In addition, the models predicting comparative advantages are based on favorable assumptions about supply elasticities which are mostly adopted from other countries and in reality are difficult to achieve for African farmers. Most traditional export crops have increased less dynamically than in other world regions, and few new export crops have emerged on a larger scale (Ng and Yeats 2003). This thus leaves SSA with only production of their traditional cash crops and perennial food crops as options in agricultural production.

3.2 Insufficient Modern Agricultural Technologies

Modern agricultural technologies are lacking in most areas: mechanization is declining, green revolution technologies have not spread except for a few spots and crops, and fertilizer use is low in the SSA region, roughly about 10 kg/ha compared with 145kg/ha in Asia (World Bank 2007). Development of low-input technologies, probably well adapted to ecological conditions in former times(though this is not enough to prevent hunger),cannot keep pace with the growing population density and ever reducing man/land ratio except in a few areas where special circumstances converged.

3.3 Continuous Soil Mining and degradation

Around 75 percent of the agricultural area in SSA suffers from severe soil mining and fertility degradation (FAO 2009a). As a result of continuous soil mining and degradation, SSA has now been converted from a food net exporting to a net-importing continent and particularly in the growing urban population which is strongly relying on imports for food security and for higher end consumption. For Instance, Statistics available (FAO,2009,a) show that among the top 20 imports in the East African region, food crops like Maize, Rice and Wheat have been dominant imports in the region as presented in the table below:

Table 5: Import values of selected Food crops in the East Africa for the period 2004 to 2007

Food crop	Quantity(Tonnes)			
	2004	2005	2006	2007
Maize	1240731	890293	589728	880893
Wheat	3234711	3594830	3382270	3268652
Sorghum	237569	342071	449058	259459
Rice Broken	342863	255159	281808	237180

Source: Table from FAO statistics 2009(a)

This disgracefully performance is partially explained by more or less immutable structural factors which include the prevalence of poor soils, ecological disadvantages and disease pressures, including difficult conditions for animal husbandry and resulting problems of integrating agriculture and livestock, all leading to soil mining and degradation thus leading low agriculture yeild. A particular problem is large variations and variability of growing conditions in many parts of the continent, in particular the absence of irrigation and water management.

3.4 Inappropriate Agricultural market policies

Policies in SSA have neglected and/or remained unsuccessful to correct for market failures since agricultural markets and institutions are usually not working efficiently. This has been worsened by cases of closure of governmental agriculture marketing parastatals in various countries, for Instance CMB, LMB and the fall of farmers' cooperative unions like Western Ankole Cooperative society, Bugisu Cooperative Society and Zigotti Coffee Limited, all in Uganda. In addition, transport, information, contract and other transaction costs in rural areas are very high. Also the private agribusiness needs appropriate support since it is mostly informal (with a few but important exceptions mostly in South Africa, OECD 2008) and suffers from insufficient access to credit, information, technology, all of which are critical elements for favorable and successful agricultural market policies.

3.5 Small holder farming in SSA

Another particular challenge for SSA agriculture is the fact that most agricultural producers are smallholder farmers. What has been said about private agribusiness is true for this group of actors: they lack capital, modern know-how, access to finance, information and services. Smallholder households pursue different, partially conflicting production and consumption objectives at the same time, with a high emphasis on reducing elementary survival risks. Without cooperation which is difficult to organize within the farming community – smallholders cannot achieve economies of scale in procurement and commercialization nor negotiate favorable conditions with input and output traders (Collier and Decron 2009).

To support the above, there has been a problem of unavailability of inputs on a timely basis or in the quantity required to boost agricultural yields in most agricultural areas especially the rural parts within the region. This constraint is largely linked to the lack of credit, difficulties in obtaining foreign exchange, lack of risk management and price formation mechanisms, the seasonality of agricultural input requirements, spatial dispersion of farmers, poor transport infrastructure and management inefficiencies of the state-owned companies responsible for single-channel input supply and marketing. The informal seed supply system in most SSA countries is the dominant source of seed/planting materials for resource-poor farmers in marginal areas and has proven to cope better with a disaster situation compared to the formal seed sector.

3.6 Weak Institutional capacity for research and extension

In most LDCs and the SSA region at large, the institutional capacity for agricultural research and extension is very weak. As a result, the technology available is insufficiently adapted to local conditions and research results do not come up with a variety of technological solutions adapted to the range of socio-economic and agro-ecological conditions existing in the respective regions, perfect examples include: the differing technical needs of small and commercialized farmers. Lack of technological alternatives is often mentioned as a constraint to irrigation development (for instance, different models of irrigation pumps, suited to the needs of different users have never been established by the respective countries which need irrigation). Where techniques and technologies developed by research are made available, their dissemination is faced with a number of difficulties such as the poor delivery of the extension and training services that are not necessarily targeted to the appropriate users.

3.7 Infrastructural public expenditure and Domestic Resource gap

SSA countries particularly the LDCs face a major domestic resource gap in generating the investments needed to achieve their developmental objectives in agriculture as per the MDGs. In many LDCs economies, much public expenditure on agriculture is in the form of subsidies, leaving little public funding for the creation of new assets, for maintenance or for other growth-producing expenditure. The result is that many agricultural support services barely function, rural roads are impassable for much of the year and this makes market accessibility by rural farmers difficult, farm machinery is mostly inoperable and irrigation schemes are crippled. Most of the required investments expected from the private sector have not fully materialized. In this regard therefore, public investment is an indispensable pre-condition and catalyst for and complement to private investment, involving basically investment in agricultural research and public infrastructure.

3.8 Global best practices from which lessons can be derived by the SSA Region

For agriculture to develop, a renewed emphasis is required on policies and on building appropriate institutions just like it is in leading agricultural producing nations like USA, Spain, Syria, Italy and the rest. Below are among the cited agricultural practices worldwide from which SSA can derive lessons.

3.8.1 Appropriate Government intervention in Agricultural markets

In many SSA countries, governments have often intervened in markets in inappropriate ways and have invested in state owned production enterprises that have often been inefficient. Reforms have been undertaken to privatize inefficient state-owned enterprises and to eliminate marketing boards and other regulatory agencies in many countries in recent decades, for instance CMB; LMB all in Uganda. However, the historical role of such institutions and the associated provision of these government efforts in agriculture have not always been fully appreciated. For instance since the closure of government agricultural marketing institutions in Uganda, the share of Agriculture in GDP, Exports and growth in the agricultural sector has been declining as presented below for the selected first six years after the closure of Marketing Cooperative Societies in Uganda in the year 1990:

Table 7 Selected agricultural indicators in Uganda, 1990-96

	1990	1991	1992	1993	1994	1995	1996
Share of agriculture in GDP (%)	54.3	52.0	54.0	48.8	52.5	48.0	45.0
Share of agriculture in exports (%)	91.0	82.0	56.0	75.0	89.0	81.0	80.0
Percentage growth of agricultural components (monetary) (%)							
Food crops	2.46	1.04	4.25	6.65	8.15	4.05	-4.0
Cash crops	-4.15	25.01	0.90	0.50	17.10	17.10	28.2
Livestock	3.86	3.77	1.98	3.89	2.57	2.41	6.34
Fishing	14.84	3.99	3.90	4.20	-3.20	6.30	4.80
Forestry	3.97	3.98	4.60	4.65	4.65	4.45	4.45
Area planted to food crops ('000 ha)	4 271	4 421	4 554	4 668	4 819	4 879	4 950
Food production ('000 tons)	15 517	14 968	15 357	16 304	13 452	16 697	15 409
Per capita (kg)	959	901	898	930	749	907	817

Sources: World Bank: *Uganda: Agriculture*, 1993; World Bank: *Uganda: Growing out of poverty*, 1993; World Bank: *Uganda: The challenge of growth and poverty reduction*, 1996; Ministry of Planning and Economic Development: *Background on the Budget 1997-98*, 1997; Ministry of Planning and Economic Development: *Economics of Crop and Livestock Production*, 1997; Ministry of Finance and Economic Planning: *Key Economic Indicators*, 1996.

In contrast to the above however, world wide experience provides that public sector investment in the development of agriculture input and output markets, agricultural extension and in applied agricultural research have been vital to agricultural development in successful agricultural economies in the world. Institutional reform without investment in these public goods does not produce economic growth in the agricultural sector. Thus SSA countries should consider reviving the above if tradability of Agriculture is to be promoted.

In addition; it should be noted that growth is not produced by passive “let the markets⁷ work” policies that do not include critical public investment programmes. Therefore, the major lesson that emerges from country experiences is that for agricultural growth to occur, a number of factors need to be in place which will address the “handicap” of the rural sector in terms of infrastructure, social services, technology, marketing infrastructure, and seasonal credit availability, along with the building of an appropriate institutional environment. Evidence provides that in all countries which have been successful in agricultural tradability, infrastructural development has played a critical role. Thus SSA governments should provide the key infrastructures since they boost agriculture.

3.8.2 Reversing the declining trend in investment

In almost all LDCs in the SSA, official development assistance (ODA) is the main catalyst of investment in agriculture implying that little or none of the local revenues are invested in agriculture (NEPAD, 2008). For instance, although total ODA to LDCs increased from US\$12.4 billion to US\$23.4 billion between 1999 and 2003, the share received by the agricultural sector declined from 19 percent to 15 percent during the same period. In addition still, much of the external assistance to agriculture in the LDCs is in grant form (between 50 to 78 percent) with a slight portion in multilateral commitments (World Bank, 2008). Improving this trend is crucial in ensuring that appropriate agricultural intensification strategies can be pursued in the future. In particular, adequate external assistance is essential to enhance agricultural productivity, which is dependent on the availability of sustainable alternative technologies and farming practices that will not further degrade the natural resource base.

Therefore, backed by the importance of the agricultural sector in the LDCs for poverty reduction and economic growth, current initiatives to provide financial assistance through targeted debt relief and other measures could in part be directed to supporting efforts to develop their sustainable agricultural potential.

3.8.3 Improving market access for agricultural exports

Many LDCs indicate that the AoA has not brought about any real improvement in market access for their agricultural exports, mainly because; of the erosion of their tariff preferences; the persistence of tariff peaks and tariff escalation in some sectors of particular interest too. In the Doha Round of trade negotiations on agriculture, there was a keen look to ensure that there should be an improvement in market access, especially for those products with a high growth potential and high value. Thus, there was an interest in reducing border protection and tariff escalation in the developed and developing countries and in ensuring that the beneficiaries of preferential arrangements are compensated for the loss or erosion of such preferences and assisted in adjusting to a more competitive environment. The Aid-for-Trade initiative will likely address some of these concerns in the developed world and later can be extended to developing economies in SSA.

⁷ “Let the market Work policies” are policies aimed at liberalizing the agricultural market, thus leaving the market control in hands of the players without state intervention

3.8.5 Raising of Agricultural safety and quality standards

Another major challenge faced by the economies in SSA is raising the standards of their exports to at least internationally recognized levels. Because of their poor capacities in scientific research, testing, conformity and equivalence, they face difficulties in meeting international safety and quality standards which are internationally acceptable in all regions of the world. The task is even more daunting when the developed countries, on risk assessment grounds, adopt higher standards than those currently recognized by international standard-setting bodies. Moreover, rising consumer concerns in the affluent countries over food safety and quality compounds the difficulty of the SSA economies in meeting ever higher standards. Fulfillment of the promises of financial and technical assistance to LDCs, and other developing countries, in respect of SPS/TBT standards is thus important to them.

3.8.6 Capacity building for agricultural trade in SSA

Economies in SSA have neither the institutional capacity nor the human resources to face all the challenges or take full advantage of the opportunities flowing from the multilateral trading system, and to participate fully as equal partners in new WTO negotiations on agriculture. Technical and financial assistance to build capacity is therefore essential, especially in the following areas: (i) developing and strengthening institutional capacity to meet international standards, for instance on food safety and quality; (ii) strengthening the capacity in multilateral negotiations, in particular assisting them to deal with problems confronted in honoring their WTO commitments, including follow-up of decisions in their favor, and to take advantage of trading opportunities; (iii) strengthening their capacity to analyze trade issues in the context of the continuation of the reform process; (iv) assisting non-members of WTO to achieve accession on terms consistent with their development and food security needs; and (v) implementing the Integrated Framework for Trade-Related Technical Assistance to SSA economies particularly LDCs as recognized in the WTO Plan of Action for the LDCs adopted in 1996 at the first WTO Ministerial Conference.

3.0 CONCLUSION

Despite the efforts undertaken by SSA countries which are aimed at transformation and promoting of industrialization and services while undermining agriculture, tradability of agriculture remains a strong pillar of growth if well pursued by SSA countries and thus no development can foster without promoting agriculture first.

The potential for promoting agricultural in particular its tradability within the SSA region exists and it is up to the member states to adopt some of the recommendations highlighted above to unlock the existing agriculture wealth if economic growth is to boom like for instance putting to use the rich unutilized Savannah, mechanization of agriculture and opening up of both local and international markets for agricultural produce are among the key distinct factors which can be utilized to promote Agriculture.

However although, the potential exists, bottlenecks such as insufficient modern agricultural technologies, continuous soil mining, inappropriate agricultural market policies and small holder farming are among the hindrances which if efforts are combined by all member states within the region, can be overcome. With success in agriculture, economic growth and poverty alleviation can be prevailed over as predicted by NEPAD and other institutions which are significantly monitoring the economic growth of the SSA region.

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