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Access of Eastern African Farmers to Domestic and International Markets: Opportunities and Constraints

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Godfrey Bahiigwa¹

Abstract

This paper reviews the opportunities and challenges that Eastern African farmers face in accessing domestic, regional and international markets. With rising population and incomes, domestic markets offer great opportunities for farmers. However, because of structural, institutional and organizational constraints, small scale rural farmers may not benefit much from domestic urban markets unless they are organized and trained to meet the high quality product standards demanded by urban consumers and supermarkets. ECA countries stand to gain more by investing in commodities that are consumed within the region, than from traditional cash crops destined for international markets. Regional integration offers opportunities for larger markets and efficiency gains and this is happening, although countries still have to do more to ease the flow of goods across the region, including joint investments in infrastructure to link markets, harmonizing trade policies, and removing trade barriers that limit cross-border trade. Access to international markets remains constrained because of trade distorting practices in developed countries, especially tariff peaks and tariff escalation, domestic support to their farmers, and export subsidies. All these practices render African products uncompetitive, discourage investments in agro-industries, thus limiting growth in jobs and incomes, and slow down the pace of economic growth and overall poverty reduction. African countries stand to gain more from liberal trade policies than from aid from developed countries.

Key words: Market access; trade reforms; regional integration; economic growth; Eastern African farmers

1. Introduction

Agriculture is the dominant economic activity in Eastern and Central Africa (ECA)² region, accounting for about for 43 percent of the region's total gross domestic product (ASARECA/IFPRI, 2005). For five of the countries in the region (Burundi, DRC, Ethiopia, Sudan and Tanzania), agriculture contributes more than 50 percent of total GDP. Only in three countries (Eritrea, Kenya and Madagascar) does agriculture contribute less than 30 percent of GDP. The distribution of the region's GDP largely

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² The ECA region as used in this paper includes ten countries (Burundi, Democratic Republic of Congo (DRC), Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Sudan, Tanzania, Uganda). This grouping follows that of a sub-regional research organization, the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA).

follows that of agricultural GDP, with smaller economies having smaller agricultural economies (Figure 1).

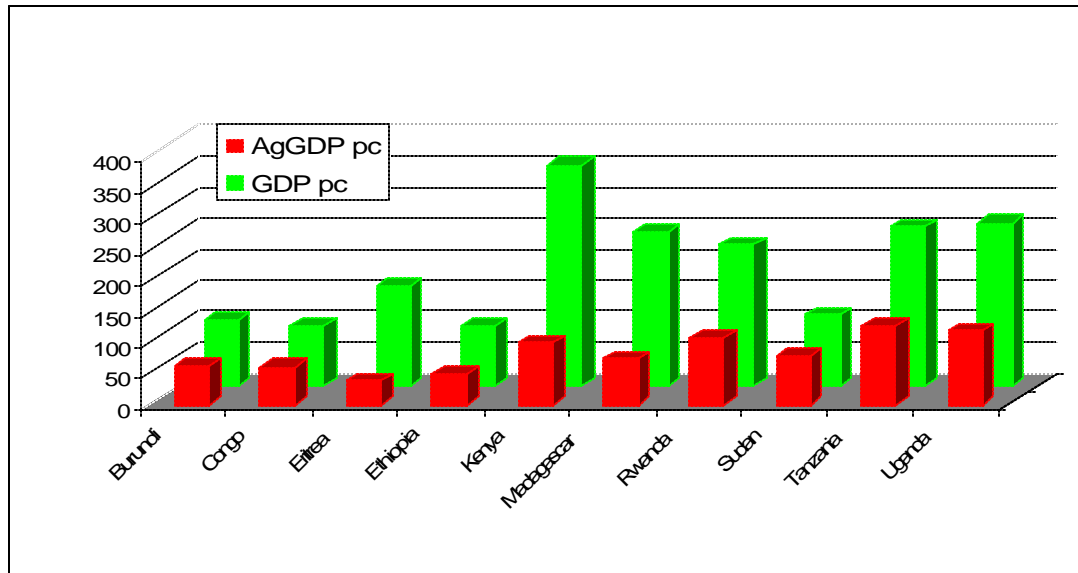
Agriculture employs more than 70 percent of the population in the ECA, the bulk of which lives in rural areas. Agricultural performance in the region has been poor, growing at 2.34 percent between 1993 and 2003, less than the rate of population growth of about 3 percent, implying a decline in per capita agricultural production over the period. Because of the poor performance of agriculture in the region, poverty, hunger and malnutrition have remained rampant.

Despite the poor performance of the agriculture, the sector is very important for getting millions of people out of poverty, given the large number of poor people that depend on it as a source of employment and income. Growth in agriculture is seen not only as an avenue for raising rural incomes, but also for growth in the non-agricultural sectors of the economy. As rural incomes rise due to growth in agriculture, demand for non-agricultural goods (manufactures) and services rises, thus stimulating growth in those sectors as well. Thus growth in agriculture has both direct and indirect benefits to the economies in the region. As such, for all the countries in the region, agriculture is high on the development agenda, as reflected in their poverty reduction strategy papers (PRSPs) and agricultural sector development plans. Given the levels of rural poverty and the dominance of agriculture, growth in the sector is important for higher incomes, food security, poverty reduction and overall economic growth.

The importance attached to agriculture in the region is not matched with the effort that regional governments accord to developing and linking markets for agricultural products. As such, agricultural markets are scattered and fragmented, poorly served with infrastructure and other services. Yet without functional agricultural markets in the region, full benefits of agricultural development strategies and reforms will not be realized. Sustainable growth in agriculture in ECA will depend on the extent to which producers have access to markets for their produce. Stimulating supply without reliable markets only leads to over production in one year and shortfalls in the next year as prices

crush, sometimes below cost of production and producers react by producing less. And that results in fluctuations in production, prices and incomes, the total sum of which is the constant food shortages in the region.

Figure 1: 2003 Per Capita GDP and Agricultural GDP (USD/year) in ECA Countries



Sources: ASARECA/IFPRI, 2005.

The purpose of this paper is to explore issues of market access for farmers in Eastern Africa, focusing on both the constraints to market access, as well as opportunities that exist currently or could be created for farmers. The paper has five sections. The first section has highlighted the importance of agriculture in the economies of ECA countries, its prospects for growth and poverty reduction, as well as pointing out that the sector's potential cannot be fully realized unless farmers have access to reliable markets for their products. The second section discusses access to domestic markets, while the third and fourth sections discuss constraints and opportunities in accessing regional and international markets, respectively. Section five concludes the paper by providing the way forward in addressing farmers' constraints in accessing domestic, regional and international markets.

2. Access to domestic markets

Constraints limiting access to domestic markets include supply side constraints, especially at farm level, that limit sufficient and reliable flow of products; demand side

constraints that limit the growth of local consumption of agricultural products; domestic agricultural policies that tend to hurt agriculture; and markets and marketing institutions that are not well linked to serve farmers, especially in rural areas. Each of these sets of constraints is discussed in more detail in subsequent sub-sections.

2.1 Stimulating supply

Most countries in the ECA have agricultural development strategies intended to stimulate supply by utilizing natural (land, lakes) and human resources (labor), and existing technologies. The common focus areas in national agricultural strategies to increase production and productivity include: strengthening agricultural research to generate appropriate technologies; improving extension services to provide relevant technical assistance to farmers both for production and marketing; improving infrastructure especially in rural areas to link them to input and output markets; providing micro-finance services to rural areas to enable farmers purchase inputs for improved agricultural productivity (see for example, Uganda's Plan for Modernization of Agriculture (PMA), 2000; Kenya's Strategy for Revitalization of Agriculture (SRA), 2005; Tanzania's Agriculture Sector Development Strategy (ASDS), 2001).

There are opportunities to stimulate agricultural production in ECA, as contained in national strategies, but also because of the existence of sub-regional agricultural research organizations such as the Association for the Strengthening Agricultural Research in Eastern and Central Africa (ASARECA). A recent study by ASARECA/IFPRI (2005) shows that there are agricultural development domains³ which are trans-boundary, highlighting the potential for agricultural investment in the region. The domains also present opportunities for technology spillover effects, such that a technology developed in one country, can be applied in another country sharing the same development domain, thus lowering the cost of developing and promoting the same technology in the recipient country.

³ Development domains in the study were defined and delineated based on three key factors: population density, market access, and agricultural potential.

At continental level there is an initiative to revitalize agriculture in Africa. The Comprehensive Africa Agricultural Development Program (CAADP) under the New Partnership for Africa's Development (NEPAD) has been formulated. The primary goal of CAADP is agriculture-led development that eliminates hunger, reduces poverty and food insecurity, opening the way for export expansion (NEPAD, 2005). Four specific thrusts for improving Africa's agriculture are outlined by the CAADP: (i) extending the area under sustainable land management and reliable water control systems; (ii) improving rural infrastructure and trade related capacities for market access; (iii) increasing food supply, reducing hunger, and improving response to food emergency crises; and, (iv) improving agriculture research, technology dissemination and adoption. The CAADP agenda is yet to be operationalized, but plans are underway to start country level consultation in mid 2006 to align national agricultural objectives and strategies to those of CAADP.

Despite the existence of the PRSPs and agricultural development strategies, implementation has been challenging to most countries for a variety of reasons including limited funding, policy reversal and lack of capacity in implementing agencies. Despite the commitment by heads of state and government of the African Union to increase public expenditure on agriculture to 10 percent of national budgets in the Maputo declaration in 2003 (African Union, 2003), countries are yet to actualize this commitment in their national budgets. One of the main constraints to stimulating supply is lack of reliable infrastructure to link production areas to consumer markets. Intrastate and interstate roads are in various states of disrepair. The railway lines are in a similar state. As a result, bulk commodity movement is by roads, making unit transport costs higher, but also damaging the roads that were not designed to withstand such loads, increasing maintenance and repair costs. High transaction costs make regional agricultural exports less competitive on world markets, compared to producers of the same commodities with lower transaction costs. Low energy generation and high energy costs in many countries are limiting investments in agro-industrialization. While production-side investments that improve productivity and product quality can definitely improve Africa's competitiveness, poorly functioning domestic and regional markets and costly transport

systems add enormously to farmers' costs and squeeze them and African traders out of their domestic and regional markets (Diao and Hazell, 2004).

2.2 *Creating demand*

From the 1960s to the 1980s, African agricultural development policy was largely export-oriented, with emphasis on production of traditional cash crops – mostly coffee, cotton, tea, sisal, coffee, cashew nuts, tobacco. The target was international markets. Little attention was made to develop domestic markets. As such, most agricultural development plans and strategies deal very well with the supply side, but are weak on demand creation and market development, especially for domestic markets. However, with time, countries are beginning to realize the need to create domestic and regional demand. Several factors are in favor: (i) the growing population in individual countries and in the ECA region as a whole; (ii) declining world prices for traditional cash crops, compelling farmers to switch to non-traditional crops, especially staples (grains, bananas, and pulses) and livestock production. Recent examples of attempts at creating domestic demand are school feeding programs that create demand for milk, thus providing opportunities for small scale farmers to produce and supply milk to schools within their locality. Indeed analysis in the ASARECA/IFPRI study (2005) indicated that there are higher growth benefits in ECA by concentrating on agricultural products consumed within the region than from traditional exports destined for international markets.

Rising incomes and urbanization in most countries in ECA also offer opportunities for farmers. However, for poor farmers, rise in incomes can have different effects, depending on what they produce. As incomes rise, people tend to consume more protein-rich livestock products and less starchy foods. Thus, if the poor farmers are not producing protein-rich foods (livestock and poultry products), they may not gain as much from rises in incomes among consumers, especially in fast-growing urban areas.

Growth in domestic demand is constrained by several factors, including generally low per capita incomes, but also income inequalities that exist in individual countries by region or rural-urban differences; static consumer habits, with most people consuming traditional

foods, prepared in traditional forms thus limiting innovation in product transformation; and limited promotion of new products and consumer education.

2.3 *Domestic agricultural policies*

In the 1980s and 1990s ECA countries underwent policy reforms, mainly under the World Bank/IMF led structural adjustment programs. The agricultural reform measures were designed to do four things: (i) eliminate government control over input and output prices, (ii) reduce exchange rate overvaluation, (iii) eliminate regulatory controls over input and output marketing, and (iv) restructure public enterprises and reduce marketing board involvement in agricultural pricing and distribution. These reforms have been implemented to varying degrees in different countries. For example Uganda completely got rid of its marketing boards for coffee, cotton and general produce. On the other hand, given the importance of grain in Kenya, the country to date has maintained a grain marketing board. The motive behind commodity and price liberalization was to increase efficiency by removing the state from activities that could be handled better and profitably by the private sector. Studies that have been done on effects of liberalization have produced mixed results (Kherallah, *et al*, 2002). For traditional export crops that were taxed by governments to raise revenue, liberalization resulted in farmers getting a larger share of world price than was previously the case. For example, pre-liberalization, coffee farmers in Uganda were receiving about 30 percent of the world price, but after liberalization in the early 1990s the farmer's share rose to more than 70 percent.

Despite some cases of positive effects, there are also cases where farmers lost out with the collapse of state price controls, especially for staple foods. Farmers have become more vulnerable to price fluctuations, especially during periods of high production, when prices collapse. In the absence of agricultural commodity exchanges, and warehouse receipts systems that can help farmers hedge against price fluctuations, politicians have began pushing governments to provide support to farmers, especially given that developed countries provide support to their farmers. A much broader issue is the need to redefine the role of the state, especially in a situation where there is market failure, as is frequently the case in many ECA countries and elsewhere in Africa. Coulter and Onumah

(2002) argue that one way of reducing the need for governments to intervene in agriculture or reduce the cost of such interventions is to develop warehouse receipt system (WRS). WRS have several advantages, including easing access to finance to farmers, moderating seasonal price fluctuations, curtailing cheating on weights and measures, as well as promoting instruments to mitigate price risks. The positive news is that many countries in the region are moving towards establishing WRS as well as agricultural commodity exchanges.

2.4 *Markets and marketing institutions*

As population grows, opportunities increase for farmers to produce and sell in various markets. Within the domestic economy, African farmers have access to three types of markets. The first category consists of rural markets or local markets that exist within easy reach, usually within a few kilometers from the farm. Such markets tend to operate periodically, weekly or bi-weekly. Entry into such markets is fairly easy, as long as one pays a known fee to a market tenderer or local government official. However, research in Uganda (Bahiigwa, 2005; Bahiigwa, et al, 2004) shows that such market fees and dues tend to be regressive, with higher tax incidences on smaller quantities of crops or smaller units of livestock than large units (see Table 1). Yet smaller units are produced by the poor smallholder farmers. This tends to discourage commercialization, yet it is an explicit objective of many agricultural development strategies in the region. While collection of such market dues can be a source of local government revenue, regressiveness is not an attribute of a fair tax regime. In such circumstances, the government role of creating an enabling environment for the farmers to commercialize is not born out by empirical evidence.

The second category of markets is urban markets that are usually distant from the average rural farmer. Other than farmers who live close to urban centers, the rural farmers have no direct access to urban markets. Rural farmers are linked to urban markets through local bulk buyers or traders that are able to transport large quantities to urban markets. In circumstances where farmers lack market information on prices in urban markets local

traders tend to take advantage and offer a lower price. However, with the spread of FM radio stations in most countries and with the advent of the mobile telecommunication networks in the mid 1990s, farmers are more able know market conditions in urban centers and therefore bargain for a higher price. Governments, through their ministries or in collaboration with others have established market information systems that broadcast commodity prices on several FM radio stations in local languages. In Uganda, for example, market information is broadcast via 9 radio stations through 12 programs a week (MIS, 2005). The 9 radio stations cover the entire country and the information is broadcast in at least seven languages, at least one of which is understood by the majority of Ugandans. The Uganda National Household Survey 2002/2003 revealed that 67 percent of Ugandans own radios, and that the radio is the main source of information for 60 percent of the population (UBOS, 2003). Therefore, the use of radio can be an effective tool in reaching farmers in rural areas. Uganda has three mobile telephone service providers, and each of them has a service to which a user can send a short message and instantly receive agricultural market prices.

Table 1: Crop and livestock market dues in rural Uganda, 2004

Crop	Unit of measurement	Market Dues (Ug. Sh)	Sales Price (Ug. Sh)	Tax as % of price
Maize (dry)	Bag	500	15,000	3.3
Maize (dry)	Tin	200	2,667	7.5
Cassava	Bag	500	21,667	2.3
Sweet potatoes	Bag	500	11,192	4.5
Sweet potatoes	Tin	300	3,000	10
Livestock				
Cow (live)	Animal	2,000	180,000	1.1
Goat (live)	Animal	1,000	18,500	5.4
Chicken	Bird	300	2,426	11.9

Source: Bahiigwa, et al, 2004.

Urban markets are also important for farmers producing horticultural products such as fresh vegetables and fruits that tend to be perishable. Here farmers sell to two types of traders: those in established (formal) urban markets who sell to high income consumers, or to traders who operate on roadside (informal) markets, mainly catering for the low income consumers. Usually the product quality difference in both markets is not very big, but the price difference is usually significant.

The third category that evolved in the mid-1990s is supermarkets. Supermarkets cater for high income urban consumers whose consumption habits are towards processed foods or high quality fresh fruits and vegetables. Such consumers often consume imported substitutes, of high quality even though such products are highly priced. Supermarkets are offering another opportunity for African farmers, but because of quality specifications very few small scale producers are able to meet such standards. This is not a problem per se, it just points to the need to train and organize farmers to meet the standards of supermarkets. Recent studies attribute the rise and growth of supermarkets in Africa to increased urbanization and rise in incomes (Reardon, et al, 2003). Supermarkets in Africa started with selling processed and staple foods but have begun to expand into fresh foods and vegetables. Supermarkets in Kenya buy about half the volume of produce exported, and thus represent a significant “dynamic market” opportunity for farmers (Neven and Reardon, 2004).

With rapid urban growth, rising incomes and favorable policies and infrastructure, supermarkets offer both opportunities and challenges for farmers. Without proper guidance and training to smallholder farmers to meet standards of supermarkets, benefits will accrue to middle and large scale producers. Government programs that emphasize transformation of subsistence farming to commercial farming for poverty reduction will not achieve their objective unless poor farmers are linked to both existing rural and urban, as well as emerging supermarkets across the region. In the ECA region, Kenya has the highest number of supermarkets. One of its supermarket chains, Uchumi, is spreading in the region and has opened a supermarket in Uganda, competing with South Africa’s Shoprite which has two supermarkets in Kampala. One way small scale farmers can

benefit from the growth in supermarkets is by forming farmers' groups or associations. That way, they can be able to bulk their produce in sufficient quantities and control the quality of their produce. It also makes it easier and more effective for government agencies to deal with farmer groups than with individual farmers.

3. Access to regional markets

3.1 *Stimulating supply*

At the regional level, there are efforts to increase production and productivity. One such effort was the creation of ASARECA in 1993 as an umbrella organization for national agricultural research institutes (NARIs) in the region. ASARECA has 17 networks including 9 commodity based programs (8 crops and 1 livestock) cutting across the region, for example on bananas, coffee, livestock, etc. The research done in one country under the program is expected to be of regional benefit, not just the country in which the program is based. Thus, technology spillover effects are expected to emerge from this approach, saving both time for research and money. The East African Community⁴(EAC) is also in the process of formulating an agricultural development strategy for Kenya, Tanzania and Uganda, with a view to stimulating investment in agriculture. The Common Market for Eastern and Southern Africa⁵ (COMESA), created in 1994 to promote regional integration through trade and investment, is also formulating an agricultural development strategy for the region. One of COMESA agricultural sector priorities is agricultural market promotion and regional integration (COMESA, 2006).

Within the ECA, there is great potential to boost agricultural production. However, market access is a major constraint. About half the rural population in the region lives more than 4 hours from a market, while about 60 percent of cropland is more than 4 hours from the market (ASARECA/IFPRI, 2005). The ASARECA/IFPRI study reveals

⁴ EAC is the regional intergovernmental organization of the Republics of Kenya, Uganda and Tanzania, with its Headquarters located in Arusha, Tanzania. The treaty establishing the EAC was signed on 30th November 1999.

⁵ COMESA, with its headquarters in Lusaka, Zambia has 20 member states namely: Angola, Burundi, Comoros, D.R. Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.

that the areas with greatest agricultural potential have low market access, and low population density. These areas offer the greatest opportunity for the region to make investments to boost agricultural production. Such investments include infrastructure (roads, railways, telecommunications, electricity) to link production to markets, within individual countries and across the region.

Physical impediments are not the only constraint limiting regional trade and market access. Access to credit is limited for most agricultural traders. The costs of obtaining reliable market information and searching for buyers and sellers, as well as enforcing contracts are very high. Agricultural trade is risky, personalized and cash-based, with limited long-term investment by private traders in transport or storage, even in regions with relatively good infrastructure. Limited storage capacity and poor access to formal financing mechanisms render prices highly volatile. Other important institutional constraints include lack of harmonized grades and standards. There are efforts in the region to address these constraints, for example, COMESA has started work on sanitary and phyto-sanitary (SPS) measures to facilitate movement of agricultural goods within member states. However, most efforts to address institutional market constraints are at national level. In 1997 Kenya established the Kenya Agricultural Commodity Exchange (KACE) which aims to facilitate linkage between sellers and buyers, exporters and importers of agricultural commodities in trade; and provide farmers and market intermediaries (traders, brokers, processors and consumers) with relevant and timely marketing information and intelligence, and other services that enhance their bargaining power and competitiveness in the market place (KACE, 2006). Uganda is establishing a warehouse receipt system as well as an agricultural commodity exchange.

3.2 Creating demand

Boosting production and productivity growth in the region is not enough, and may in some instances be counter-productive. Production must be linked to markets. Regional integration is one way to help link farmers to markets beyond those within national boundaries. Regional integration has several benefits, including access to larger markets, efficiency gains, as well opportunities for specialization in production. Regional

economic communities (RECs) have been formed to take advantage of these benefits. For the ECA countries, each of them belongs to at least one such REC, the main ones being COMESA, EAC, and Southern Africa Development Community⁶ (SADC). However, multiple memberships to the RECs is still an issue that countries will have to sort out in order to harmonize trade regimes. For example, while Tanzania is a member of the EAC along with Uganda and Kenya, it is also a member of SADC, but not a member of COMESA to which its EAC partners belong. Despite these complications, regional integration is recognized as the way forward. In fact, talks are at advanced levels for Rwanda and Burundi to join the EAC, increasing the size of the market from 98 million to 114 million people. Rwanda's accession to the EAC is possible before end of 2006. With population and urbanization expected to grow in the region, demand for agricultural products will rise, and with this, the need for more trans-boundary movement of goods through trade. Countries in the RECs will benefit through trade as either producers or consumers of different agricultural products depending on their comparative and competitive advantages with respect to those products.

3.3 Regional policies

Effective January 1, 2005, the EAC customs union came into force, with a common external tariff structure for the three East African states. The protocol establishing the customs union also provides for gradual reduction and eventual elimination of internal tariffs by 2008. COMESA is also working towards formation of a customs union by 2008. However, as earlier noted, there are still outstanding issues of multiple memberships in RECs that must be sorted out before the COMESA customs union is formed. Along with common external tariffs, the RECs are beginning to design investment strategies for whole RECs rather than the individual countries. NEPAD encourages regional integration as well as regional investments with benefits that accrue to more than one country. Such regional investments include roads, railway, telecommunications and electricity generation and distribution.

⁶ SADC was formed in 1992 in Windhoek, Namibia. With headquarters in Gaborone, Botswana, SADC has 14 member states: Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe. SADC emerged out of the Southern Africa Development Coordination Conference (SADCC) which was created in 1980 in Lusaka, Zambia.

Regional trade exists among the countries in the region but much of the trade is with Europe. The largest inter-regional trade occurs among Uganda, Kenya, Rwanda, Burundi and Tanzania. Both EAC and COMESA are at various stages of formulating agricultural investment strategies and policies for the respective regional organizations. The success of these regional efforts will depend on how well public and private sector roles are articulated. Blind market liberalization through regional integration without adequate understanding of the effects on producers and consumers in each country could prove to be politically unpopular. More analytical work is needed to understand the impacts of the various trade policies at regional and national levels, as well as for specific commodities, and ultimately on producers and consumers of those commodities.

4. International markets

4.1 ECA in international trade

The ECA's main exports are agricultural commodities, mainly traditional cash crops: coffee, tea, sisal, pyrethrum, tobacco and cotton. In the 1990s, non-traditional commodities that gained importance were maize, cut-flowers and fish. The shift towards non-traditional commodities was prompted by two main factors: first, the need to diversify away from traditional cash crops whose international prices have been declining since the 1980s, but more so in the 1990s; and, second, the rise in demand for fish and cut-flowers in Europe, and the demand for maize in some eastern and southern Africa countries that frequently face food shortages (Ethiopia, Kenya, Zambia and Malawi), as well as demand for humanitarian assistance in countries with civil conflicts (DRC, Sudan and Uganda).

Sharp declines in world prices in recent years (1995-2004) for traditional cash crops were highest for coffee (70 percent) and cotton (37 percent). Tea prices, however, rose by 20 percent, while prices for fish declined by 30 percent (Table 2). The main agricultural imports for the ECA region are cereals, mainly wheat and rice (imported from outside the region) and maize (traded within the region). World prices for cereals rose during 1985-

1995, but declined during 1995-2004, with rice experiencing the largest decline (23 percent) and maize the lowest (10 percent). The fall in world prices for the main exports has resulted in a fall in incomes of producers of these commodities, who are largely small scale producers (except for tea). There is a direct relationship between the welfare status of rural producers of traditional export crops and the fluctuations in world prices of the commodities. In the mid-1990s when world coffee prices rebounded, Uganda experienced the largest decline in poverty, and mostly among coffee producers.

Table 2: World Price⁷ Changes (%) of Key Traded Commodities for ECA (1985-2004)

Commodity	1985-2004	1985-95	1995-2004
Cotton	3.5	64.1	-36.9
Maize	-0.5	9.9	-9.5
Tobacco	-	1.2	-
Tea	-0.1	-17.2	20.7
Fish	-40.1	-14.5	-30.0
Sisal	64.0	35.1	21.3
Coffee	-69.3	4.6	-70.6
Sorghum	6.6	15.5	-7.7
Wheat	15.5	30.3	-11.3
Rice	13.0	47.6	-23.4

Source: Author's computation. Data from the International Financial Statistics (IMF, 2006).

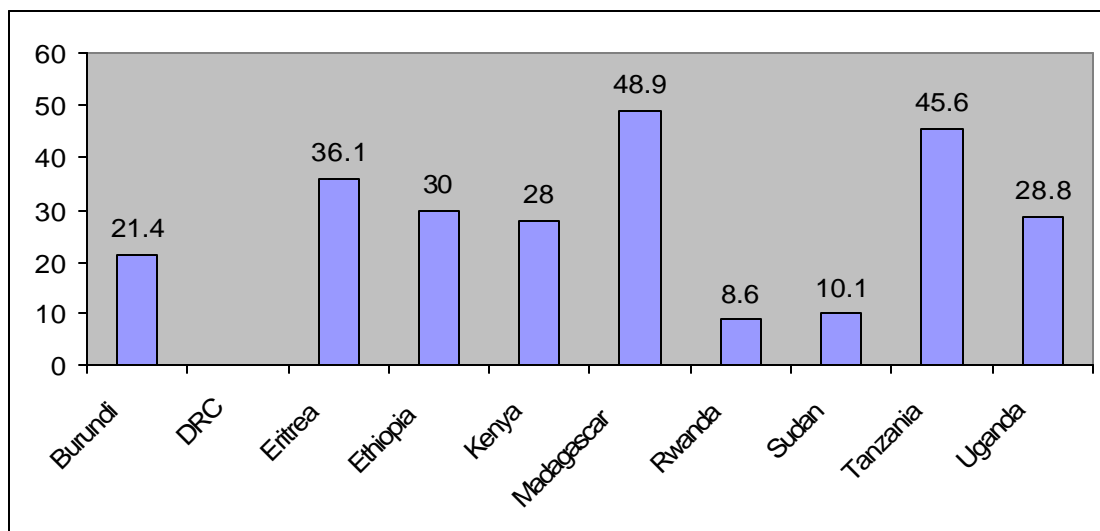
The ECA region is deficient in cereals and their demand is expected to rise as population grows, and will imply a huge import bill unless countries in the region invest in producing these commodities. Recent estimates indicate that by 2015 the ECA food imports would rise by more than 50 percent (ASARECA/IFPRI, 2005).

The ECA region accounts for 0.13 percent of world exports and 0.21 percent of world imports. The ECA countries export mainly to the European Union (25 countries), with some few exceptions (Burundi, Sudan and Rwanda). Figure 2 shows the share of exports of ECA countries to the European Union. Burundi's main export market is Switzerland (56 percent), for Sudan it is China (65 percent), while for Rwanda, Kenya is the main export market (41 percent). In fact, for Rwanda the East African Community accounts for 76 percent of its exports. For all countries, except Sudan, the main exports are

⁷ Nominal prices (US dollars per metric tonne).

agricultural products (mainly raw materials), ranging from a low of 12 percent for Eritrea, to a high of 88 percent for Ethiopia. Sudan's main exports are fuels and mining products, accounting for 78 percent. Except for Rwanda and Uganda, whose main imports are from Kenya at 28.6% and 20.8 %, respectively, the rest of the ECA countries main imports are from the European Union. For all ECA countries, the main imports are manufactures. This imbalance in the nature of traded products is at the heart the debate about industrialization in Africa. Africa exports low-value products, but imports high-value manufactures, in the process losing manufacturing jobs and incurring trade deficits with the rest of the world. In many instances, African countries import manufactured products made from raw materials exported to developed countries. Examples include instant coffee (from coffee beans) and chocolates (from cocoa beans).

Figure 2: Shares (percent) of ECA Country Exports to the EU (25 countries), 2004



Source: World Trade Organization (website, March 2006).

4.2 *International agricultural and trade policies*

Despite the low share of ECA countries in world trade, most countries in the region depend on markets outside the region, both for exports and imports. Therefore, market access to foreign markets is very important, although there is increasing argument and evidence that countries have more to benefit from domestic and regional markets than from international markets. In trying to access international markets, African countries face several challenges, ranging from domestic supply constraints to market entry barriers

in export markets. Supply constraints include technological constraints (low adoption of productivity-enhancing technologies) to ensure steady and ample supply of commodities and institutional constraints (poor infrastructure, weak regulatory frameworks, weak credit markets). These issues and what the region is doing to address them were discussed in sections 2 and 3 of the paper.

Access constraints to international markets facing exporters of agricultural products in ECA and other African countries can be characterized into four categories. First are tariff barriers including tariff peaks⁸ and tariff escalation⁹. Tariff escalation is particularly critical for African countries investing in manufacturing to add value to their products instead of exporting raw materials. If processed products face tariff escalation, that makes these goods less competitive, lowering returns to investment or discouraging investments in value-addition altogether. This hampers the diversification of exports, limits the accumulation of skills and capital, and thus helps perpetuate dependence on a small number of unprocessed goods whose world demand grows little and whose prices are volatile (IMF, 2002).

As defined, tariff peaks are tariffs that are 15% or higher and they are common in the Quad countries (Canada, European Union, Japan and the United States). In these countries, over 30% of least-developed country exports may be potentially affected by tariffs of 15% or higher. More specifically, tariff peaks in Japan and the EU are concentrated on agricultural and food products, especially dairy products, vegetables, processed coffee, tea, cereals, cocoa and tobacco products. It is thus precisely the product groups into which African countries might wish to diversify that could potentially face tariff peaks (Global Coalition for Africa, 2003).

⁸ Tariff peaks means relatively high tariffs, usually on “sensitive” products, amidst generally low tariff levels. For industrialized countries, tariffs of 15% and above are generally recognized as “tariff peaks”.

⁹ Tariff escalation means higher import duties on semi -processed products than on raw materials, and higher still on finished products. This practice protects domestic processing industries and discourages the development of processing activity in the countries where raw materials originate.

Second are the non-tariff barriers, mainly technical standards and sanitary and phytosanitary (SPS) measures. Developed countries use product standards to limit imports of agricultural products from developing countries. African countries are not involved in setting standards, yet they have to meet them in order to export. Over the years, technical standards have been increasing. For example annual notification of new technical standards to GATT/WTO, increased steadily from under 25 in the early 1980s to over 400 in 1999. The investments needed by African countries are high and prohibitive in many instances. Trade officials in Africa consider technical and SPS measures to constitute a greater constraint on their ability to export their products to developed countries than tariff barriers and other quantitative restrictions (GCA, 2003).

Third are the domestic agricultural support policies and exports subsidies in OECD countries. Producers in these countries receive support from their governments. This stimulates supply on the world market, lowering prices, but they are further helped by their governments to exports at those prices through export subsidies. The combination of farm price supports and export subsidies has made it difficult for African producers of the same commodities to compete on the world market. OECD agricultural policies hurt African producers and exporters by driving down world prices, at the same time subsidizing exports that end up out-competing African products even within African markets. A good example by the GCA (2003) shows how the milk processing industry in Kenya suffered from cheaper imports of powdered milk. The volume of processed milk rose from 179,000 tons to 392,000 tons (more than 100%) during 1980-1990. However, from 1990, the volume of processed milk fell drastically to 126,000 tons in 1998. At the same time, import of milk powder soared from 48 tons to 2,500 tons (over 5,000 percent). This is a clear case of how subsidized milk products undermined Kenya's local production and reducing its ability to diversify into agricultural processing activities. The GCA paper gives similar examples of chicken in Benin being out-competed by imports. Another example is the effect of US cotton subsidies on cotton producers in West Africa where the cumulative loss of export revenue as a result of the fall in world prices was over 3% of GDP in Mali and Benin, and 1-2% of GDP in Burkina Faso and Chad during 1999-2001.

The fourth barrier is the evolving nature of commodity trade chains controlled by large multi-national companies with increasing levels of concentration. The multi-national companies are gaining control of the commodity value chains from production to processing and distribution of the final product. The result of this is an increasing decline of exports and a lower share of final consumer price that is received by producers that are not part of the value chain of the multi-national companies.

4.3 Trade schemes for African exports

Despite the market access constraints facing African farmers, there are multi-lateral trade negotiations to reduce trade distorting practices. The most recent being the Doha Development Agenda (DDA) in which African countries were seeking to have developed countries reduce domestic support to their farmers and commit to eliminate export subsidies. In addition to the multilateral trade negotiations under the WTO, African countries have been offered markets access under a variety of schemes. Already there are several generalized systems of preferences (GSP) schemes, that despite their limitations, African countries have not been able to take full advantage of what they have to offer. The EU's Everything-But-Arms (EBA) is seen as one of the best GSPs because it offers quota-free and duty-free entry of exports from least developed countries, and its benefits are not time-bound. It has been argued, though, that as much as the EBA is attractive, higher benefits will accrue to countries whose set of current exports face high most favored nation (MFN) tariffs. Within the ECA region, two countries will benefit most, Madagascar (fish and clothing) and Uganda (fish and tobacco).

As African countries seek to have trade reforms to enhance market access, they also have supply capacity constraints that may limit their ability to benefit from the reforms. The most significant factors are infrastructural, including telecommunications, transportation and energy. In some countries, telecommunications remain a constraint, especially in countries without competition in the sector. Ethiopia is one such example where the benefits from mobile telephone communications would be higher if the sector was liberalized to allow private sector competition with the government telecom company. It

would be useful to analyze the effects of liberalization in the telecom sector on GDP in general and on specific sectors in national economies. Many ECA countries are land locked and therefore face high transportation cost to move exports to the sea, thus limiting the competitiveness of such exports. Only 50 percent of countries in the ECA region have direct access to sea transportation, the other half are land-locked. Regional cooperation in infrastructure development could help reduce transportation cost. Such cooperation is beginning to pay off. For example, in early 2006, with World Bank support, both Kenya and Uganda consessioned their railway lines to respective subsidiaries of the Rift Valley Railway Holdings, in which the lead investor is a South African company (World Bank, 2006).

5. Conclusions

5.1 *Domestic markets*

For most countries in EAC, agriculture still offers the best opportunity to ensure household food security, rise in rural incomes and overall economic growth and development. Governments in the region have responded by making reforms that can stimulate agricultural supply response if well implemented. Areas covered by reforms and strategies include agricultural extension services, research and rural financial services, as well as some investments in physical infrastructure (roads, energy, telecommunications). These reforms are necessary, but not sufficient to create a dynamic and sustainable agricultural sector in the region. Access to markets, especially domestic and regional markets is very critical for farmers in the region if investments in agriculture are to be sustained and poverty reduced.

Countries have to do more to make domestic markets work more efficiently to serve the needs of small scale farmers. Governments have to be clear about public and private sector roles in agricultural marketing, more especially the role of the state in circumstances where there is market failure. Several suggestions are made here to improve the functioning of domestic markets, including:

- (i) promoting the creation of supportive market institutions such as warehouse receipt systems and agricultural commodity exchanges to enable farmers access finance, as well as manage price risks associated with price crashes especially when there are bumper harvests;
- (ii) setting grades and standards and training farmers' groups to meet them, for different agricultural commodities, especially for supermarkets, regional and international markets. National bureaus of standards should be supported in this area, and they in turn should work with commodity based programs (coffee, dairy, grains, etc) and extension agencies to ensure that farmers understand the importance of and adhere to the standards;
- (iii) providing market information, especially over FM radio stations that have high penetration in rural areas. This way, farmers would know commodity prices in various urban markets and have the basis for bargaining for higher prices from traders and middlemen. Penetration of mobile telephone networks in rural areas in helping link farmers to traders in urban areas and market information is obtained instantly.
- (iv) instituting and enforcing commercial laws and regulations, especially contract enforcement, to support private sector investors in commodity trading and related transactions. A strong, transparent and reliable legal system is imperative for business.
- (v) encouraging the formation of farmers' organizations to help small scale growers enter into contracts, access extension and financial services that may otherwise be inaccessible by individual farmers. Farmer organizations should be based on common needs and be governed on democratic principles.
- (vi) investing in physical infrastructure, especially rural road networks to connect input and product markets, and in electricity supply to rural areas to encourage evolution of small-scale agro-industries, such as milk cooling plants, maize mills and vegetable oil processors. Availability of electricity also increases the number of hours rural markets and shops can remain open, and with purchase of refrigerators, preservation of perishable commodities such as fruits and vegetables that otherwise go to waste; and

- (vii) creating domestic demand for commodities produced locally, especially by small scale farmers. School feeding programs that utilize locally produced milk and maize products provide sustainable markets for local cattle keepers and maize growers by providing a stable and predictable market for their products. Other ways include investments in product transformation and consumer educations to increase the forms in which products are consumed. A classic example is fried chicken dipped in wheat flour. Consumers of such chicken provide demand for both chicken and wheat, yet each product can be consumed independent of the other.

5.2 *Regional markets*

Recent analysis (ASARECA/IFPRI, 2005) has shown that for ECA countries the largest poverty reducing impacts will come from growth in sub-sectors for which demand is greatest within the region. The sub-sectors are: staples (bananas, maize, millet, sorghum, sweet-potatoes, beans, peas); livestock products (milk, beef); fruits and vegetables; and oilseeds. Cumulative GDP gains from a 1 percent additional growth in these sub-sectors were about: USD 1,510 million, 1,100 million, 520 million, and 480 million, respectively. Growth benefits were much lower for coffee and tea (about USD 200 million for both). These commodities with the largest benefits are produced mainly by small scale farmers across the region, and therefore growth would be more evenly distributed than if the benefits were higher for plantation crops that are grown by few farmers or multinational companies.

High as the estimates are for regional benefits in these sub-sectors, they will not accrue automatically. Regional governments have to make the necessary investments in technology to increase productivity, as well as in physical infrastructure to support regional trade and market access. From a technology view point, ASARECA is helping with agricultural R&D that may have spillover benefits from one country to another, based on similar agro-ecological characteristics. In trying to benefit from regional

integration, ECA countries have formed and belong to at least one of the three regional economic communities: EAC, COMESA and SADC. However, challenges remain in improving and harmonizing trade policies to improve cross-border trade. Standards for both inputs and outputs are particularly limiting regional trade and market access, but efforts are underway both at EAC and COMESA to address these issues. As RECs become customs unions, member countries will have to move faster towards elimination of internal tariffs to facilitate free movement of goods across the region. In addition, ECA countries have to work harder to eliminate non-tariff trade barriers of all forms that limit free flow of tradables, both at border crossings and along transit routes in the region.

At the regional level, there are efforts to support trade by providing market information including product quantities and prices on a daily or weekly basis. The Regional Agricultural Trade Intelligence Network (RATIN) is an example of a regional organization that provides trade analysis of maize, beans and rice using information from various sources (RATIN, 2006). RATIN makes the information and analysis available to cross-border traders, food aid organizations, millers, farmers and donors through a variety of means including radio (Uganda and Kenya), and the internet by providing the most recent information in various markets in East Africa. Another regional effort is the Regional Agriculture Trade Expansion Support (RATES) program, which is designed to increase value/volume of agricultural trade within the East and Southern Africa region and between the region and the rest of the world. RATES focuses on developing commodity-specific regional trade initiatives through innovative private sector/public sector alliances and partnerships and works primarily through regional trade flow leaders such as regional trade associations, national-level trade organizations, private companies and individual entrepreneurs. The RATES program is currently supporting activities in specialty coffee, maize and pulses, cotton/textiles, livestock and dairy (RATES, 2006).

5.3 *International markets*

Even as evidence begins to emerge that ECA countries will benefit more in regional market than in international markets, it may take a while before the full regional benefits are realized. The reasons have been discussed, including policy, institutional and

organizational issues. In the meantime, countries have to pursue a two-pronged approach: to create better conditions for regional trade to flourish, and to seek improved access to international markets. Market access constraints have been discussed. African countries need to push hard so that the Doha Development Agenda yields positive results. It may be a slow process, as little progress was made in Singapore in December 2005, but the momentum for reforms must be maintained. Reduction in farm support, reduction in price-based trade barriers and elimination of export subsidies by OECD countries would go a long way to increase the volume and value of ECA agricultural exports. Arguments have been made that it is better for OECD countries to open their markets to African products than to provide development assistance because the continent stands to benefit more from trade than from aid.

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