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Intra-Regional Trade Limitations for Agricultural Commodities in the East African Community

Laurent Levard (GRET) and Damian Gabagambi
(Sokoine University of Agriculture)

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Executive Summary

The East African Community (EAC) is composed of five countries namely Burundi, Kenya, Rwanda, Tanzania and Uganda. It is a regional block of more than 140 million people. Food supply of the population mainly relies in the domestic agricultural production. Part of the needs is met through imports from other countries, and the major part of these imports comes from outside the region.

Almost four out of ten (37%) EAC inhabitants are suffering from food insecurity and the situation has been worsening over the last years.

The study put forward five hypothesis:

- the food demand will rise in the next years due to population growth and increasing purchasing power of part of it;
- the region has a high potential for rising food production;
- intra-regional trade can play a significant role in food security, by ensuring complementarities between areas of surplus and areas with permanent or temporary deficits;
- it is the interest of the region as a whole to meet the rising food demand by enhancing production instead of increasing imports from outside;

- it is highly useful to better understand the specific limitations and challenges for enhancing agricultural intra-regional trade in the EAC, in order to recommend specific policy measures and supports from the international cooperation.

The objectives of the study are :

- to identify the main agricultural intra-regional trade flows in the EAC and the main stakeholders involved in it;
- to identify the main factors that currently limit the development of agricultural intra-regional trade in the region;
- to suggest policy measures that would contribute to elimination of such limitations, as well as actions that could implement the international cooperation in order to help the region developing intra-regional trade and reducing food imports from countries outside the region.

The approach is based in literature review, focusing some agricultural commodities with high trade potential in the region (maize, rice, sugar, dairy products and poultry meat), and two case studies (rice and milk products) through interviews with main actors in the value chains, in Tanzania.

Maize, rice and milk are mainly produced by small-holders. Maize and rice are the main cereals consumed in the region. There is a structural deficit and every year the region imports rice (18% of con-

sumption), maize (1-2%) and milk products (less than 1%). EAC declared maize, rice and milk products to be sensitive commodities and implements 50% to 75% tariffs on imports. Thus, the East African market is relatively protected. Within the region, regularly deficit cereal markets in Kenya (with high prices) provide the center of gravity for the region. Regarding milk, Tanzania is the main importer.

The main flows are as follows:

- **maize:** Uganda to Kenya; Uganda to Burundi; Uganda to Tanzania; and Tanzania to Kenya;
- **rice:** Tanzania to Rwanda; Tanzania to Kenya; Tanzania to Uganda; and Uganda to Rwanda;
- **dairy products:** Kenya to Tanzania; Kenya to Uganda; and Uganda to Tanzania.

The intra-regional trade connects mainly neighboring countries, and more specifically neighboring areas, due to the low level in transport infrastructures and high transport costs. The level of informality in cross-bordering trade is high.

The results of the literature review and field studies show that the main limitations to the development of intra-regional trade are at the production level. Deficiencies of value chains organization and functioning and some limitations to intra-regional trade negatively affect market access for farmers as well as the price they receive for their products. This reduces their short term possibility and interest to produce for the market and negatively affects their income and thus their ability to invest in increasing production. These value chains and trade limitations thus indirectly limit the production itself.

Some of the constraints to intra-regional trade are not specific limitations to cross border trade: they also affect trade within each country. These include the low development of transport infrastructure, storage and processing facilities, balances of power within value chains that adversely affect farmers and reduce farm-gate prices, while increasing prices for the consumers. Some producers have no access to the markets, at least in some periods of the year, preventing the trade of perishable goods. Transportation costs are high; delays are a limitation for the improvement of the quantity and quality of the agricultural production and for food preservation. Regarding value chains, in most cases, moving food products from farmers to final consumers involves multiple transactions. The margins required by each party substantially increase the final retail price or reduce the farm-

gate price. Imbalances of power specifically affect small-scale producers.

Many farmers have no information about market prices and need to sell their products once harvested or collected. This makes the middlemen able to impose low farm-gate prices. Due to lack of storage facilities, seasonal price fluctuations affect small-scale farmers. Bad quality of storage facilities generates bad quality of products, losses and health risks for consumers. Costs of energy and telecommunication are another challenge. Lack of know-how and of access to capital is another limitation to value-chain development. Market regulation mechanisms are not able to avoid price volatility.

Other limitations are more specific to trade between countries. Tariff barriers within the EAC have been removed. However, various non-tariff barriers remain. Bans exports are principally implemented by the Tanzanian Government (maize and rice), as food security policy. There has been a wide debate on the opportunity of export bans: the surpluses can hardly be marketed in the domestic market as some regions are relatively isolated, part of them continues to be exported in an illegal way, but the existence of bans tends to improve the balance of power for the benefit of the traders at the expense of farmers.

Technical barriers (part of them being considered as disguised protectionism) are: cumbersome procedures for business and licensing customs operations; lack of harmonization of procedures and documents; lack of recognition of certificates and standards; slow and costly immigration procedures; roadblocks and weighbridges. Corruption is frequent at the borders, but also at all over the supply chain, where the stakeholders pay to avoid delays, overload charges and other problems. All non-tariff barriers increase costs and delays for trading goods from one country to another. These limitations also reflected negatively on the prices paid to farmers. More generally, they generate a distribution of the added-value that is negative for the productive sectors (agriculture, processing of agricultural products) and consumers.

In conclusion, the potential for developing regional production is high, especially through increased yields of animal and crop productions. Greater emphasis on this potential would improve the food security of the population, making thus possible to meet increased needs and contribute to the economic and social development, while reducing food dependency on certain products. It also implies the develop-

ment of trade flows between areas of surplus and deficit areas, and thus of the intra-regional trade.

Despite value-chains and intra-regional trade limitations above mentioned, farm-gate prices are relatively profitable thanks to the high CET in sensitive products. This protection, as well as some proactive agricultural policies, has made possible a significant increase in agricultural production over the recent years (milk in Kenya, Uganda and Rwanda; rice in Tanzania, etc.). From the point of view of farmers, external protection partially offset intra regional limitations (value chains, intra-regional trade).

Enhancing the potential of agricultural production in the region and the marketing of this production to deficit areas may result in the development of trade between countries in the region (case of rice, for example). But it could also strengthen the ability of each country to meet its own food needs without having to resort to imports from the other EAC countries (case of the milk, for example).

The main recommendations are the following:

- maintaining effective tariff protection (and sometimes strengthening its effectiveness through reinforced controls) for the main agricultural and food products;
- agricultural policies aimed at developing agricultural production (including enhancing agricultural investment, irrigation works, agricultural credit, input supply, research and technical support) and value-chains, as well as a better added value distribution for the benefit of farmers and consumers. One of the main objectives should be to protect farmers against seasonal

price fluctuations. Policies should therefore focus on developing value-chains as a whole and to strengthen the organization, the role and the negotiation power of small-holder farmers. It includes improving physical access to markets; improved road and railway infrastructures; on-farm and local warehousing facilities; support for processing and packaging agricultural products; market information systems; improving cooperation between stakeholders; supporting capacity building of producer organizations; appropriate banking policies.

It is important that the States of the region and the regional authorities continue their current efforts to reduce non-tariff barriers to intra-regional trade, to reduce costs and delays.

The elimination of export bans is necessary to ease intra-regional trade and promote the development of production (the President of Tanzania recently committed not to use bans anymore). However, the region should implement food security policies that include, in addition to a substantial improvement in local small-scale farmers storage capacities, local, national or regional buffer and emergency stocks; market monitoring and information systems (that should involve the stakeholders who are currently taking initiatives in this area) and appropriate measures to enable the effective supply deficit areas with stock areas surplus.

International cooperation should support such policies, as well as autonomous initiatives of producer organizations or initiatives that involve various chain stakeholders. ●

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GLOSSARY

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AMIS	Agricultural Market Information System
CET	Common External Tariff
COMESA	Common Market of East and Southern Africa
DRC	Democratic Republic of Congo
EAC	East African Community
EAGC	East African Grain Council
ECOWAS	Economic Community of West African States
FAO	Food and Agriculture Organization
FTA	Free Trade Area
KRA	Kenya Revenue Authority
MVIWATA	Mtandao wa Vikundi vya Wakulima Tanzania
NAFCO	National Agricultural and Food Corporation (Tanzania)
NMC	National Milling Corporation (NMC)
NTB	Non-Tariff Barrier
NTM	Non-Tariff Measure
SADC	Southern African Development Community
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
TAMPA	Tanzania Milk Processing Association
WRS	Warehouse Receipt System

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Part I. Introduction and Methodology

INTRODUCTION

Background

The East African Community (EAC) is composed of five countries namely Burundi, Kenya, Rwanda, Tanzania and Uganda. It is a regional block of more than 140 million people (Figure 1). Generally speaking, food supply of the populations in African countries, including East African countries, mainly relies in the domestic agricultural production. Part of the needs is met through imports from other countries. However, besides several integration processes between African countries, the major part of these imports comes from other countries outside Africa and not from other African countries.

Food security of each country member of the EAC relies mainly on their domestic food production. Nevertheless, it also relies on trade flow between the countries of the community or coming from other countries, in particular from the USA, the European Union, Australia, Asian countries, South American countries as well as South Africa. Intra-regional trade of agricultural and food products remains small in comparison with the volumes imported from outside the region, in particular from countries outside Africa.

In each country, only a small proportion of the food produced is exported into neighbouring countries, both members and nonmembers of the EAC. This implies that most of the food produced is consumed domestically. Nevertheless, the EAC countries are exporting agricultural products other than food staples such as coffee, flowers, cashew nuts, etc, mainly to developed countries.

Statistics indicate that a significant part of the EAC population is currently suffering from poverty and food insecurity. According to FAO, 37% of the population in the EAC countries (about 52 million persons) are undernourished during 2010-2012 period. This is an increase of 9 million persons compared to 2004-06 period, which means increase in the prevalence of undernourishment by 1% from 36 to 37%. In absolute terms, Rwanda is the only country where the number of undernourished persons has decreased. In relative terms, the prevalence of undernourishment has decreased in Rwanda (from 42 to 29%), as well as in Kenya (from 33 to 30%), while it has increased in Burundi (from 68 to 73%), Tanzania (from 35 to 39%) and Uganda (from 28 to 35%).

Of course, undernourishment is due to a wide set of factors, in particular the levels of income, but empirical studies show that intra-regional agricultural and food products can help solving local or national food shortages by importing products from neighbouring surplus countries and making them available in the deficit areas. In addition, such flows can help reduce imports from other countries outside the region.

However, there are often a great deal of limitations to intra-regional trade that are in the form of tariff barriers (existence of custom duties between the countries) as well as non-tariff barriers (other kind of limitations not directly related to tariff) [see Figure 1: East African Community map, page 8].

Food insecurity is structural for part of the population [see Table 1: Prevalence of Undernourishment in the East African Community (2004-06 and 2010-12), page 9]. But part of the population is also threatened by cyclical food crises due to climate accidents, droughts in particular.

FIGURE 1: EAST AFRICAN COMMUNITY MAP



Source: www.flickr.com/photos/nukta77/4745009613/

TABLE 1: PREVALENCE OF UNDERNOURISHMENT IN THE EAST AFRICAN COMMUNITY (2004-06 AND 2010-12)

Country	Total population (million)	Number of under-nourished persons	Prevalence of under-nourishment (%)	Total population (million)	Number of under-nourished persons (million)	Prevalence of under-nourishment (%)
Burundi	7,3	5,0	68	8,6	6,0	73
Kenya	35,6	12,0	33	41,6	13,0	30
Rwanda	9,2	4,0	42	10,9	3,0	29
Tanzania	38,8	14,0	35	46,2	18,0	39
Uganda	28,4	8,0	28	34,5	12,0	35
EAC	119,3	43,0	36	141,8	52,0	37

Source: FAO [www.fao.org/hunger/hunger-home/en]

Reducing tariff and non-tariff barriers between the countries of a same region is precisely one of the objectives of the regional integration processes, in order to facilitate intra-regional flows and to promote regional economic development. This is the case of the East African Community (EAC). Originally founded in 1967, the East African Community collapsed in 1977, but was revived in 1999. The Treaty for the re-establishment of the EAC was signed on November 30, 1999 and entered into force on July 07, 2000 following its ratification by the original three partner states: Kenya, Uganda and Tanzania. The republics of Rwanda and Burundi acceded to the EAC Treaty on 18 June 2007 and became full members of the community effectively from July 01, 2007. Currently, this is a regional block of more than 140 million people, a land area of 1.85 million square kilometers, and a combined gross domestic product (GDP) of about US\$ 74,5bn (2010)¹.

The proposed EAC's regional integration process included formation of a Free Trade Area, a Custom Union, and a Common Market, a Monetary Union and further reaching a Political Federation.

A Protocol for the Establishment of the East African Community Customs Union was signed by three heads of states of Kenya, Tanzania and Uganda on 2nd March 2004 in Arusha, Tanzania. Rwanda and Burundi joined the Customs Union in 2008 and started applying their instruments in July 2009. The

Customs Union commenced in January 2005 and became fully-pledged in January 2010, after a five years transitional period in which partner states had agreed that goods to and from Uganda and Tanzania shall be duty free when crossing border to Kenya. However goods from Kenya into Uganda and Tanzania were grouped into two categories. Some goods were eligible for immediate duty free treatment whereas for other goods the tariffs were to be phased out over a five year period.

A 3-band common external tariff was also established with a minimum rate of 0%, a middle rate of 10% and a maximum rate of 25%. Partner States undertook to review the maximum rate of the common external tariff after a period of five years after the Customs Union² come into force. The salient features of the East African Community Customs Union are summarized in Annex 1. Sensitive products were identified with an additional protection. This measure intended to protect regional production. The following products are part of the list of sensitive products:

- **maize:** 50% protection rate;
- **rice:** 75% or 200 USD/MT, whichever is higher;
- **wheat:** 60%;
- **milk and milk products** are: 60%, less for some fresh products such as butter, cream, yoghurt, curdled milk, whey, cheese (25% tariff);
- **sugar:** 35% for jaggery; 100% or 200 USD/MT (whichever is higher) for the other products.

1. CUTS International, 2011, "Agriculture in Development of Select African Countries: linkages with Trade, Productivity, Livelihood and Food Security."

2. More information in <http://www.eac.int>

Partner States agreed to remove all non-tariff barriers, and that no new non-tariff barriers would be imposed. They also undertook to formulate a mechanism for identifying and monitoring the removal of all these non-tariff barriers. This mechanism is now in place.

The Protocol on the establishment of the East African Community Common Market was signed by the Heads of States on 20 November 2009, coinciding with the 10th Anniversary of the revived Community. It entered into force on 1 July 2010, following ratification by all the five Partner States: Burundi, Kenya, Rwanda, Tanzania and Uganda.

The establishment of the EAC Common Market is in line with the provisions of the EAC Treaty. The common market provides for "Four Freedoms", namely the free movement of goods; labour; services; and capital, in order to significantly boost trade and investments and make the region more productive and prosperous. General provisions in the Protocol touch mainly on the following: Institutional Framework needed to operationalise the East African Community Common Market; Approximation and Harmonization of Policies, Laws and Systems; Safeguard Measures; Measures to address imbalances; Monitoring and Evaluation; and Regulations³.

In a context in which several African regional integration areas are overlapping, each EAC country is also member of another integration area.

For example:

- Burundi, Kenya, Rwanda and Uganda are members of Common Market for Eastern and Southern Africa (COMESA). However they are not members of the COMESA customs union that entered into force in June 2009. The problem here is duplication of membership. As the EAC has already established a customs union in 2005, it is not possible to join another customs union (unless the tariffs are the same)⁴.
- Tanzania is a member of the Southern African Development Community (SADC). Eleven SADC member states, including Tanzania, launched the SADC Free Trade Area (FTA) in 2008. The FTA aims to abolish customs duties on all the products by 2012⁵.

More generally, of the twenty-six countries that constitute the combined membership of COMESA, EAC and SADC, seventeen are either in a cus-

tom union or participating in negotiating an alternative customs union to the one they belong to, or are in the process of negotiating two separate customs unions which would be contrary to WTO rules. The detailed multiple memberships to regional economic blocs are illustrated in Annex 2.

In order to strengthen the coherence of the integration processes, EAC, COMESA and SADC saw the need to initiate a tripartite process of coordination and harmonization of their regional integration programmes. The Heads of State and Government of COMESA, EAC and SADC, met in Kampala on 22 October 2008 and called for the establishment of a single Free Trade Area covering the 26 countries of COMESA, EAC and SADC. It was proposed that the Tripartite FTA should be launched in January 2012. Besides, the tripartite economic space decided to address current challenges resulting from multiple memberships.⁶

Research Justification

One of the major challenges of East African countries is to improve the food security of their population, which implies, inter alia, to increase the availability of food products and also to improve the nutritional balance of food supply. This study puts forward five hypothesis as outlined below.

The **first hypothesis** is that food demand will rise in the next years and decades, due to population growth and increasing purchasing power of part of the population, which will demand a more diversified diet including a higher component of animal products. If regional production is not able to meet the demand, the imports from outside of the region may increase. The region is currently a net importer of maize, rice, sugar, dairy products, poultry and processed food. Supermarkets are full of imported fresh and manufactured products such as spinach, tomatoes, ketchups, juices, water, etc. from abroad that can be produced locally.

The **second hypothesis** is that there is a high potential in the region for rising food production and meeting the demand in food products, by increasing primarily the yields but also in some cases expanding land under cultivation and increasing the number of productive cycles per year. Availability of food products can also be increased by reducing losses and thus by improving storage and transport infrastructure. However, increasing production level is not enough to ensure effective food availability for the population.

3. More information in <http://www.eac.int>

4. GTZ, 2010.

5. GTZ, 2010.

6. <http://www.eac.int>

On the one hand, very often, potential for increasing production is not located in areas with permanent deficits, in particular the most urbanized areas (in particular Nairobi, Mombasa, Dar es Salaam and Kampala) or dry areas (in particular in northern Kenya). On the other hand, there are frequent temporary deficits resulting from climatic conditions or from seasonal variations, especially in Kenya. Since approximately three-quarters of the country is arid or semi-arid, Kenya is increasingly becoming a net importer of staple foodstuffs (wheat, maize, palm oil) from the region and from the world market (including South Africa). This geographical drought prone area, experiences regular food crises, which could be solved by regional trade flows from surplus zones of production.⁷

Consequently, increasing production can help resolve food deficits only if agricultural and food products can easily be transferred from surplus areas to areas with deficits, relatively quickly (in particular for perishable products), and at a reasonable costs. Otherwise, either the price for the consumers may become excessively high or the price paid to the producer excessively low. More importantly, transaction costs may become so high to the extent that products cannot compete with imported products.

Thus, the **third hypothesis** is that, under certain conditions, intra-regional trade can play a significant role in food security, in particular by ensuring a certain degree of complementarities between areas of structural surplus and areas with permanent deficits. It is currently the case for maize: regularly deficit markets in Kenya provide the center of gravity for the East Africa market, pulling in surplus maize from Kenya's own central highlands as well as from eastern Uganda and northern Tanzania. In particular, Tanzania⁸, with its varied climate and vast land resources, often of rich soils, can produce much more to satisfy its large local food demand and to meet a significant demand from the neighbouring countries for processed and unprocessed food items.⁹

The intra-regional trade can also contribute to alleviating the impacts of temporary deficits resulting from climatic conditions or from seasonal variations. In some cases, there are reverse trade flows for some products across seasons. For example, beans and bananas are exported to Ugan-

da from Tanzania but the direction of trade can reverse depending on the season's performance on either side of the border. As well, trade between agricultural areas of northern Tanzania and Kenya can easily reverse depending on seasonal complementarities.

The complementarity between countries also concerns the types of products that are traded. Thus, Kenya imports regularly raw agricultural products from neighbouring countries (maize, but also rice flour, sorghum, beans, pineapples, oranges and bananas from Uganda; beans from Tanzania) while processed food (cooking oil, sugar, wheat flour and dairy products) are exported to the whole region. Various fruits and vegetables grown in the northern part of Tanzania are regularly traded in urban markets of Nairobi and Mombasa, where the products are further processed. These processed products can then be found in Tanzanian supermarkets and small shops all over the country¹⁰. These complementarities reflect the heterogeneity in the development of the food industry of the respective countries¹¹.

It should be noted that there are several valuable potentials for developing agricultural intra-regional trade within the EAC:

- First, there are historical ties between countries and networks of trade stakeholders (including cross-border trade). For example, the food security linkages between Kenya and Uganda are strong as Uganda has made the expansion of food exports to neighbouring countries an official part of its food security policy. Maize and beans have been a focus of the export promotion efforts, while Kenya's frequent deficits in both food staples have been well recognized by traders and policy-makers in Uganda¹².
- Furthermore, the existence of a Common External Tariff (CET) and of high levels of protection for sensitive products, including cereals and milk and dairy products. Thus, despite high production and transaction costs, regional production generally succeeds to be competitive with imported products.
- Finally, there is a real political will among national and regional policy makers and authori-

7. GTZ, 2010.

8. World Bank, 2008.

9. Gabagambi, 2011.

10. GTZ, 2010.

11. By contrast, both sides of the Uganda-Tanzania border experience similar and favorable agro-climatic conditions, conducive for ample food production with surpluses. There is limited trade within the border areas. GTZ, 2010.

12. GTZ, 2010.

ties, to increase regional food production (and it should be noted that the setting of the CET is also a result of this willingness), to develop intra-regional trade and to remove the current limitation and constraints to achieve this, even if there are also contradictions and if some stakeholders are not necessarily interested in such an evolution. There is thus pressure from businesses community not to recognize products from within EAC due to fear of loss of markets¹³. The EAC governments have committed themselves to remove tariffs and non tariff barriers among the countries of the region; that's why the East African Community has been implementing a program designed to monitor and to accelerate their elimination. Indeed several non-tariff barriers have been resolved over the past few years¹⁴.

The **fourth hypothesis** is that it is in the interest of the region as a whole to meet the rising food demand by enhancing domestic production instead of increasing imports from countries outside Africa, and thus to promote intra-regional trade. On the one hand, recent agricultural price rise in the world markets has shown that depending on the global market for ensuring own food demand is serious threat for long term food security. On the other hand, even when imported products may be cheaper than regional products, supporting small-scale farmers to increase their production and to improve their income is fully consistent with the general interest, as small-scale farmers families are often the persons who most suffer food insecurity, and because the other activity sectors (industry, services) would not be able to offer alternative jobs to the huge majority of them.

The **fifth hypothesis** is that agricultural intra-regional trade is currently facing serious specific limitations and constraints, in addition to other constraints facing agricultural production in general. In turn, limitations for intra-regional trade create negative repercussions at the level of the agricultural production itself (lack of market opportunities, low prices, etc). Consequently, it appears highly useful to better understand the specific limitations and challenges for enhancing agricultural intra-regional trade in the EAC, in order to recommend specific policy measures and supports from the international cooperation aimed at enhancing intra-

regional flows and reducing imports from countries outside the region.

Objectives

The objectives of the study are:

- to identify the main agricultural intra-regional trade flows in the EAC and the main stakeholders involved in it;
- to identify the main factors that currently limit the development of agricultural intra-regional trade in the East Africa Community;
- to suggest policy measures that would contribute to elimination of such limitations, as well as actions that could implement the international cooperation in order to help the region developing intra-regional trade and reducing food imports from countries outside the region.

This study is part of a more general study about agricultural intra-regional trade in Africa that is also based on another regional study carried out in West Africa.

Organization of the Report

The report is organized into 4 Parts.

- The first part (Introduction and Methodology) presents the background, justification, objectives and organization of the study, as well as the methodology and approach that has been employed in addressing objectives of the study.
- In the second section (General Results and Discussion), a description is made of the main agricultural intra-regional trade flows and the current trends. Comparison with the levels of production in the EAC countries is made, as well as with the levels of consumption and trade flows from outside the region. The main stakeholders of the value chains are identified, as well as the strengths and limitations of agricultural intra-regional trade.
- The third section presents the results of two case studies: rice and milk and dairy products, including a discussion about the potential for development of intra-regional trade and the challenges and limitations.
- The fourth section presents conclusions and recommendation of policy measures for developing agricultural intra-regional trade, as well as actions that could implement the international cooperation in order to help the region developing intra-regional trade and reducing food imports from countries outside the region.

13. *Status of Elimination of Non Tariff Barriers in the East African Community*," Volume 2, EAC, March 2012.

14. *Status of Elimination of Non Tariff Barriers in the East African Community*," Volume 2, EAC, March 2012

METHODOLOGY

Methodology is critical in any research assignment. There is no research report that can be better than the approach by which information was collected. In this study, the approach included among others the following: (i) review of key documents related to regional economic bloc and interregional trade with specific focus on the East African Community (EAC); collection of relevant data from different sources including the Ministry of Agriculture Food Security and Cooperatives, Ministry of Industry and Trade, United Nations Statistical Division (Comrade data), FAO statistical database, and other regional trade publications and reports. Synthesis of intra-regional and interregional trade data, culminated in selection of 5 major agricultural commodities with high trade potential in the EAC region. These include Maize, rice, sugar, dairy products and poultry meat.

Of the five commodities, two commodities namely rice and dairy products were selected for further examination. The arguments for selection of these commodities are as follows: The income of consumers in the EAC is increasing as reflected by economic growth. For example, the GDP for Tanzania has been increasing at an average of 6% in the last 5 years. Literature indicates that as incomes grow, people tend to consume more protentious food stuffs¹⁵, and they shift from consumption of coarse grains (maize, sorghum, millet and finger millet) to soft grains (such as rice and wheat). This is expected to be the phenomenon in the EAC region in the near future as countries are implementing their development visions.

On the other hand, although most of the world's rice is produced and consumed in Asia, its demand is soaring in Africa. Rice has become a major source of calories not only for the affluent, but also for the urban and rural poor in many parts of the continent. Its availability and price have become major determinants of the welfare of the poorest African consumers. Rice production in sub-Saharan

Africa (SSA), though rising from 8.6 million tons of paddy in 1980 to 12.6 million tons in 2005, has not kept pace with demand. As a result, the quantity imported yearly by the region increased from 2.5 million tons in 1980 to 7.2 million tons in 2005. Sub-Saharan Africa spends more than US\$1.5 billion in foreign exchange every year for its rice imports¹⁶. In Tanzania, rice has a relatively high nutrition value, and is increasingly becoming a food as well as a cash crop even for the poor. In addition, Tanzania has a big potential of producing rice for domestic and regional markets¹⁷. However there are obstacles limiting cross-border trade in rice in the EAC region. These should be investigated and corrective policy measures suggested. That is the essence of this study.

Regarding dairy products, consumption may contribute to improve food security and get a more balanced nutrition in developing countries. Production and consumption have dramatically increased in the last years, in particular in Kenya, Uganda and Rwanda where the governments have implemented strong policies aimed at developing the sector and at promoting consumption in the framework of a regional milk program. Tanzania has huge potential in dairy production with more than 17 million cattle, ranking third in Africa after Botswana and Ethiopia. Thus the country stands to benefit a lot from this sector. At the same time, the region is importing milk from global market. It was interesting to explore obstacles constraining harnessing of this sector using dairy product as a case study.

After identification of the two commodities, interviews were conducted with main actors in the dairy and rice value chains. The interviews were conducted on 20-26 September 2012. They entailed a spectrum of stakeholders from the public and private sector. They were clustered into three categories. The first category involved stakeholders in the dairy sector; the second entailed stakeholders in the rice sector; and the third dealt with cross-cutting stakeholders who provided information on general issues. The list of stakeholders contacted during fieldwork is presented in Annex III page 56. ●

15. Bruce A. Babcock (2008). *Breaking the Link between Food and Biofuels*. Summer 2008 Vol. 14 No. 3. Centre for Agriculture and Rural Development. Iowa Ag Review

16. Africa Rice Center (WARDA) (2006). *Transforming Sub-Saharan Africa's Rice Production through Rice Research*. Africa Rice Congress 2006.

17. *Strategic investment priorities for agricultural growth and poverty reduction*.

Part II. General Results and Discussion

INTRA AND INTERREGIONAL AGRICULTURAL COMMODITY FLOWS FOR THE EAC

Major Food Commodities Traded in the EAC

> Maize

Maize is the main cereal consumed in the region. First source of food calories, it constitutes the main pillar of the regional food security. Although the region produces the vast majority of the maize consumed by the population, it shows a structural deficit and it imports maize every year. Due to the variability of climate conditions, the imported volumes vary over years. The rate of coverage of maize demand by the regional production has tended to improve since the start of the century.

In Tanzania maize is mainly produced by small-holder farmers. Approximately 65% of approximately 3 million households in Tanzania grow maize (average 1.2 has) and 30% of all households sell surplus maize¹⁸. Maize is produced mainly for food. However, feed represents an increasing share of maize production (17% in Tanzania¹⁹).

Regularly deficit markets in Kenya provide the center of gravity for the East Africa market, pulling in surplus maize from Kenya's own central highlands as well as from eastern Uganda and northern Tanzania²⁰. Smaller quantities are also imported from Uganda to Rwanda and from eastern Tanzania ar-

reas to Burundi. It should be also noted that surplus Southern Highlands of Tanzania supply Malawi, the Democratic Republic of Congo (RDC) and Zambia, and the Ugandan surpluses likewise periodically find their way into deficit markets. However, volumes traded between Tanzania and Malawi have decreased over the last years, as Malawi has apparently become self-sufficient and net exporter of maize.

As well, intermittently, in years of exceptional maize harvest and low price in Ethiopia, such as 1997 and 2002, small quantities of surplus maize flow from southern Ethiopia into northern Kenya, although poor roads and long distances limit these flows²¹.

At the same time, deficit urban areas of Kenya and Tanzania are partly supplied by the world market, from the ports of Mombasa and Dar-es-Salaam. Extra-regional imports come mainly from the Republic of South Africa, USA and Mexico. Although Tanzania exports maize to its neighbouring countries, 6 out of the last 10 years (2000-2009) Tanzania was a net importer of maize²². Cross-border trade from Ethiopia is also driven by demand from Kenya. The price of maize in the region is largely determined by:

- the CIF price in the ports of import;
- the fluctuating tensions in the main deficit areas (mainly in Kenya) depending on the circumstances and the seasonal fluctuations;
- the regional trade policy and its application by the EAC member states.

The great deficit in maize and the tensions in the Kenyan market, are largely a result of the agricultural and economic policies which have encouraged export crops at the expense of food crops,

18. AFAP-SPAAA, 2012-2.

19. AFAP-SPAAA, 2012-2.

20. World Bank, 2008.

21. World Bank, 2008.

22. AFAP-SPAAA, 2012-2.

in a context of sustained high level of effective demand in the country, especially in main urban centers and of overwhelming dependence on maize as the key staple for the majority of the population²³.

At the same time, the Kenyan agricultural and trade policies (and the current regional trade policy) aim to ensure prices that are:

- sufficiently remunerative for farmers in order to encourage production;
- not too high in case of price rise in the world market or in case of food shortage due to climatic accidents.

Other factors have contributed to continued high prices of maize in Kenya: the accelerated appreciation of the Kenyan currency in recent years; the impact of increased internal production costs, given the increasing cost of inputs and other production outlays and the overall rise in inflation²⁴. The price of maize is also high in other deficit areas and countries of the region where this cereal is highly demanded: Democratic Republic of Congo (DRC), South Sudan and Somalia. Prices are reported to be almost twice as much as Tanzanian local market prices²⁵.

As the EAC declared maize to be a sensitive commodity, it implemented 50% tariff rice on imported maize from outside the Community. However, during the high food prices crisis, Tanzania removed the import tariffs for maize from July 2007 to May 2008 and again in November 2008²⁶. Figure 2 below indicates price levels in the capital cities of EAC countries during mid November 2012²⁷. It could be noted that prices were consistently lowest in Kampala and highest in Bujumbura. [See Figure 2: Price levels in the capital cities of EAC countries during mid November 2012, page 17]

At global level, during the period January 2007 and January 2012, international grain prices were variable during the period, with price rises in mid-2008 and in 2011, reflecting world price volatility [see Figure 3: International and regional white maize export prices, 2007-12, page 17]. Maize export prices in the United States increased by just one percent between late February and late March. In Central America, maize price was stable after having declined considerably in the second half of 2011. By January 2012

23. CUTS International, 2011.

24. CUTS International, 2011.

25. Gabagambi, 2011.

26. MAFAP-SPAAA, 2012-2.

27. Regional Agricultural Trade Intelligence Network (RATIN).

it was close to its level from before the price surge in 2010/11. In Southern Africa, adequate supplies of maize and other staple foods from the good 2011 harvests held maize prices and the prices of other staples relatively stable or seasonally trending upward despite as the lean season peaked.

High prices in Kenya, Malawi and Burundi markets usually stimulate cross-border trade, particularly from Tanzania and Uganda, thus generating tensions (price rising, risks of shortage) in these countries. That is why, on several occasions, the Government of Tanzania, issues bans on exports. But according to the discussion held with the Food Security Unit of the Ministry of Agriculture and Food Security, trade bans have already been stopped following the commitment²⁸ made by President Jakaya Kikwete to the Leaders G8 countries in May 2012 (Appendix 4). The Government has commissioned a study to explore alternative ways of ensuring food security without imposing trade bans. However the extent to which this commitment is binding is doubtful because trade ban is carried out as a legal action as per Food Security Act of 2008; and the constitution of the United Republic of Tanzania is does not allow anybody, not even the President, to be above the law.

> Sugar

Although the EAC produces sugarcane, the region imports much of the sugar consumed by the population. Kenya is the main producer in the community, followed by Uganda and Tanzania.

In recent years the shortage of sugar has been acute. Stakeholders believe that some unscrupulous traders hoard the commodity in order to create artificial shortage and rake up more profit from high prices. High prices in Kenya have compounded the crisis as traders from across the region smuggle sugar to cash in on the lucrative market. The price more than doubled during the last quarter of 2011, as the rest of the region also faced sugar shortages²⁹.

A number of hypotheses are put forward by stakeholders to explain sugar shortage:

- Hoarding of sugar has become notorious in Kenya; it is suspected that some high profile politicians and individuals are involved.

28. Statement by Jakaya Mrisho Kikwete, President of Tanzania, Ellen Kullman, CEO of DuPont and Dr. Rajiv Shah, Administrator of USAID - 05/18/12 04:26 PM ET.

29. The Citizen Newspaper, Tanzania on Sunday, 25 September 2011- Regional crisis as sugarcane production falls.

FIGURE 2: PRICE LEVELS IN THE CAPITAL CITIES OF EAC COUNTRIES DURING MID NOVEMBER 2012

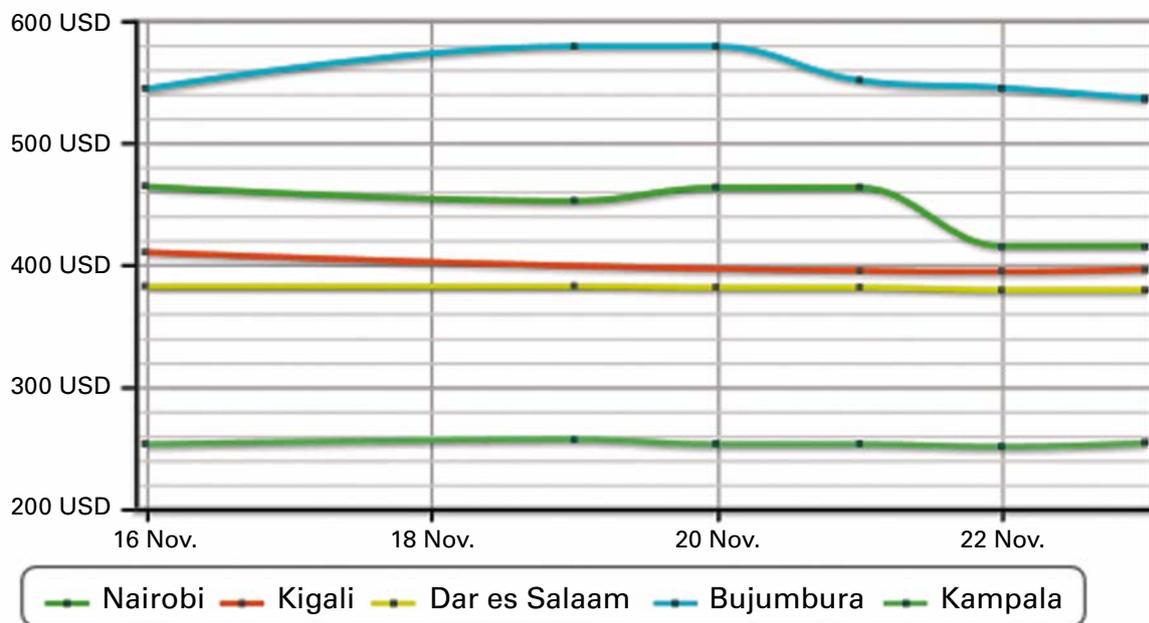
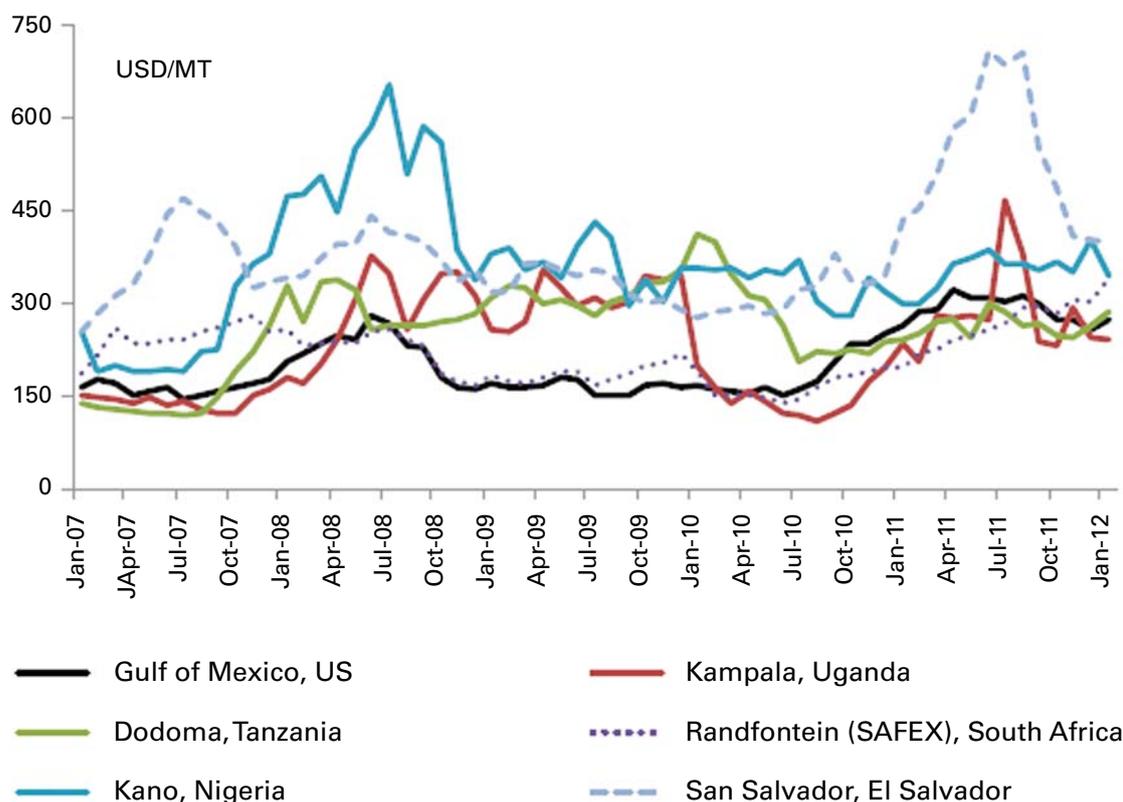


FIGURE 3: INTERNATIONAL AND REGIONAL WHITE MAIZE EXPORT PRICES, 2007-12



- However the shortage may as well be attributed to droughts which lead to a fall in production of sugarcane, the main raw material used for production of sugar in the region.
- Economic dynamics are responsible for the situation; higher prices offered in some countries, especially Kenya, have made it more profitable to export sugar from Tanzania and Uganda across the borders. Related to this is the strength of the Kenyan currency that make it profitable to sell commodities in that economy.
- Neglect of the sugarcane farmers. Farmers are apparently abandoning cane production because it was no longer profitable. The higher prices consumers pay for sugar and huge profit margins made by traders do not seem to trickle down to the cane producers.

To stop sugar smuggling, mainly across their borders Kenya, Tanzania and Uganda have vowed to use their armies alongside other state organs in a bid to ease domestic shortages. The drastic security measures highlight the gravity of the situation.

Sugar is one of the "sensitive" goods whose import from outside the region is controlled by the EAC through higher Common External Tariffs (CET) in order to motivate local production and intra-regional trade on the commodity. However, EAC secretariat has not been able to enforce this rule because sugar business is no longer under the control of the public sector, and the private business firms in the five member states are free to import or export the commodity.

The EAC bloc has a binding agreement to export sugar to the European Union (EU) countries. The region is expected to fulfil its export quota irrespective of the fluctuating production due to weather conditions or other factors. This has stressed domestic supplies. Even in the event of drought, it is more profitable for companies to honour their export agreement with the EU because of the higher prices offered.

In actual fact Tanzania could be losing in the sugar crisis because other partner states are importing the same commodity from the Common Market for Eastern and Southern Africa (COMESA) at much lower prices. There is also controversies related bio-fuels production in the region, particularly in Uganda, involving large amounts of sugarcane being diverted for green fuels production, instead of sugar.

The EAC region has huge tracts of land suitable for sugarcane production, and there is no excuse for

shortages of the commodity. EAC governments are yet to address adequately problems facing cane growers, who have to grapple with high production costs due to the rising prices of fertilizers, fuel and pesticides, as well as high transportation costs, while the sugar factories pay them low prices.

Although sugar factories in the region still own large estates planted with sugarcane, in recent years the raw material has increasingly been supplied by neighbouring farmers under outgrower scheme arrangements.

Statistics at the EAC secretariat indicate that sugarcane production for 2009 was 178,000 tonnes in Burundi, 18,000 tonnes in Rwanda, 3.5 million tonnes in Uganda and 5.6 million tonnes in Kenya. Tanzania's production stood at 3.5 million tonnes in 2008. Statistics released recently by the ministry of Agriculture Food Security and Cooperatives indicate that local sugar production in Tanzania stood at 300,000 tonnes annually against an annual consumption of 400,000 tonnes. Thus, the country's sugar deficit stands at 100,000 tonnes per annum.

Additional figures released by EAC early this year indicate the region has a much higher shortfall of sugar, with Tanzania and Kenya alone having a combined deficit of 360,000 tonnes, against an annual demand of 480,000 tonnes and 700,000 tonnes respectively. Production figures for the two countries are estimated at 500,000 tonnes for Kenya and 320,000 tonnes for Tanzania.

Currently, there are four sugar factories in Tanzania. These are TPC in Moshi, the oldest in the country, Kagera Sugar, which opened in the early 1980s, and Kilombero I and Kilombero II, both run by South Africa's Illovo, and the Mtibwa factory. The last three factories, located in Morogoro Region, started production in the 1970s. They have a production capacity of 300,000 tons a year.

> Rice

Rice is the second most important crop in the EAC region after maize and mostly used as both, food and cash crop. It is produced in all the five countries though with varying proportions. In the Eastern African area, Madagascar, the Comoros and Tanzania can be numbered among the world's leading rice-consuming nations but only Madagascar can claim anything like self-sufficiency³⁰. There are some signs the reported figures that the end of regional conflicts can also signal a return to rice

30. Africa Rice Center (WARDA), 2007.

production. The evidence from the 2001-2005 statistics shows a recovery in production and in consumption in several post-conflict countries.

The average annual milled rice production was 2.6 million tons in the period 2001-2006. In 2006, the milled rice production estimate for East Africa is 3.1 million tons, with Madagascar and Tanzania ac-

counting for 2.3 million tons and 525,300 tons respectively, bearing out the strong upward trend in production which grew at a laudable rate of 7.21 % during the same period of time.

The region's performance was due to increases in rice production in Kenya, Tanzania, Uganda and Madagascar [see Table 2 below].

TABLE 2: AVERAGE MILLED RICE PRODUCTION (1000 TONS) FOR SELECTED PERIODS AND COUNTRIES IN EAST AFRICA

Country	1979s	1980s	1990s	2001-05
Comoros	7.64	8.99	11.29	11.5
Kenya	24.56	30.19	31.58	32.49
Madagascar	1,333.37	1,460.22	1,655.21	1,942.52
Malawi	42.04	23.80	41.34	49.99
Somalia	4.16	8.56	2.92	7.44
Sudan	5.39	1.87	2.12	12.16
Tanzania	184.05	329.54	446.29	456.97
Uganda	12.40	17.29	54.47	85.76
East Africa	1,613.61	1,880.46	2,245.22	2,598.83

Source: Africa Rice Center (WARDA) 2007 Brief

The main challenge that countries in the region are facing in rice production is low productivity. For example, Tanzania's rice productivity is lower than most neighbouring countries and one of the lowest in the world. Thus, Tanzania and other EAC countries hardly meets their own rice demand and therefore imports significant amount of rice mostly from South-East Asia. Figure 4 [see page 20] presents trend of rice imports and exports for EAC during the period 2000-2011. It could be noted that in recent years the gaps between imports and exports are bridging.

> Dairy Products

Dairy production and marketing are a significant part of the agriculture economy in East Africa. According to FAO data, EAC countries produced around six billion liters of fresh cow milk in 2007 roughly equal to one-quarter of the total for all of Africa (Figure 1). While less than half of this total would have been available for sale after allowing for on-farm use and production by dispersed traditional herds,

market oriented dairying is a major economic activity in East Africa noted for extensive smallholder farmer involvement. In diverse settings throughout the region, dairy has been shown to provide small farmers a regular cash income that can be several times greater than many other types of on- and off-farm enterprise³¹. Other recognized benefits of dairy production include growth linkages to input service providers, milk traders, and dairy processors; the ability to supply nutritious and affordable food to the local population; and opportunities for long-term expansion into growing domestic and regional export markets³². [See Figure 5: Milk Production in the EAC Region, page 20.]

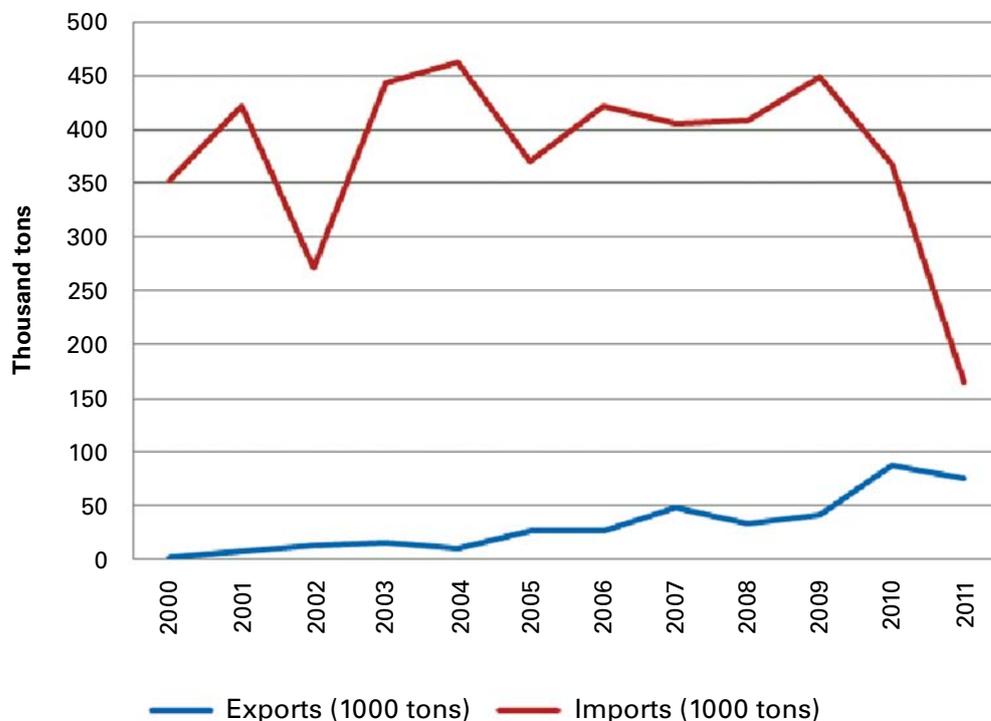
EAC Regional Trade Patterns

The EAC is one of the few regions well endowed with water resources consisting of rivers, dams,

31. Staal et. al., 2003; Keyser, 2003; IFAD, 2005; Parsons and Matiru, 2008.

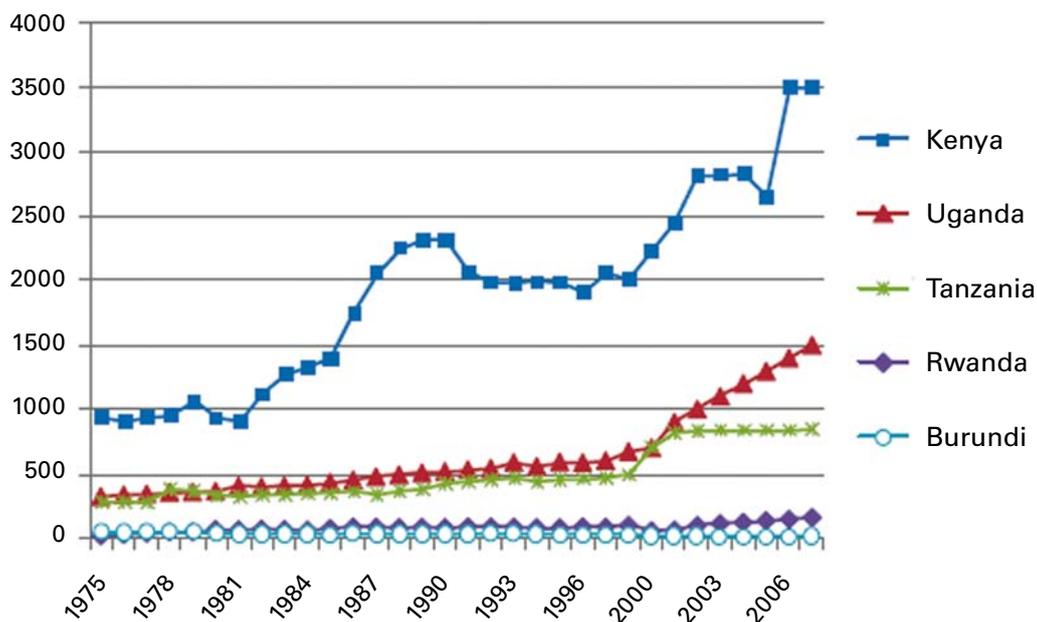
32. Bennett, Lhoste, Crook, and Phelan, 2006.

FIGURE 4: TREND OF RICE IMPORTS AND EXPORTS FOR EAC DURING THE PERIOD 2000-2011



Source: Computed from UN-COMTRADE data

FIGURE 5: MILK PRODUCTION IN THE EAC REGION



Source: FAOSTAT, 2009

swamps, lakes, and underground water. As such, a wide range of agricultural commodities are produced and traded in and outside the EAC. Indeed, agricultural products in the EAC contribute substantially to the total merchandise exports from the region³³. Table 1 [see page 9] presents regional balance sheet of five selected agricultural commodities namely milk and dairy products, maize, rice, sugar and poultry products for the EAC countries.

It could be noted that generally the EAC region is a net importer of agricultural commodities including maize and rice that some state members have huge potential to produce. However, the region seems to be self sufficient in poultry products. Between 2000 and 2011 the region either did not

import poultry product or exported some volumes of the same commodity.

Examination of the direction of flows of these commodities from the EAC region indicates that 93% of exports are to COMESA, SADC and the EAC itself. The exports among EAC partner member states accounts for 51%. Export to other regions of the world including Europe, America and Asian countries is very marginal [see Figure 2 page 17]. This observation counters the arguments that EAC partner states do not trade much among themselves. Such finding is plausible because EAC countries are known for exporting to Europe and other developed countries traditional export crops such as raw coffee, tea, cotton, cashew nuts, and tobacco, just to mention a few [see Figure 6: EAC exports to different regions of the world - Average for 2000-2011, page 22].

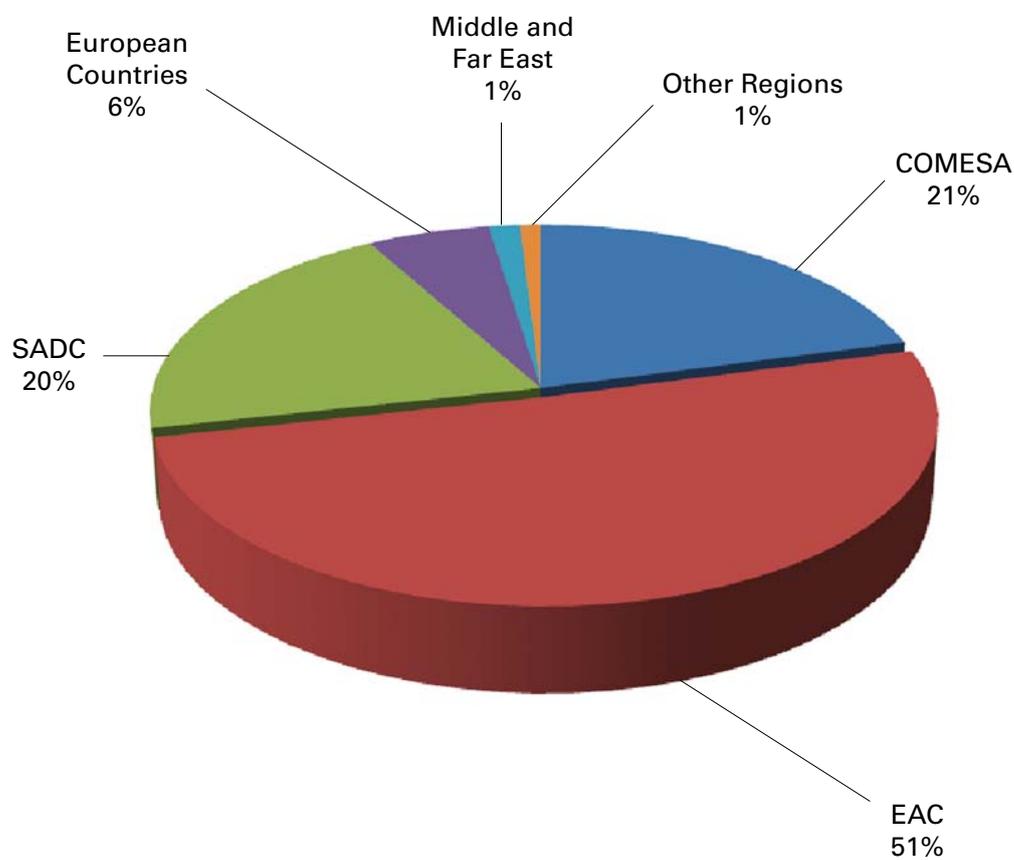
33. Julian Mukibi (2009). *Leveraging the Agriculture Sector Through Trade: Opportunities and Challenges in the EC-EAC EPA. CUTS International and GTZ*

TABLE 3: REGIONAL BALANCE SHEET (1 000 TONS) FOR SELECTED COMMODITIES (2010-2011)

Period	Commodity	Production	Consumption	Export	Import	Deficit
2000-2002	Dairy products	12,274	12,286	2	15	-13
	Maize	18,085	18,110	87	112	-25
	Poultry meat	265	265	-	-	-
	Rice	3,343	4,365	23	1,045	-1,
	Sugar	2,211	2,485	65	339	-274
2003-2005	Dairy products	12,0	33	41,6	13,0	30
	Maize	18,085	18,110	87	112	-25
	Poultry meat	265	265	-	-	-
	Rice	3,343	4,365	23	1,045	-1,
	Sugar	2,211	2,485	65	339	-274
2006-2008	Dairy products	12,0	33	41,6	13,0	30
	Maize	18,085	18,110	87	112	-25
	Poultry meat	265	265	-	-	-
	Rice	3,343	4,365	23	1,045	-1,
	Sugar	2,211	2,485	65	339	-274
2009-2011	Dairy products	12,0	33	41,6	13,0	30
	Maize	18,085	18,110	87	112	-25
	Poultry meat	265	265	-	-	-
	Rice	3,343	4,365	23	1,045	-1,
	Sugar	2,211	2,485	65	339	-274

Source: Computed from UN-Comtrade data

FIGURE 6: **EAC EXPORTS TO DIFFERENT REGIONS OF THE WORLD:
AVERAGE FOR 2000-2011**



Source: Computed from UN-COMTRADE data

But in terms of imports for the same commodities, it was observed that 61% of imports are from Latin America followed by ECOWAS (12%) and SADC (10%). [See Figure 7: EAC imports from different regions of the world - Average for 2000-2011, page 24.] To limit the analysis to a manageable scope, subsequent analysis was confined to two commodities; rice and dairy products. Figure 8 and 9 show fluctuations in production, imports and exports for rice and dairy products in the region [see page 25].

Main Intra-Regional Flows in the EAC

Intra-regional trade flows of major commodities were examined by preparing a matrix of exports in the five countries of the EAC [see Table 4 below].

It was revealed that the main flows are as follow:

- **dairy products:** Kenya to Tanzania; Kenya to Uganda; and Uganda to Tanzania;
- **maize:** Uganda to Kenya; Uganda to Burundi; Uganda to Tanzania; and Tanzania to Kenya;
- **rice:** Tanzania to Rwanda; Tanzania to Kenya; Tanzania to Uganda; and Uganda to Rwanda;
- **sugar:** Uganda to Rwanda; Uganda to Burundi; and Burundi to Rwanda.

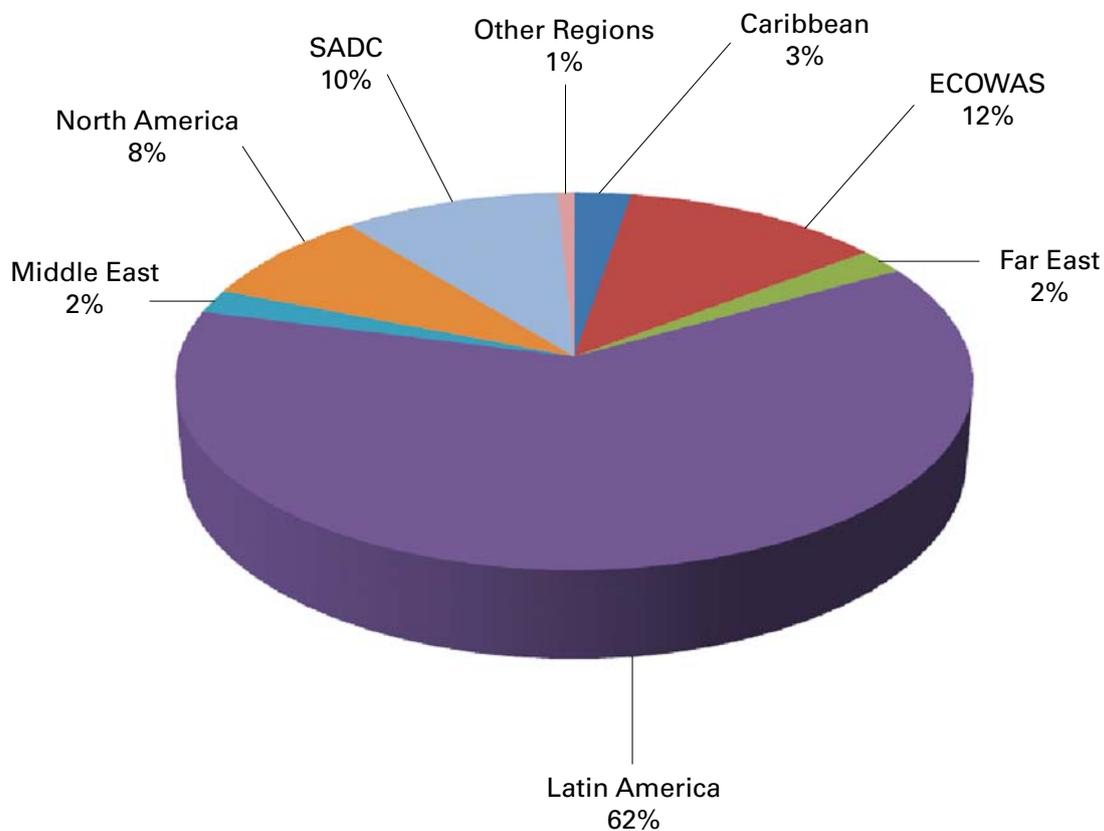
These flows are presented in the map of East Africa as [see Figure 10: Map of East Africa showing major trade flows, page 26].

TABLE 4: INTRA-REGIONAL TRADE FLOWS IN EAC FOR ELECTED AGRICULTURAL COMMODITIES (2006-2011 AVERAGE)

Commodity	Country	Burundi	Kenya	Rwanda	Uganda	Tanzania	Main flows
Dairy products	Burundi	-	-	-	-	6	Kenya to Tanzania; to Uganda; and Uganda to Tanzania.
	Kenya	1,945	-	357	11,436	28,978	
	Rwanda	8	-	-	-	-	
	Uganda	372	20,869	789	-	1,074	
	Tanzania	13	3,619	37	120	-	
Maize	Kenya	-	-	1,554	4,575	21,095	Uganda to Kenya; to Burundi; to Tanzania Tanzania to Kenya.
	Rwanda	327	-	-	789	60	
	Uganda	91,209	203,093	24,342	-	70,543	
	Tanzania	6,007	53,316	2,186	358	-	
Rice	Burundi	-	-	836	-	-	Tanzania to Rwanda; to Kenya; to Uganda; Uganda to Rwanda.
	Kenya	-	-	45	4,182	524	
	Rwanda	155	-	-	123	246	
	Uganda	5,252	5,933	41,943	-	-	
	Tanzania	1,409	30,986	56,761	44,876	-	
Sugar	Burundi	-	-	33,076	98	215	Uganda to Rwanda; to Burundi; Burundi to Rwanda.
	Kenya	1	-	4,167	190	98	
	Rwanda	82	29	-	2	-	
	Uganda	13,731	4,392	45,292	-	6,222	
	Tanzania	170	9,157	3,360	4,294	-	

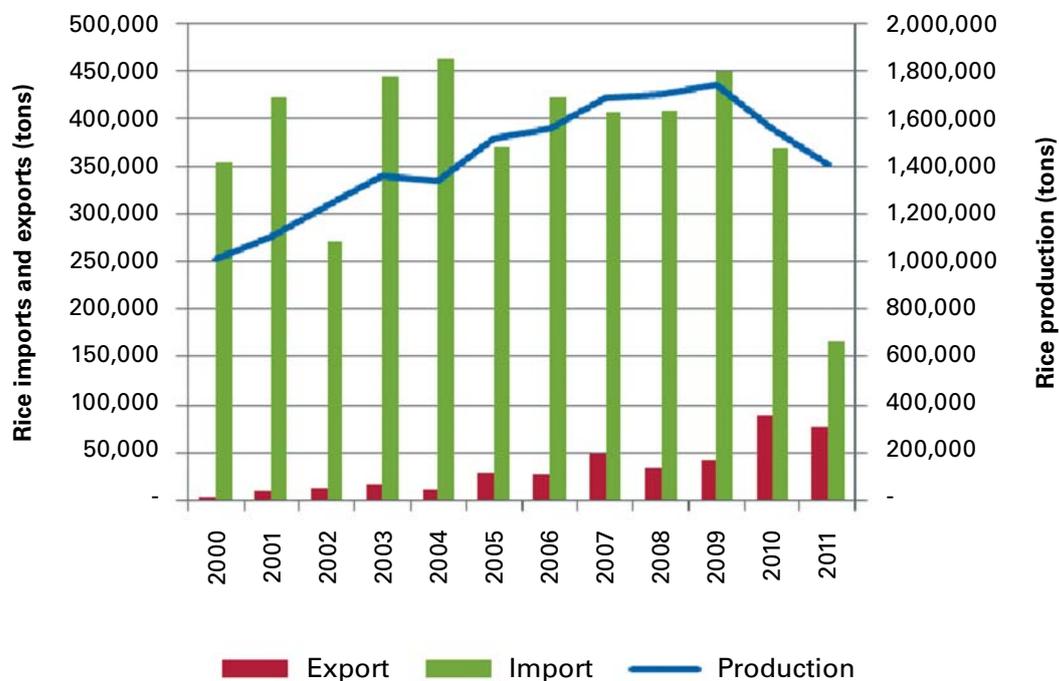
Source: UN-Comtrade data, 2011

FIGURE 7: EAC IMPORTS FROM DIFFERENT REGIONS OF THE WORLD: AVERAGE FOR 2000-2011



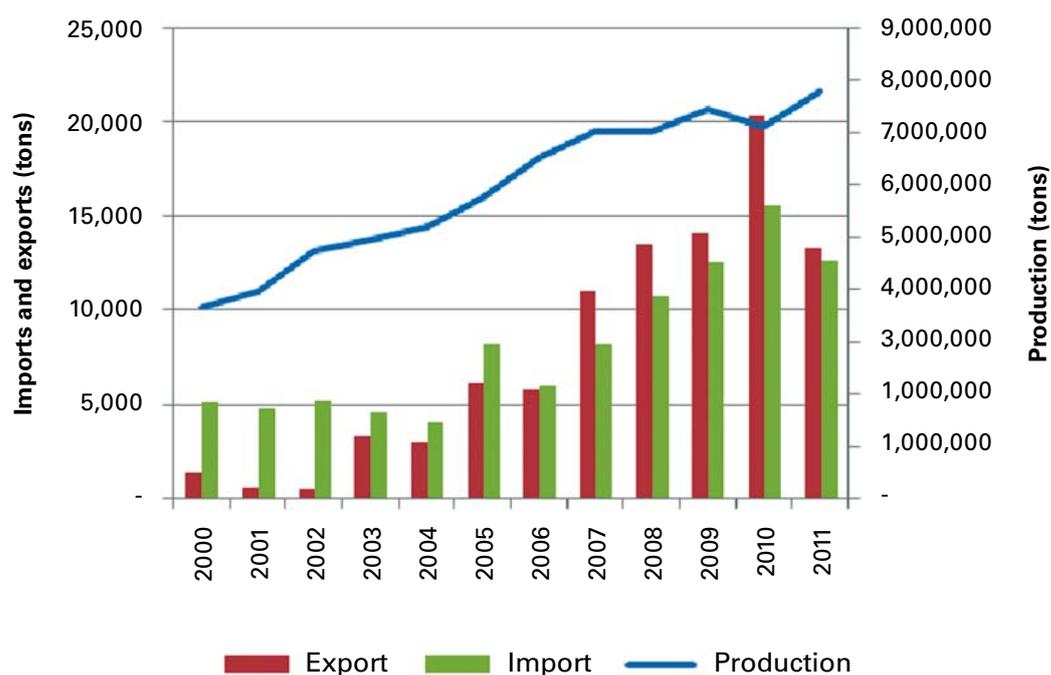
Source: Computed from UN-COMTRADE data

FIGURE 8: TREND OF RICE PRODUCTION, EXPORTS AND IMPORTS (TONS)



Source: Computed from UN-COMTRADE data

FIGURE 9: TREND OF DAIRY PRODUCTS PRODUCTION, EXPORTS AND IMPORTS (TONS)



Source: Computed from UN-COMTRADE data

The intra-regional trade connects mainly neighboring countries, and more specifically neighboring areas. Indeed, the low level of development in transport infrastructures and high transport costs often limit the long-distance trade, although the situation is improving in this field. Multi-country import is only common in Kenya, which receives beans from Rwanda and maize from Malawi and Zambia³⁴.

An important factor to be considered when assessing the volume of agricultural trade within the region is its **high level of informality**. Indeed, trade between the EAC countries is carried out through both formal (regulated and recorded in national accounts) and informal (unregulated and unrecorded) channels. According to estimates by ministries and industry associations, about 80% of trade in agricultural products and food in the region is informal and not statistically recorded³⁵. Informal trade accounts for over 95% of trade in livestock and up to 60% for staple grains, especially among small traders³⁶. According to the East Africa Cross-border Trade bulletin, the share of informal trade was 42% for maize, 77% for the other cereals, 60% for sugar, 54% for fruits and vegetables (but 0% for sesame and only 8% for beans)³⁷.

Price differences between countries tend to stimulate intra-regional trade. Due to its trade and agricultural policies and to its higher level of development, Kenyan prices are higher than prices in the neighboring countries. Thus, and for example, the main agricultural production areas of northern Tanzania are reliable and inexpensive sources of food for the insecure and marginal agricultural south-east and south-western lowlands of Kenya. In return, Tanzanian farmers and traders get relatively better prices compared to the domestic market³⁸.

> **Rice Supply Chain**

In Tanzania, before liberalization of the sector, rice was extensively produced and marketed by National Agricultural and Food Corporation (NAFCO) as well as National Milling Corporation (NMC) on the part of processing the rice. At the moment all these activities are privatized including the relevant infrastructures like the irrigation schemes, farms, mills and their storage facilities.

34. GTZ, 2010.

35. GTZ, 2010.

36. CUTS International, 2011.

37. Gabagambi, 2011.

38. GTZ, 2010.

The supply channels for rice are generally long and the produce changes many hands before reaching the final consumer.

Traditionally most of the small farmers sell part of their rice production to local agent of millers or traders. The high number of stakeholders is linked to the fact that there are lots of long term relations of trust and dependence between sellers and buyers. However, some of the better organized and more dynamic smaller Tanzanian farmers (representing less than 20%), producing rice on less than 10 acres of irrigated land with their higher yields and nearer to regional centers have established direct links with regional buyers.

A few more structured supply chains are emerging and there is increasing interest from large (foreign) investors. Some bigger farmers on irrigated land link directly to national large millers and buyers. Part of the latter are linked or integrated to larger trading companies which are dealers in several crops (rice, maize, cotton, etc.) and also import rice. They will arbitrage between the price of local rice and the price of imported rice, thus looking at the opportunity cost of their investments³⁹.

> **Maize Supply Chain**

In Tanzania, the maize marketing system is characterized by a very large number of small traders operating both from the main centers of production and from the major urban areas.

Marketing channels are characterized by lengthy brokerage services dominating at village, district and national urban markets. The market margins are generally quite high⁴⁰.

> **Milk and Dairy Products**

The countries in the region generally have large and vibrant small-scale trading sectors in which various kinds of milk vendors, milk shop owners, and mini-processors link small farmers with city and town buyers.

Dairying in all five countries is a domestically focused activity with very large informal sectors and maybe only 10-20% of milk is going through formal market chains⁴¹.

39. MAFAP-SPAAA, 2012-1.

40. MAFAP-SPAAA, 2012-2.

41. Jensen Michael and Keyser John.

CHALLENGES AND LIMITATIONS TO INTRA-REGIONAL TRADE

The limitations for developing agricultural intra-regional trade within the EAC can be classified in five main categories:

- lack or bad conditions of physical infrastructures for transportation;
- tariff barriers;
- non Tariff Barriers;
- constraints specific to value chains downstream from agricultural production;
- constraints specific to the agricultural production.

Lack or Bad Conditions of Physical Infrastructures for Transportation

Even though the main roads between the major cities of the regions are often in a good condition, these roads are scarce.

In Tanzania, only five percent of the road network is bituminized. So, the lack and bad conditions of roads is not a problem specific to cross-border trade: it's also affects the trade within the larger countries, specifically Tanzania.

Most cities and regional markets cannot be reached by a good road throughout the year which bids up the cost of transport of these areas creating a market barrier to the producers in the area need to face if they wish to sell their products to the national market⁴². In addition, there is no railway connection between Uganda and its neighboring countries e.g. Tanzania, Burundi and Rwanda, as well as between Kenya and Tanzania⁴³. This has the following implications:

- Some producers have no access to the market, at least in some periods of the year. This is often the case for perishable goods. As they suffer from delays in transport, some agricultural products from remote locations untradeable altogether⁴⁴.
- In Tanzania, horizontal integration at the markets is underdeveloped as the benefits from trade between regional markets other than Dar es Sa-

laam are eaten by the high transportation costs. Besides the trade between the larger markets, i.e. interregional trade (from Dar es Salaam), access to regional markets from the small village level markets, i.e. intra-regional trade, is dependent on feeder roads, which in their current state are in poor conditions⁴⁵.

- Transportation costs are increased. According to the SAGCOT value chain survey, transport costs (rice) are on average \$0.40/T/km from the farm gate to the primary market (rural), *\$0.27/T/km from the primary (rural) market to the secondary (regional) urban market, and \$0.12/T/km from the secondary market to the wholesale markets. However, during peak times and in the more remote rural areas the cost can even be higher⁴⁶. Poor road conditions can sometimes stop the trucks completely in rural regions and the risk of getting stuck is reflected in seasonal fluctuation of transport prices to remote locations⁴⁷. In addition, the more remote the location, the more expensive the fuel is, and thus the transportation costs⁴⁸.
- High transportation costs and long transportation time is also decreasing the size of the market by blocking more remote producers and potential consumers from the market giving market power to the few large-scale players who are able to meet the transaction costs⁴⁹. Consequently, they are able to capture much of the value added.
- Increased delays are a limitation for the improvement of the quantity and quality of the agricultural production and for food preservation⁵⁰. This decrease their competitiveness with imported products (in particular for perishable goods such as fruits and vegetables). This affects especially the larger traders who trade goods across markets, and for whom delays in transport can mean loss of consumers as well as rotten products. Traders take high margins in order to compensate the risks of losses, which impacts negatively in the farm-gate prices.
- It should be noted that the lack of infrastructures within a country sometimes help trade between two neighboring countries. Thus, his-

42. Eskola Elina, 2005.

43. Othieno Lawrence, 2012.

44. Eskola Elina, 2005.

45. Eskola Elina, 2005.

46. MAFAP-SPAAA, 2012-1.

47. Eskola Elina, 2005.

48. Eskola Elina, 2005.

49. Eskola Elina, 2005.

50. Eskola Elina, 2005.

torically Kenya and Tanzania have enjoyed strong agricultural trade ties and, among other factors, this trade has evolved due to poor transport infrastructure within Tanzania, making Kenya an outlet for surplus food production from the Arusha and Lake Victoria regions. However, Tanzania has currently improved its infrastructure, which has widened the food sources for the Kenyan market. It is now common for maize from Southern Tanzania, parts of Malawi, and Zambia to reach the Kenyan markets of Nairobi⁵¹.

Tariff Barriers

Through the EAC Customs Union Protocol, the member States commits to the elimination of tariff barriers. The transitional period ended in 2010 and, strictly speaking, there are no more tariffs within the region.

However, “tariff” concept can be expanded to include any statutory deductions from farmer’s or trader’s income that are not related to production, ie domestic taxes⁵². Domestic taxes often constitute constraints to the commercialization of agricultural products. In Tanzania, the district councils are given the authority to tax up to 5% of the value of the crop. There are considerable variations in the rates and amounts in local taxes. There are duplication of taxes (double-taxation by the local and national government on the same revenue-base) and inconsistencies between local and central government tax policies. Some local governments impose high taxes on export crops, which are inconsistent with the national government policy to encourage production. Some sub-sectors are especially affected by the VAT regime. For example, cane farmers are taxed on land preparation, cane cutting and transportation to factories. But usually the farmers can’t deduct the VAT because they are too small to register, which difficult their competition with counterparts in regional and international markets⁵³.

Non Tariff Barriers

While tariffs barriers between the EAC countries have been eliminated, the business community had been experiencing many non-tariff barriers (NTBs) in cross border business transaction in the region⁵⁴.

51. GTZ, 2010.

52. Gabagambi, 2011.

53. Gabagambi, 2011.

54. Gabagambi, 2011 and Muluvi and al., 2012.

NTBs should be well defined, as well as Non tariff Measures (NTMs). The later are “quantitative restrictions and specific limitations that act as obstacles to trade”. NTMs may be legitimate, when they serve social objective, for example health protection. Generally, non legitimate NTMs are considered as Non Tariff Barriers⁵⁵. Of course, the line between NTBs and legitimate NTMs is often questionable. NTBs can be classified as follows:

- export bans;
- technical barriers;
- bribery and corruption.

Limitations to intra-regional trade have been monitored by the EAC authorities. In coordination with the members States, the EAC implements various actions in order to eliminate non tariff barriers. A Study on the development of a legally binding mechanism on the elimination of identified NTBs has commenced and the inception report of the study was approved by the EAC dedicated Ministerial meeting on NTBs during their meeting on 14th March, 2012 in Mombasa, Kenya⁵⁶. For its part, the East African Business Council (EABC) releases every two years a survey about NTBs in the region and proposes solutions⁵⁷.

> Export Bans

Temporal export bans on cereals (maize and rice) are principally implemented by the Tanzanian government, as a food security policy. Food exports are regulated by the Strategic Grain Reserve, within a context of state intervention in the cereal markets aimed at stabilizing prices and food supply. Export permits are required for anyone who desires to export from Tanzania.

Tanzania has had exports bans for maize in place during most of the first decade of the XXI century. The export ban normally follows a bad harvest or price peaks. The main objective of this ban is to avoid production being diverted to Kenya where prices for maize are significantly higher than in Tanzania, and thus to supply the domestic market and avoid price rising⁵⁸. Tanzania is the only country in East Africa which formally restricts trade and this becomes a major policy debate issue in the country. This policy measure is in place since the

55. Jensen M. and Keyser J.

56. EAC, *Status of Elimination of Non Tariff Barriers in the East African Community, Volume 2, March 2012.* <http://www.eac.int>

57. East African Business Council, www.eabc.info

58. MAFAP-SPAAA, 2012-2.

1980's and formally lifted in 1999. However it has gained prominence again during the food price peak events on the later 2000'. Since 2006, exports bans for maize were successively lifted and reintroduced three times⁵⁹.

Regularly, the Ministry of Agriculture, Food Security and Cooperatives estimates a ratio between grains supply and demand for each one of the twenty-one region of the country and for Tanzania as a whole. When the ratio for Tanzania is less than 120%, bans are decided. The Ministry only considers that there is a surplus beyond 120% due to the expected waste and losses. Between 100% and 120%, it is estimated that the country is self-sufficient. Below 100% the country is considered as in deficit.

Actually there is in Tanzania debate on the opportunity of export bans: "A missed opportunity for exports" or "a gain for Food Security"? Many stakeholders criticize these measures. Indeed, they deeply affect producers as export bans result in lower prices and seem to be very beneficial for the traders and customs officials. In some regions relatively isolated (for example in West and South-West Tanzania), production can hardly be transported within Tanzania and thus meet the demand of Tanzanian urban centers and deficit areas, while it can be easily exported. Thus, surpluses can hardly be marketed in the domestic market, prices remain low, cereal stocks rot in warehouses, farmer incomes have very few incomes. Actually, part of them continues to be exported, in an illegal way (smuggling, for example with bicycles or motorcycles or rolling in charcoal bags, or by paying bribes to the officials). But, the existence of bans tends to improve the balance of power for the benefit of traders at the expenses of farmers.

Bans also generate uncertainty on economic agents. Sometimes it is not clear whether the ban is in place or not.⁶⁰ This has reduced the number of buyers from outside Tanzania, especially Kenya. As a result the prices of maize are sometimes not high enough as expected by local stakeholders⁶¹.

In Tanzania, Regional Commissioners are in charge of delivering certificates of clearance for exportation, including when exports are authorized. In case the region is not considered as "food secure", the delivery can be refused. The lack of transparency and the complex administrative procedures can be used by big companies and influential persons

59. MAFAP-SPAAA, 2012-2.

60. MAFAP-SPAAA, 2012; Lagandré Damien, 2010.

61. Gabagambi, 2011.

to obtain their exportation licence. Small traders often cannot access to the information nor follow all the procedures⁶².

It should be also noted the existence of district by-laws against food sales out of the district in times of food shortage⁶³. The last export bans were set up between July and December 2011. Recently, the President of Tanzania committed not to use bans anymore.

> Technical Barriers

Some of the various technical barriers can be considered as disguised protectionism (no recognition of certificates, excessive delays, etc.), other one as a results of interests of national governments or of specific authorities (cost of some procedures and certificates). Finally, some limitations result from inefficiencies and bureaucracy and from a relative slowness in the harmonization or unification of procedures between the countries of the region.

• *Cumbersome procedures for business and licensing and customs operations*

According to the findings of a study carried out in 2005 in three countries of the EAC (Kenya, Tanzania, Uganda), time for the border administrative formalities is very long and causes delays⁶⁴. Also the study is a bit old its findings are still relevant today.

● **Time Taken for Documentation at Border Crossings.** According to the study, nontariff barrier related to border post procedures especially those related to Documentation at crossing was found to takes more than 1 hour in the majority of cases. Since the procedures at customs, immigration and police checks are sequential, the total period could be more than 3 hours.

● **Time for procedures at Border Posts.** Pre-shipment inspection is completed within a day for at least 60% of the cases in Tanzania and Uganda and in less than 20% of instances are these procedures delayed beyond a week. In Kenya on the other hand businesses experience the longest delay overall in completing the clearance formalities⁶⁵.

62. Lagandré Damien, 2010.

63. MAFAP-SPAAA, 2012-1.

64. Study on Non-Tariff Barriers and Development of a Business Climate Index in the East Africa Region, commissioned by the East African Business Council (EABC) in collaboration with the GTZ, reported by Gabagambi, 2011.

65. Study on Non-Tariff Barriers and Development of a Business Climate Index in the East Africa Region, commissioned by the East African Business Council (EABC) in collaboration with the GTZ, reported by Gabagambi, 2011.

Obtaining an import declaration form (IDF) involves numerous agencies, with often duplication of effort and wasted business time⁶⁶.

It is expected that recent decision of Ministers to implement the electronic cancellation of bonds within 24 hours will contribute to reducing delays⁶⁷.

● **Time for Business Registration and Licensing.**

In all the States, registration and licensing is completed within a week for the majority of them. In Kenya, various ministries, departments and parastatals regulate and support the country's trade. In performing their functions, they sometimes hinder the free and smooth flow of goods and services in the EAC. These hindrances occur because of the setting of product standards, technical regulations and conformity assessment procedures. All the Kenyan agencies in charge of regulating country's trade operate independently of each other, without much coordination (thereby occasioning delays). In addition, most of them do not operate 24 hours a day⁶⁸. More generally, numerous institutions are involved in testing goods. The Ministers of the EAC States recently agreed to act in order to fast track the clearance of goods at border entry points and to enhance collaboration among the regulatory agencies⁶⁹.

● **Lack of harmonization of procedures and documents**

Lack of harmonization of procedures and documents is a key factor of delays. The clearance of goods by the Kenya Revenue Authority (KRA) takes time because of the lack of harmonized import/export documentation and procedures. Currently, the digital data exchange system used by revenue authorities is operational in Rwanda, Uganda and Kenya, but not in Burundi and Tanzania. Only Kenyan customs operates for 24 hours, meaning that even if goods are cleared in Kenya, they are delayed in Burundi and Tanzania by other member states⁷⁰.

However the EAC is currently enhancing the implementation of harmonized document and the utilisation of harmonized procedures manual, as well as the interfacing of national customs' systems⁷¹.

● **Lack of recognition of certificates, standards**

Theoretically, there is a mutual recognition of certificates issued in the various EAC countries. However, regarding standards and certification, some agencies accredited to conduct standardization in one country are not recognized by officers in other countries^{72 73}. Veterinary licenses have sometimes to be issued for each individual consignment instead of for an extended period (for example annually)⁷⁴.

Indeed, these measures appear sometimes to be real import bans. It's for example the case of Ugandan ban on beef and beef products from Kenya, and of Kenyan bans on Ugandan day old chicken (in the latter case, the ban has been recently lifted)⁷⁵. Kenya recently imposed stricter quality standards in the dairy sector, which Ugandan producers and traders referred to as "protectionist measures" that were imposed to protect the relatively expensive Kenyan industry. According to stakeholders, it seems that the situation in the ground is sometimes very different than political speeches.

Many traders came to the border without certification from the export country. As there are no laboratories at the border points, samples have to be sent to the capital of the importing country, which generate huge delays. The procedures for obtaining the certificates of origin are cumbersome and lengthy⁷⁶.

Harmonization of standards can help developing intra-regional trade. However, it's necessary the standards are adjusted to the reality of the production in the region. In the milk sector, harmonized regional standards seem to be too demanding and thus unrealistic. So, they may be a source of trade conflicts in the future⁷⁷.

● **Immigration procedures**

Work permits requirements that undermine the free movement of people within the region⁷⁸. It takes between 1-5 months to get a work permit for workers sourced from another EAC country⁷⁹. As well, Tanzania charge visa costs of USD 250 for

66. Muluvi Augustus and al., 2012.

67. "Status of Elimination of Non Tariff Barriers in the East African Community," Volume 2, EAC, March 2012.

68. Muluvi Augustus and al., 2012.

69. "Status of Elimination of Non Tariff Barriers in the East African Community," Volume 2, EAC, March 2012.

70. Muluvi Augustus and al., 2012.

71. «Status of Elimination of Non Tariff Barriers in the East African Community," Volume 2, EAC, March 2012.

72. Muluvi Augustus and al., 2012.

73. Jensen M. and Keyser J.

74. Jensen M. and Keyser J.

75. "Status of Elimination of Non Tariff Barriers in the East African Community," Volume 2, EAC, March 2012.

76. Muluvi Augustus and al., 2012.

77. Jensen M. and Keyser J.

78. Othieno Lawrence, 2012.

79. "Status of Elimination of Non Tariff Barriers in the East African Community," Volume 2, EAC, March 2012.

businessmen⁸⁰. For companies that operate at the both side of the border the cost can be high (for example, they have to pay each time they need to send an engineer). Similarly, Tanzania remains closed to foreign capital stock trading⁸¹.

• **Roadblocks and weighbridges**

According to a study, although the majority of businesses do not regard these three sets of NTBs as constituting obstacles, police road blocks in Kenya are considered as a major obstacle by almost 20% of businesses in Kenya, as well as weighbridges⁸². There are 27 police control posts between the Ugandan border and the Kenyan port in Mombasa⁸³. For every 100 kilometers, traders encounter about two, five and seven roadblocks in Tanzania, Uganda and Kenya, respectively.

On the other hand, road blocks aimed at levying taxes are many in the Tanzanian local districts. At each road block, there is a considerable delay. The farmer has to show a receipt that prove he has already paid the cess, but sometimes the guard rejects the quantity of maize quoted on the receipt on guise of under-declaration. This sometimes necessitates offloading and recounting of bags from tracks and tractors. A delay at a road block may take up to 4 hours⁸⁴.

• **Road axle regulations**

Until early 2012, the application of axle load specifications varied from one country to the other⁸⁵. However, the impact of Non-Tariff Barriers must not be overstated. In spite of the various limitations, the traders and companies “live with them” and regularly export without absolute constraint. Jensen’s and Keyser’s study shows that NTBs are not a big threat to regional trade currently. They found that market participants were generally happy with the flow of trade. They said that trade had become much easier over the latest years. This is coherent with the declarations of the stakeholders we met in the course of this study. However, Jensen and Keyser mention that there are numerous potential sources of NTBs that may develop into major barriers in the future⁸⁶.

80. “Status of Elimination of Non Tariff Barriers in the East African Community,” Volume 2, EAC, March 2012.

81. Othieno Lawrence, 2012.

82. Gabagambi, 2011.

83. Ancharaz and al., 2011.

84. Gabagambi, 2011.

85. “Status of Elimination of Non Tariff Barriers in the East African Community,” Volume 2, EAC, March 2012.

86. Jensen M. and Keyser J.

> **Bribery**

Corruption is frequent at the borders, but also at all over the supply chain, where the stakeholders pay to avoid delays (for example, when traders have to wait for sending and examining samples), overload charges, and other problems. On average, Tanzania’s farmers pay 10 bribes per year in the full supply chain process, Kenya’s farmers 8 bribes and Uganda’s farmers 4 bribes. An average of 7 of bribes from Tanzanian farmers occurs at roadblocks and 3 at weight-bridges⁸⁷. Police officers solicit bribes especially from transporters and traders whose vehicles have foreign registrations⁸⁸.

On the Northern Corridor (Mombasa-Kigali), bribes are estimated at USD 0,55 per roadblock per truck on Ugandan side and USD 1,3 on Kenyan side, or USD 25,70 per truck⁸⁹.

> **Consequences**

The main impacts of non-tariff barriers are the following:

- increased costs, and thus lower farm gate prices and sometimes higher consumer prices;
- in some case, loss of markets for the traders (due to delays);
- possibly disincentive for some stakeholders to trade products within the region.

Limitations at Production Level

To a large extent, the low level of intra-regional trade is more due to the insufficient regional production than to constraints to trade. In the case of milk, Jensen M. and Keyser J. mention that, whereas some observers have tended to link the poor trade performance with the existence of trade barriers, it is more likely that trade is not happening due to a general shortage of milk⁹⁰.

On the other hand, production costs are sometimes relatively high while the price anticipated by farmers is relatively low due to the several constraints along the value chain. This doesn’t incentive farmers to invest and produce more for marketing. In addition, risks due to natural conditions and to price volatility are significant. This reinforces farmers’ risk management strategies based on

87. MAFAP-SPAAA, 2012-2.

88. Muluvi Augustus and al., 2012.

89. “Status of Elimination of Non Tariff Barriers in the East African Community,” Volume 2, EAC, March 2012.

90. Jensen M. and Keyser J.

cost reduction. However, it should be noted that, at consumption level (and in particular in the great urban centers), national and regional products are in competition with products imported with high customs tariffs. This has tendency to keep prices relatively high which, eventually, has a positive impact on farm-gate prices. Low trade complementarity is mentioned by Ancharaz and al., 2011.

In the case of milk, seasonal variation is similar across EAC States and all are normally in a deficit situation⁹¹.

Another limitation is that the EAC partner states are currently entwined in producing and exporting substitutable products rather than complements: for example, all of them export to each other dairy products, food stuffs, vegetable, fats and palm oil. This has generated unnecessary competition within the single market, which in turn has limited the gains from trade, especially for the landlocked countries (Uganda, Burundi, and Rwanda)⁹². There is a certain complementarity, as some countries are net-importer from other countries and because seasonal variations are not exactly the same from one region to the other. However, seasonal variations have the same gross characteristics, for example in the case of milk production.

Limitations at Value Chains Level

> Numerous Stakeholders

In most cases, moving food products from farmers to final consumer involves multiple transactions. The margins required by each party within multi-party chains substantially increase the final retail price or reduce the farm-gate price⁹³.

In Tanzania, the weak institutional framework for following and enforcing trading agreements between unknown parties leads to long supply chains of friends, middlemen and brokers as contracts cannot be made directly between the consumer and the producer who do not know each other. Throughout the supply chain deals are made with middlemen to ensure timely and reliable supply of agreed goods. The lack of formal contracts and ability to enforce informal agreements means that most of the deals are done between relatives or close personal friends, which increases transaction costs⁹⁴.

91. Jensen Michael and Keyser John.

92. Othieno Lawrence, 2012.

93. MAFAP-SPAAA, 2012-1.

94. Eskola Elina, 2005.

> Imbalances of Power

At various levels, there are imbalances of power between stakeholders within the value chains. The major one is between small-scale producers and traders at local level. Many farmers have no information about market prices and need to sell their products once harvested or collected. This makes the middlemen or traders able to impose low farm-gate prices⁹⁵.

Moreover, seasonal price fluctuations are significant for products such as maize, and only actors with access to storage facilities and financial services are able to take advantage of them⁹⁶.

When trade is operated in markets (wholesale or retail markets), the relations are more balanced as there is a real competition and information about prices (including indicative prices in some wholesale markets). The reduction of intermediaries implies a better transmission of the market price to the farmers. In Tanzania, MVIWATA has developed wholesale markets (bulk marketing) that have made possible more balanced relations for the benefit of farmers. Moreover, the existence of Warehouse Receipt Systems (WRS) make possible the farmers to storage their production in good conditions and to sell it when market prices are higher. Controlling and grading products in some wholesale markets also make price determination more objective⁹⁷.

There are several initiatives in the region to improve information on the cereal markets, in particular prices and information of where there are surplus or shortfalls:

- The Tanzanian government calculates monthly food balance sheet in each region of the country and for the country as a whole.
- The Eastern Africa Grain Council is developing a marketing information system: data on market prices in eight countries of the region; information by SMS; RATIN trading platform (internet trading) aimed at linking stakeholders that have products in warehouses with other stakeholders; monthly food balance sheet at national and regional levels⁹⁸. At the moment, this mechanism is not really connected with the MIS Tanzanian government mechanism; although there is some progress in order to articulate both initiatives.

95. Lagandré Damien, 2010.

96. MAFAP-SPAAA, 2012-2.

97. Lagandré Damien, 2010.

98. www.eagc.org and www.ratin.net

- MVIWATA is implementing an Agricultural Market Information System (MAMIS) based in the collection of price information from six rural markets and six town markets (Dar es Salaam, Morogoro and Dodoma) and their dissemination to different markets. In these markets, there are price information blackboards in which this information is displayed to stakeholders. MVIWATA is planning to extend this system and developing SMS application at affordable price⁹⁹.

The trucking sector in much of Africa is dominated by transport cartels that operate through a system of queuing for loads at fixed fares as opposed to competitive best-offer practices¹⁰⁰.

> Lack and Low Quality of Storage and Processing Infrastructures

Lack of infrastructures, or bad infrastructures, for storage and conservation of the products is a great concern in the region. While perishable goods are mainly affected by the few cold chains and transportation delays [see above], maize is mainly suffering bad conditions for storage (mould). Post-harvest losses are quite significant¹⁰¹. Due to the lack of infrastructures, farmers are frequently forced to sell just after harvesting when the prices are low. The main consequences are the following:

- Bad quality of the products, sometimes undermined competitiveness of the products vis-a-vis products imported from outside of the region, lower prices at consumption level. For example, broken rice is sold for half to a quarter of the going price for full kernel rice¹⁰². Currently, the marketplaces in Tanzania are in poor condition, which hinders the expansion of the market in terms of new customers and investors. The dirtiness of the market place seems to be the main constraint facing consumers using the markets in Dar es Salaam; goods are often lying on the ground and the smell of rotten food does not encourage new consumers to enter¹⁰³. The compliance with standards is rarely inspected for maize and beans imported from Uganda to Kenya, although there are frequent concerns about the moisture content of Ugandan maize, which might be too high according to EAC quality standards for maize.

99. Lagandré Damien, 2010.

100. Ancharaz and al., 2011.

101. MAFAP-SPAAA, 2012-1.

102. MAFAP-SPAAA, 2012-1.

103. Eskola Elina, 2005.

- Lower farmers' incomes, due to losses and lower prices at farm-gate level. The high level of goods getting rotten means that the traders are faced with substantial losses in their trade, which is reflected in high marketing margins for perishable products¹⁰⁴, which means lower prices to producers or higher prices for consumers (and thus less competitiveness).
- Health risk to the traders and the final consumers¹⁰⁵.

There are some emerging business models, such as Warehouse Receipting Systems (WRS), that are supported by NGO projects. They make possible the improvement of quality. Farmer organisational models are also emerging, in particular MVIWATA bulk marketing experiences in Tanzania¹⁰⁶.

Controlling and grading products in some wholesale markets also constitute a good incentive for improving the quality, as prices can better take into account the quality of the products. The East African Grain Council is willing to work on quality issue especially to promote regional trade through regional standards of grades¹⁰⁷.

> High Costs of Transportation, Energy and Telecommunication

Cost of energy is by far Africa's largest infrastructure challenge, at production level, for transportation [see above] as well for food processing. Shortages used to be frequent, which means underutilization of infrastructures or higher costs due to the use of generators¹⁰⁸. Intra-regional passenger transportation is also expensive (USD 500 per a Nairobi-Dar es Salaam fly). Telecommunication costs are also a limitation to intra-regional trade¹⁰⁹. A phone call to China can be cheaper than a call to another East African country¹¹⁰.

> Lack of Know How and Access to Capital

In Tanzania, lack of knowledge in basic business skills appears to be a serious constraint for many traders, thus preventing from increasing their businesses. Lack of business skills can act as a barrier

104. Eskola Elina, 2005.

105. Eskola Elina, 2005.

106. MAFAP-SPAAA, 2012-2; Lagandré Damien, 2010.

107. Lagandré Damien, 2010.

108. Ancharaz and al., 2011.

109. Ancharaz and al., 2011.

110. Direct interview of stakeholders.

er for expanding the business especially when it comes to managing and obtaining loans, which are used to increase the working capital.¹¹¹ The limitation is even higher for intra-regional trade. Many Tanzanian companies and traders are not registered as East African companies and cannot export. However, Kenyan companies and traders are better organized and many of them operate in the neighbouring countries in order to export from or import into Kenya.

Lack of capital and access to credit not only a constraint for the small-scale farmers and traders but also for the large market actors. Large-scale traders without access to official credit cannot compete with their international competitors who have more flexible access to credit. Circulation of working capital is currently seen as a problem at every stage of the supply chain.¹¹²

Due to an increased competition between wholesalers, traders give sometimes credit to their customers nowadays more often as a means to close the deal, which puts additional pressure on traders' working capital.¹¹³

In Tanzania, traders' inability to borrow against future earnings leads also to low risk and often low return strategies being selected. They have to deal with irregular supply and transport, which limits their possibilities to diversify their business and obtain loans.

111. Eskola Elina, 2005.

112. Eskola Elina, 2005.

113. Eskola Elina, 2005.

> Consequences

The main consequences of the limitations of values chains' level as a whole are:

- lower volume of intra-regional trade;
- lack of competitiveness (price au quality) with imported products;
- distribution of value added unfavourable for producers which therefore receive low prices for their produce. This is in turn a disincentive to investment by farmers to output growth, for increasing production levels, and thus to the marketing of the surplus.

Lack of Regulation of the Markets

There are some price regulation mechanisms in the region: Common External Tarriff and the possibility for the states not to apply it (or to apply a lower tariff than the CET) in case of shortage and price rising; export bans in the case of Tanzania and which impact is questionable [*see above*]; national strategic reserves whose volumes nevertheless seems to be too low to make it a real tool for price regulation.

However price seasonality and volatility are relatively high. We have mentioned that price seasonality very often affects farmers' income. For traders, price seasonality and volatility can be an opportunity to increase benefits. But price volatility means also risks for traders. ●

Part III. Analysis of Rice and Dairy Products Case Studies

RICE CASE STUDY

Production, Consumption, Trade

> Consumption

Rice is an important staple food crop, from a caloric perspective. Rice is more important in the diets of high income consumers in urban areas. In Tanzania, rice is the third most important source of calories after maize (33% of caloric intake) and cassava (15%). Rice is used almost entirely for human consumption. Rice is a preferred grain in the sense that as incomes rises, consumers shift from sorghum and maize toward rice and wheat products. Over the past nine years (from 2000/02 to 2009/11), consumption has increased by 25% which shows that per capita rice consumption has not risen.

> Production

Rice is mainly produced by smallholder farmers¹¹⁴. In the nine last years (from 2000/02 to 2009/11), production has increased by 41%¹¹⁵. In Tanzania, areas sown with paddy and paddy production have increased dramatically over the last years (with a doubling of production between 2009 and 2010), due in particular to the proactive-policy of subsidizing inputs under inputs voucher systems –new input subsidy policy that came in place following the implementation of the Kilimo Kwanza (agriculture first) strategy–, the increase in the use of irrigation and a favorable rainfall distribution. The

114. MAFAP-SPAAA, 2012-1.

115. UN-Comtrade data.

area planted with paddy increased from approximately 666.000 ha in 2006/07 to 1.136.000 ha in 2009/10¹¹⁶. Increased rice prices in domestic markets from late 2007 and early 2008 also contributed to improve the rentability, and thus interest, of rice for producers.

> Trade

The East African Community as a whole is a net importer of rice. It imports 18% of its consumption (2009-11 period¹¹⁷), mainly from USA (Tanzanian imports) and Asian countries (Thailand, Vietnam, China, India, Pakistan) In the 2000/02 period, 24% of the consumption was imported. In absolute terms, imports are more or less at the same level: from 1.045 MT in 2000-02 to 981 MT in 2009-01, with an increase in the middle of the first decade of the century (1.274 MT over the 2003-05 period).

Tanzania hardly meets its own rice demand and therefore imports large quantities, mostly from South-East Asia. But, at the same time, most neighbouring countries have rice deficiencies, which make the regional block a highly attractive market for Tanzanian rice. Thus, part of the Tanzanian production is exported into the other countries of the region, particularly into Kenya Uganda, Burundi and Rwanda. It should be noted that the demand from urban medium-high consumers is increasing for quality and branded aromatic rice, which is primarily produced in Tanzania¹¹⁸.

As rice production in Tanzania has been on the rise, domestic rice has a growing market share in the domestic Tanzanian market (85% in 2000, 89% over the period 2005-2007)¹¹⁹.

116. MAFAP-SPAAA, 2012-1.

117. Average of the three consecutive years. UN-Comtrade data.

118. MAFAP-SPAAA, 2012-1.

119. MAFAP-SPAAA, 2012-1.

The main intra-regional trade flows are the following (2006-11 average)¹²⁰:

- exports from Tanzania (western areas) into Rwanda (56.761 tons);
- exports from Tanzania into Uganda (northern and western areas) (44.876 tons);
- exports from Tanzania (northern areas) into Kenya (30.986 tons);
- exports from Uganda to Rwanda (41.943 tons).

Rice is the largest commodity traded between Tanzania and Kenya. It should be also mentioned the existence of exports into neighbouring countries out of the EAC: from western areas of Tanzania to the RDC and from southwest areas to Malawi and Zambia.

Price differences between countries tend to stimulate intra-regional trade. Due to its trade and agricultural policies, its structural deficit and to its higher level of development, Kenyan rice prices are higher than prices in Tanzania. Tanzanian farmers and traders get relatively better prices compared to the domestic market¹²¹.

Stakeholders, Value Chain

In Tanzania, before liberalization of the sector, rice was extensively produced and marketed by NAFCO (National Agricultural and Food Corporation) as well as National Milling Corporation on the part of processing the rice. Recently all these activities are privatized including the relevant infrastructures like the irrigation schemes, farms, mills and their storage facilities.

Rice is mainly produced by small-holder farmers. But, larger rice growers account for the bulk of sales. Indeed, just 13% of Tanzanian rice farmers sold any rice¹²².

The supply channels are generally long and the produce changes many hands before reaching the final consumer. Traditionally most of the small farmers sell part of their rice production to local agent of millers or traders. The high number of stakeholders is linked to the fact that there are lots of long term relations of trust and dependence between seller and buyer. However, some of the better organized and more dynamic smaller Tanzanian farmers (representing less than 20%), producing rice on less than 10 acres of irrigated land with their

higher yields and nearer to regional centers have established direct links with regional buyers. A few more structured supply chains are emerging and there is increasing interest from large (foreign) investors. Some bigger farmers on irrigated land link directly to national large millers and buyers. Part of the latter are linked or integrated to larger trading companies which are dealers in several crops (rice, maize, cotton, etc.) and also import rice. They will arbitrage between the price of local rice and the price of imported rice, thus looking at the opportunity cost of their investments¹²³.

Due to the high rice demand in Kenya, Kenyan traders are present in the other countries of the region. They are seen as "aggressive buyers", which provides an indication of the fact that Kenyan prices are led by Kenyan market. Actually, traders generally offer higher prices for rice exported to Kenya. Kenyan traders frequently are cooperating with local agents or traders.

Price Determination, Market Regulation

The EAC policy and specifically the external tariff-structure adopted by the Community allow to maintain the competitiveness of regional rice with imported rice and to provide an intra-regional price well above world price. Under the EAC tariff structure, the tariff rates are set at 0%, 10%, and 25%, except those commodities deemed "sensitive". The EAC declared rice to be a sensitive commodity and implemented a 75% tariff on rice imported from outside the Community. This tariff benefits Tanzanian rice farmers in two ways. First, it creates increased demand for local rice among Tanzanian consumers by reducing rice imports. Second, it expands the market for Tanzanian rice in Kenya, since the rice production capacity of Kenya is much smaller than that in Tanzania. Without the current tariff in rice imports, both domestic and export prices would fall substantially¹²⁴.

In January 2010, Thai A1 Super rice (a low-quality rice) could be imported at a CIF price of USD 0.45 per kg, as compared with domestic price selling in Dar at USD 0.75 per kg for low grade and USD 0.97 per kg for best quality rice. In a price-sensitive market, local rice would lose out to the imported product were it not for the 75 percent duty imposed on rice imported into Tanzania. This raises the price of Thai A1 Super to USD 0.76 per kg and allows the local products to compete¹²⁵.

120. UN-Comtrade data.

121. GTZ, 2010.

122. MAFAP-SPAAA, 2012-1.

123. MAFAP-SPAAA, 2012-1.

124. MAFAP-SPAAA, 2012-1.

125. MAFAP-SPAAA, 2012-1.

Similarly, in September 2012, most of the rice sold in Dar es Salaam, whether in the markets, in shops or in supermarkets, was from Tanzania and, in the few places where imported rice was available, it was competitive with imported rice from India or Pakistan. Tanzanian rice was sold at USD 1.16 to 1.61 per kg¹²⁶, while imported rice was sold at USD 2.06 to 2.51 per kg¹²⁷.

It should be noted that some rice is imported from outside the region with lower tariffs:

- on the one hand, a bilateral trade agreement between Kenya and Pakistan states a preferential tariff (25%) for a quota of rice imports from Pakistan (at the same time, it states a preferential tariff for Pakistan imports of Kenyan tea). This agreement, previous to the establishment of the EAC Common External Tariff, has been recognized by the countries of the region¹²⁸. Due to the structural deficit of Kenya, the impact on market prices of this preferential agreement is relatively limited. Imported rice results to be cheaper than regional rice and tends to be bought by the poorest consumers. Tanzanian rice, which is appreciated for its particular aromatic and taste qualities, is sold at a higher price;
- on the other hand, EAC regional agreement states that each country is allowed to apply a reduced tariff to rice and other staple food imports (generally from 0% to 25%) for a determined volume in case of emergency and threaten for its food security and after a regional agreement. Practically, tax exemptions are always accepted. Kenya and Tanzania sometimes resort to such a decision. These measures tend to limit price rising in shortage periods. In this case too, imported rice, which is cheaper, tends to be consumed by the poorest consumers. When such rice is available in Dar es Salaam, its price is around 1.00 USD per kg¹²⁹.

Various stakeholders told us the existence of smuggling of imported rice from outside of the region, in order not to pay the CET. Rice is unloaded from ships that are at rest near the coast, and transported to packaging units where it is packed as Tanzanian rice.

126. 1.800 – 2.500 TSH per kg. At the same time, according to the Kenyan Embassy, prices at consumer level were from USD 1.35 to 1.50 per kg in Kenya.

127. 3.200-3.900 TSH per Kg. Prices collected at the retail level.

128. This bilateral agreement, opposite to the WTO's Most Favoured Nation Rule, has been criticized by other countries, including India.

129. From 1.500 to 1.600 TSH per kg.

The seasonality of rice prices is lower than that of maize prices, which is presumably related to the fact that rice storage involves smaller losses than maize storage. In Tanzania, the highest-to-lowest monthly ratio price varies between 1.23 in Dar es Salaam and 1.33 in Mtwara¹³⁰. However, according to other source of information, rice price seasonality at farm gate level in Tanzania is actually much higher: from USD 0.45 per kg in the high season (July-August) to USD 0.96 per kg in the low season (February-April). In September 2012, the prices had just dropped from USD 0.84/0.90 per kg to USD 0.58 per kg¹³¹. This high price seasonality reveals the lack of storage infrastructures at farm and local levels. After a bumper harvest, prices quickly fall. Farmers associations generally are not able to market themselves and thus the farmers sell directly to traders.

Regularly, the Ministry of Agriculture, Food Security and Cooperatives estimates a ratio between grains supply and demand for each one of the twenty-one region of the country and for Tanzania as a whole. When the ratio for Tanzania is less than 120%, bans are decided. The Ministry only considers that there is a surplus beyond 120% due to the expected waste and losses. Between 100% and 120%, it is estimated that the country is self-sufficient. Below 100% the country is considered as in deficit.

Main Challenges and Limitations to Intra-Regional Trade

The various challenges and limitations described above apply to rice sector. In this part we present a more detailed analysis of these challenges and limitations for this sector.

> Export bans

Tanzania bans policy appears to be a major limitation to intra-regional trade, although part of the trade is still conducted in an illegal way during banning periods.

In 2011, as rice production had increased in Tanzania, many Kenyan traders came and bought directly to Tanzanian farmers at favourable prices (up to 1.300/kg, ie 0.84 USD/kg). When new bans were implemented, Kenyan traders contacted Tanzanian traders, who were declaring they were buying for the Tanzanian market, whereas in fact the

130. MAFAP-SPAAA, 2012-1.

131. 1 USD = 1.555 TSH (September 2012).

products were exported illegally. The existence of bans was a pretext for paying lower prices to the farmers. Consequently, bans affected production zones without allowing transfer to deficit areas.

> Recognition of Certificates and Standards

It should be noted that there are already regional standards for rice. Kenyan applies specific standards for imported rice from Pakistan.

> Limitations at Production Level

Many farmers use traditional technology, in particular broadcasting, with poor yields. Rice transplanting, mechanization of farming and using improved seeds, fertilizers and irrigation, which are more labour and capital intensive technologies and allow for better yields, are not always used.

Lack of access to credit, which frequently result from the lack of guarantees, and to infrastructures (for irrigation), as well as low use of animal draught in some regions, constitute the main limitations for increasing yields.

> Lack and Low Quality of Storage and Processing Infrastructures

As mentioned above, storage is one of the major challenges for small holder farmers.

Although this problem is less significant than for maize, moisture and mould sometimes lower the quality of rice and thus the price paid to the farmers. In addition, most rice in Tanzania is milled using cheaper, pounding machines and a significant part of the product results to be broken¹³².

As rice is often exported in bags without packaging, traders tends to pay the farmers at a lower price (the price of low quality rice) as they have no security about the quality. In some cases, farmers groups have bought machines for packaging, which allows them to sell their products at a better price.

> Lack of Regulation of and Information About the Markets

Management of food aid is not always the most appropriate. For example, in Tanzania, US food aid programs tends to distribute imported products to pupils instead of buying to local farmers.

¹³². MAFAP-SPAAA, 2012-1.

Conclusions

The East African Community as a whole is a net importer of rice. Demand is expected to increase in the coming years due to the population growth and an improved standard of living.

The coexistence of structural surplus areas and structural deficient areas (in particular urban areas and Kenya as a whole), as well as potential for increasing production levels, justify the development of intra-regional trade.

In fact, rice intra-regional flows are significant, and largely led by the Kenyan demand. The current Custom Union (which applies a high CET for rice) and Common market are valuable assets for increasing even more intra-regional trade.

However, it is possible to identify some limitations for developing rice intra-regional trade:

- Export bans implemented by Tanzania in order to prioritize the immediate supply of her population at a reasonable cost. The President of Tanzania recently committed not to resort such measures anymore. The issue is thus: what mechanisms of market regulation will these measures be replaced by? In case of price rising, will the government increase the volumes allowed to be imported at low price from the global market through exemption of TEC, with the risk to penalize the farmers? Improved storage capacity at different levels could contribute to face shortage situations while contributing to better price for producers [see below].
- Difficulties of transporting production from some surplus areas to deficit ones (lack of information on markets, transport infrastructure limitations). These difficulties are a limitation for trade, not only between neighbouring countries, but also inside Tanzania. In the short term, they reduce the ability to cope with deficits in other regions. In the medium term, they impact negatively the price paid to the farmers and thus disincentive them to produce for the market.
- The limitations at production level. Besides issues related to technological development and access to productive resources, a key issue is the one of the price paid to farmers. The current existence of a regional market protection certainly improves it even when distribution costs are high (including the costs caused by non tariff barriers) and when the balance of power is negative for farmers. However, farmers currently receive sometimes less than of 50% of the

consumer price.¹³³ Farmers' organization for marketing and negotiating prices, access to competitive markets (in particular through information on markets and wholesale markets), improvement of milling infrastructure and development of packaging units at local level are key issues. Similarly, development of storage capacities at local level could allow producers not to suffer price seasonality and volatility consequences as they currently do, and therefore incentive them to produce more for the market.

133. In September 2012, the price at consumer level was from TSH 1.800 to TSH 2.500 per kg in Dar es Salaam, and the farm gate prices from TSH 900 to TSH 1.400 per kg.

MILK AND DAIRY PRODUCTS CASE STUDY

Production, Consumption, Trade

> Consumption

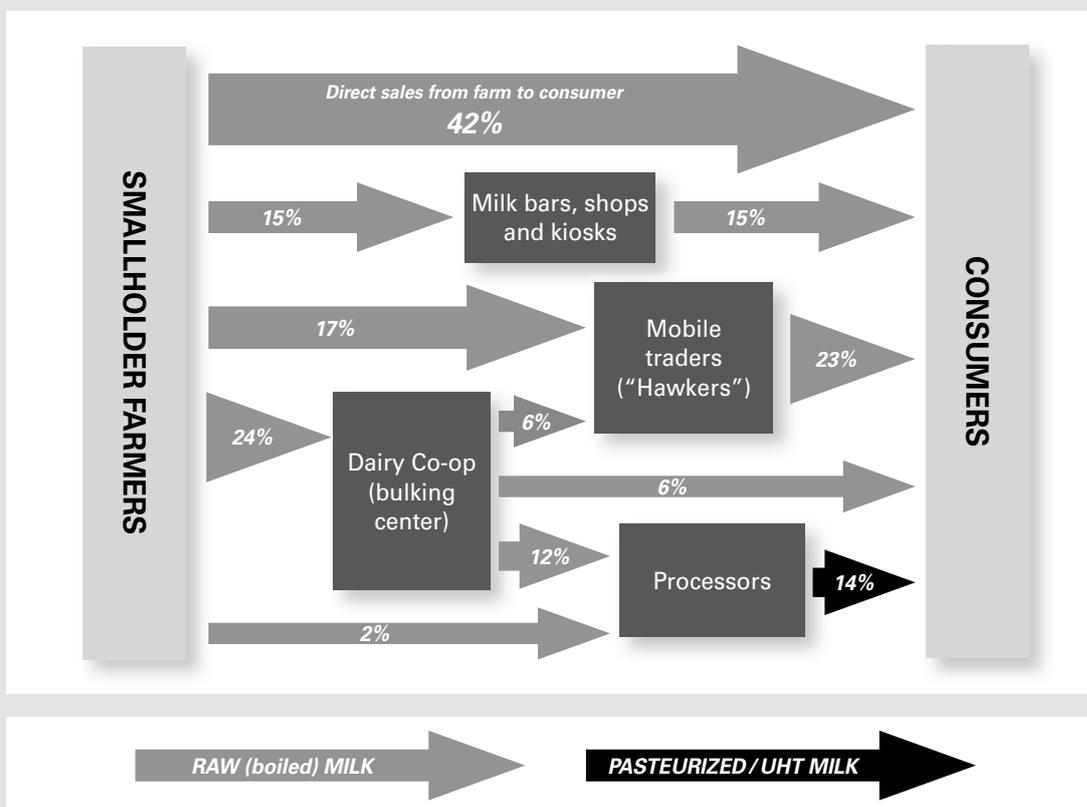
Milk and dairy products consumption has dramatically increased in the last years (+ 81 % from 2000-02 to 2009-11¹³⁴), in particular in Kenya, Uganda and

134. UN-Comtrade data.

FIGURE 11: **MARKETING CHANNELS FOR SMALLHOLDER MILK**

The chart below for marketed milk in Kenya shows that an estimated 86% of smallholder milk reaches the final consumer as a raw product traded through various kinds of small-scale networks. Raw milk is nearly always boiled at home and may also be heat treated or lightly processed by the final vendor to add value and kill disease-causing bacteria. Although conditions vary from country to country, this overall pattern is typical of dairy trade throughout the EAC region. In Uganda and Rwanda, small scale traders account for an estimated 95% of total milk marketing.

Source: H.G. Muriuki, et. al., 2007 (traded milk only, excluding milk fed to calves and/or consumed by the farm family).



Source: Jensen Michael and Keyser John

Rwanda where the governments have implemented strong policies aimed at developing the sector and at promoting consumption in the framework of a regional milk program.

Several types of dairy products are consumed in the region:

- **Raw milk.** Most of the milk consumed in the region is raw milk, that is traded in areas not too far from the production areas and that is generally boiled before consumption. Consumer demand is highly skewed towards low price raw milk that is generally boiled before consumption¹³⁵.
- **Fresh processed milk.** This milk is pasteurized and refrigerated in small or medium processing units. It is transported in refrigerated camions, which is relatively costly. Consequently, it is generally sold in urban centers of the country where it is produced, or in neighbouring areas of two countries. In Tanzania, the supply is not enough to meet the demand in the dry season and there are frequent shortages at retail level. In the high season, the supply is higher than the demand and processing units have to transform part of the milk into cheese.
- **UHT long-life milk.** Greater processing units are required for the production and the processing costs are higher. This milk can be regionally traded without refrigeration. UHT milk is mostly consumed by middle and upper class people. Part of the milk is produced in the region (Kenya, Uganda and in a less extent in Tanzania) and another part is imported from outside the region.

135. Jensen Michael and Keyser John.

- **Powder milk.** Even greater processing units are required. The countries of the region import powder milk from Europe (Holland, Ireland, Swiss) and Oman. Part of the powder milk is bought by specific entities (offices, etc.) that prefer this kind of product as it is easier to use and storage. Even so, there is a certain level of substitutability with regional processed milk. Upper and middle class people also use to consume milk powder, with probably a certain level of substitutability. We can also consider there is a potential substitutability for consumption of lower class people, although they currently consume very few powder milk which is more expensive than raw milk.
- **Curdled milk, consumed locally and made from raw milk.**
- **High value products** (cream, butter, cheese, yoghurt, ice-cream), mainly consumed by middle and upper class.

> Production

Dairy production and marketing are a significant part of the agriculture economy in East Africa. Like consumption, production has drastically increased over the last decade (+81% from 2000-02 to 2009-11¹³⁶). More than half of the production is directly consumed by the farming households (70% in Tanzania), supplying thus a nutritious food. Less than half of the production is available for sale. Dairy provides small farmers a regular cash income throughout the region, supplies nutritious

136. FAO Statistics.

TABLE 5: MILK PRODUCTION (TOTAL AND PER CAPITA) IN THE EAC REGION

	Production Full milk (eq) (million t) 2010	Population (million) 2010-12	Annual production per capita (kg p. year p. cap)
Burundi	0,03	8,6	3,0
Kenya	3,97	41,6	95,4
Rwanda	0,18	10,9	16,9
Tanzania	1,65	46,2	35,7
Uganda	1,19	34,5	34,5
EAC	7,02	141,8	49,5

Source: FAO

and affordable food to the local populations and present abilities for expansion into growing domestic and regional export markets¹³⁷.

Kenya, Tanzania and Uganda are by far the largest dairy producing nations in East Africa and account for 57%, 24% and 17% of EAC's total milk supply respectively. Kenya and Uganda have the capacity to manufacture a wide range of processed products including pasteurized milk and various kinds of higher-value products that are amenable to export including UHT long-life milk. Production per capita is much higher in Kenya than in the other countries of the region¹³⁸.

Tanzania is a large dairy nation measured by total output, but in this case more than 95% of cows are traditional Zebu animals that are highly dispersed and yield very little surplus for commercial processing and trade. Dairy firms in Tanzania therefore only handle about 60.000 to 80.000 liters per day including milk made from imported milk made from imported milk powder. Most of this production is absorbed locally and Tanzania is a minor dairy exporter¹³⁹.

Rwanda has a low level of output, but the dairy sector is undergoing great change due to an ongoing Government program aimed at providing each poor household an improved dairy animal. Dairy production has dramatically grown ("one family-one cow" program) and a new production line is now set to come into operation that will increase formal sector capacity¹⁴⁰. This policy has actually been implemented in the framework of a regional milk program which has been also implemented in Kenya and Uganda. In these three countries, production has significantly grown. This program will proximately been implemented in Tanzania too.

> Intra-Regional Trade

Dairying in all five countries is a domestically focused activity. Less than 1% of the EAC region's milk output is exported.¹⁴¹ Regarding intra-regional trade, it should be noted that raw milk is not a tradable product due to tropical temperatures and the lack of cooling infrastructure. Its nature is highly perishable and thus it easily carries disease-causing bacteria. Rwanda and Uganda prohibit the importation of raw-milk. Kenya maintains a similar

policy, but was recently found allowing a Kenyan-owned processor to take unprocessed milk collected around Arusha to Kenya for processing and packaging near Nairobi.¹⁴²

Intra-regional trade primarily takes place in milk powder, UHT milk and luxury products such as cheese and yoghurt. For the period from 1997 to 2008, dry milk powder and long-life liquid milk (including various types of flavoured milk) and cream have been the main exported dairy products. These products (excepted cream) do not require refrigeration and are best suited to international trade since they are relatively easy to transport by road. Fresh yoghurts and fermented milk (i.e. curdled milk or mala as it is known in Kenya) have been another important category but must travel by refrigerated truck or air so are more expensive and risky to ship. Likewise, cheese, butter, dairy fats, and dairy ices must be refrigerated and are inherently vulnerable to any kind of delay during transit¹⁴³.

All the countries are normally in deficit situation (with similar seasonal variations) and the trade in luxury goods is restricted by the limited size of the middle income class, expatriate societies and the tourism industry. Dairy trade, however, grew strongly during the decade prior to 2008, as Kenya, which was a net importer of milk and dairy products, became a net exporter. However, milk and dairy products trade with other regions remain marginal in relation with regional production and consumption (0.1%).

Kenya is by far the strongest dairy producer and exported (86% of the total of exports, followed by Uganda, 9%, Tanzania (4%), Rwanda (1%) and Burundi (0.3%)¹⁴⁴. Until recently, the EAC has been a firm net dairy importer. Thanks to the growth of production (in particular in Kenya and Uganda), the EAC has become a net exporter. More than half of the Kenyan exports are imported into other EAC countries (mainly Uganda and Tanzania). Uganda, the second exporter in the region, exports mainly into Kenya.¹⁴⁵

Regarding intra-regional trade, the main flows are the following (average 2006-11)¹⁴⁶:

- exports from Kenya to Tanzania: 28.978 tons;
- exports from Uganda to Kenya: 20.869 tons;
- exports from Kenya to Uganda: 11.436 tons.

137. Jensen Michael and Keyser John.

138. Jensen Michael and Keyser John.

139. Jensen Michael and Keyser John.

140. Jensen Michael and Keyser John.

141. Jensen Michael and Keyser John.

142. Jensen Michael and Keyser John.

143. Jensen Michael and Keyser John.

144. Jensen Michael and Keyser John.

145. Jensen Michael and Keyser John.

146. UN Comtrade data.

The region imports powder milk from Europe, New Zealand and Oman, as well as UHT Milk from South Africa and Zimbabwe.

Milk exports to outside the region are negligible. However, Brookside Company has invested in a huge powder milk processing unit, in order to sell in the domestic market and to export, including to outside of the region in deficit countries such as Egypt. Brookside intends to buy milk not only in Kenya, but also in Tanzania in order to supply this factory.

Stakeholders, Value Chain

Most of the milk is produced by small-scale farmers, with a few number of large-scale milk farms.

Like other countries in the region, both Kenya and Uganda have large and vibrant small-scale trading sectors in which various kind of milk vendors, milk shop owners, and mini-processors link small farmers with city and town buyers. These markets generally have lower quality requirements than formal processors require and account for 80-95% of total milk marketing in Kenya and as much as 95% of milk marketing in Uganda. Domestic trade is mainly informal and maybe only 10-20% of milk going through formal market chains¹⁴⁷ (2% in Tanzania).

Small, medium and large units are processing part of the milk, generally buying directly to groups of farmers, and establishing contracts with them. Processing companies may have their own collecting centers (they also can be property of producers organizations), with cooling tanks, from where they transport the milk to the processing unit. The main company is a Kenyan company, Brookside, that operates in all the region and that has also invested in a milk factory in Kenya to export powder milk out of the region.

Most of the milk is distributed by traders to consumers, small shops and to a lesser extent in small supermarkets. Supermarket and hypermarket sales have increased significantly in Kenyan urban centers where many people have left the small shops and kiosks for supermarkets. Supermarket and hypermarket chains are generally owned by Kenyan and foreigners investors. In the other countries, there are few supermarkets and hypermarkets and the customers are mostly from the middle and upper class. However, such as in Kenya, supermarket and hypermarket chains have a clear long-term strategy of opening new outlets and increasing the number of customers, focusing on low and middle classes.

147. Jensen Michael and Keyser John.

Multinational companies and large merchants are importing from outside the region UHT milk and dairy luxury products.

Price Determination, Market Regulation

The EAC policy and specifically the external tariff-structure adopted by the Community allow to maintain the competitiveness of regional milk with imported milk and to provide an intra-regional price well above world price. Under the EAC tariff structure, the tariff rates are set at 0%, 10%, and 25%, except those commodities deemed "sensitive". The EAC declared milk and dairy products to be sensitive commodities and implemented a 60% tariff (or 75% according to TAMPAs) on milk powder imported from outside the Community, as well as a 60% tariff on yoghurt and a 25% (30-35% according to TAMPAs) tariff on other milk products.

Milk from South Africa is now also imported into Tanzania without tariff.

There is no other public regulation that directly influences the market price. However there are other kind of regulations mainly motivated by the need to insure a good sanitary quality of the product: dairy industry regulations, raw milk transport public regulation, treatment and disposal material regulations, milk quality regulations.

In a regional context of production deficit and efficient market protection, it seems that the traders and processors tend to decide the selling price based on the price they have bought the milk, on their own costs and on their margin objective. The price at which the traders or processors buy the milk is generally negotiated with the producers, being the latter in a relative favourable balance of power in the dry season, it is to say when milk production is low and the supply is not enough to meet the demand. Conversely, traders or processors are in a better position in the high season, that is when the production levels are high and the farmers do not sell their milk easily. Generally, processors try to establish contracts with the farmers in order to be sure to guarantee their supply all over the year, all the more that traders who sell directly to consumers or retail points generally offer a better price to the farmers.

Milk market is segmented and the prices at consumer level depend on the type of milk:

- **Raw milk**, which is traded par traders who buy it to the farmers and sell it directly to consumers or to shops, is the cheaper one: from USD 0.6

to 0.8 per liter¹⁴⁸. Generally, the milk is not refrigerated and it is sold some hours after milking and boiled by the consumers. Traders are commonly accused of adding water. Anyway, there are no processing costs and the transportation cost is relatively low, depending on the distance between production and consumption places.

- **Fresh processed milk.** This milk is pasteurized and refrigerated in small or medium processing units. It is often transported to the processing units in refrigerated camions. Refrigerated vehicles are also required for the transportation from the processing units to the retail points. Transportation and processing are relatively costly. Consequently, the milk is generally sold in the same country, or in neighbouring areas of two countries. Due to the processing costs, the price at consumer level is higher than raw milk ones: approximately USD 1.3 per liter in local shops, and from USD 1.2 to 1.9 per liter in supermarkets¹⁴⁹. It should be noted that supermarkets may calculate as well low as high margins, depending on the specific marketing strategy (depending on whether it is a *produit d'appel* or the company wants to take advantage of the relative scarcity of the product), which explain high differences between prices.
- **UHT milk.** Greater processing units are required for the production and the processing costs are

higher. This milk can be regionally traded without refrigeration. Kenya and Uganda are producing UHT milk, unlike Tanzania. In Tanzania market, UHT milk from the region is sold at a higher price than Tanzanian domestic fresh processed milk (USD 1.8/1.9 per liter instead of USD 1.3 per liter). In the supermarkets, there are a high variety of prices both for regional imported UHT milk and for domestic fresh processed milk (respectively from USD 1.3 to 2.1 per liter and from USD 1.2 to 1.9 per liter). There are with significant differences from one brand to the other. South Africa UHT is also available in supermarkets. Sold from USD 1.6 to 2.1 per liter, it is sometimes competitive with some intra-regional UHT milk brands.

- **Powder milk.** Even greater processing units are required. The countries of the region import powder milk boxes from Europe (Holland, Ireland, Swiss) and Oman. Thanks to EAC external tariff, powder milk is generally sold at a similar or higher price (from USD 1.8 to 2.6 per liter of reconstituted milk). However, imported Swiss milk packed in Tanzania (Cowbell) and imported milk boxes from Oman (Al Mubish) are sold at a more competitive price (from USD 1.6 to 1.8 per liter of reconstituted milk). Due to its low price, many stakeholders consider that some powder milk (from Europe and Oman) is smuggled, that is to say imported without paying the EAC tariff.

Farm gate prices depends on the kind of value chain and on the season, as presented in Table 6 below.

148. From TSH 1.000 to 1.200 per liter. Numbers in USD rounded.

149. Prices per liter at consumer level in Dar en Salaam, September 2012. Sold in 500 ml sachets. Exchange rate: 1 USD = 1.555 TSH.

TABLE 6:

	High season	Dry season
Price paid by traders (in order to sell directly to consumers and retail points)	USD 0.35-0.4 per liter	USD 0.4-0.45 per liter
Price paid by processing units	USD 0.25-0.35 per liter	USD 0.3-0.4 per liter

Compared with other countries, the ratio between the price of processed milk at consumer level and the price of milk at farm gate level is much higher (in average from 4 to 6 times more expensive at consumer level, instead of from 2 to 3 times in Europe), which reveals the high costs of transportation, intermediation and processing. Due to the existence of a

high protection, consumers have to pay a high price for processed milk. But this protection has allowed a development of processing activities in the region and a remuneration of farmers at a level similar or even higher than in other regions of the world. It should be noted that farm gate prices are (but slightly higher) in Kenya (from USD 0.4 to 0.5 per liter).

Main Challenges and Limitations to Intra-Regional Trade

Various challenges and limitations described above (2.4.) apply to milk and dairy products sector. However, most of the limitations to the development of the sector in the region (production, processing, transport, trade, consumption) are not strictly speaking "trade limitations". Indeed, most of the limitations are at production and processing level.

Moreover, in the future, solving these limitations could increase more domestic trade than intra-regional trade. Milk production has dramatically increased over the past years in Kenya, Rwanda and Uganda, mainly for domestic market, but also for regional market. Kenya has become a net exporter. Future increase of production in these countries would increase intra-regional exports, in particular into Tanzania, but also, in the case of Kenya, exports to the global market. But, Tanzania has also a great potential for increasing its production and it's more pertinent for her to take advantage of this potential and to develop her own production in order to increase domestic trade and to supply her population while decreasing imports.

We present below a more detailed list of some challenges and limitations in the milk and dairy sector.

> Export Bans and Non-Tariff Barriers

Before 2009, the Brookside company was exporting raw milk from Tanzania to Kenya in order to be processed and freely re-exported to Tanzania (in this time Tanzania still charged custom tariffs to imports from Kenya). Tanzanian authorities decides to ban such exports, in order to promoting the processing in Tanzania. They also argued that actually imported volumes of processed milk were higher than raw milk exports. These flows were stopped.

Currently there are some complementarity between processing units in Tanzania and Kenya: Tanzanian units buy Kenyan milk in the dry season and sell milk when there are not able to process all the milk in the high season. However, these flows are very difficult for the delays required to allow exports and imports (from three weeks to two months), while this kind of decision should be taken very quickly when milk supply is suddenly raising or decreasing. Many documentation is needed to export from Kenya to Tanzania: four documents by Kenyan authorities (Kenyan Dairy Board, veterinary services, Ministry of Health, Kenyan Revenue Authority) and four other documents by Tanzanian authorities

(TFDI, veterinary services, certificate about atomic residues, Tanzanian Dairy Board). Permit to import milk into Kenya seems to be sometimes difficult to get from the Kenyan authorities.

> Standards

EAC dairy standards have recently been upgrade very ambitiously and harmonized with international standards. This has taken place without a clearly defined demand from the private sector and without reference to a public health rationale. This process has been donor and public-agency-driven. Although upgraded standards are necessary to improve food safety, these standards may be a source of trade conflicts in the future¹⁵⁰.

> Limitations at Production Level

Whereas the livestock is large, Tanzania is a small milk producer in relation with the other EAC countries, in terms of quantity and quality. The milk yield is low (from one to two liters per cow per day). 70% of milk production is produced by local breed (Zebu) and 30% by improved breeds.

At production level, in addition to livestock genetic features, feeding is the main constraint, in particular in the dry season. Milk seasonality of production is high, due to the deficit of nutritious feed and water. Livestock sometimes pasture freely in the land and fodder systems generally do not allow for enough food in the dry season.

Livestock is also frequently affected by diseases.

Due to these limitations, dairy production per cow is low and calving intervals very long.

In some areas, the lack of access to market (absence of passable roads) is another limitation generating wastages in the high season. This doesn't incentive the farmers to increase the production.

> Limitations at Processing Level

In Tanzania, most of processors are small (from 300 to 1.000 liters per day), with 5 medium and big processors (from 30 to 40.000 liters per day).

Due to seasonal fluctuations of production (up to 40%) infrastructures are generally underutilized in the dry season, which tend to raise processing unit costs. In average, 27% of Tanzanian processing capacities are underutilized. The situation is aggravated by the fact that farmers prefer to sell to hawk-

¹⁵⁰. Jensen M. and Keyser J.

ers and traders who offer better prices. In the dry season, the farmer see the hawker as a key stakeholder. In the high season, he tries to sell the surplus to the processors. That is why processors try to establish contracts with farmers, generally for all the production, whatever the season, in order to encourage the farmers to establish contracts. Depending on the processing company, the price paid to the farmers may be or not the same all over the year. However, it seems that, in the dry season, contracts are sometimes not fulfilled by the farmers. Owning processing units by cooperatives (which is the case for example of Tanga Fresh Limited, the second processing society in Tanzania) allows for a better commitment of the farmers.

In the high season, processing units have frequently no capacity to process all the milk and surpluses are sometimes thrown away. When the processing unit has the capacity to process all the milk it is sometimes not able to sell all the production. That's why Tanga Fresh transform part of the production in , the processing unit buy all the milk and uses the surplus to produce cheese, which is refrigerated and sold all over the year. In this case, cheese production is not adding value to the product, as the valorization of each liter of milk is lower.

Apart from the limitations at production level, there is a lack of collecting centers in some areas. Then, even when there is an excess of milk, it may be difficult to collect it.

Processing units have also to pay a great deal of taxes, as well as sanitary analysis and controls. Due to frequent shortages, processing units have to use generators or special tanks that allow the preservation of milk for hours during an electricity shortage of several hours.

UHT milk production requires larger processing units and costly infrastructures. Obtaining loans is not easy for many companies, in particular for cooperatives. However such investments require securing supply of high volumes. In the current situation, the value chain is not organized enough to give such a security.

Conclusion

The region has a high potential to increase milk production and consumption while reducing milk and dairy products imports from outside the re-

gion, although these imports are actually very low. The development of milk and dairy value chains will not necessarily generates an increase of trade between countries, as each country of the region have the potential to increase the production for its own population. In relation to Kenya, Uganda and Rwanda, Tanzanian potential for increasing production is not nurtured. Continuing the efforts in the first countries and engaging comprehensive milk programs in Tanzania, as such as in Burundi, are priorities. In the case Tanzania would not be able to develop its own processing activities, part of the raw milk could be exported into Kenya in order to be transformed in the new Brookside processing unit.

Regarding non tariff barriers, there are some limitations which are common with other sectors. They mainly affect transportation of raw milk which is necessary to allow a better complementarity in some seasons between processing units of neighbouring countries, such as Kenya and Tanzania.

In order to increase milk consumption and rural incomes and to substitute regional milk imports, comprehensive value chains approach is needed, including production, services (in particular veterinary and genetic improvement services, industry for providing livestock complementary feeding) collecting centers processing units, transportation and promotion of milk consumption (including through distribution of milk in the schools, which also makes possible improving nutrition for children), such as Kenya, Uganda and Rwanda have done. These examples show that it is possible to develop the sector based on small-scale farmers and involving all the stakeholders.

Apart from production, developing processing units is a key solution to increase the capacity to supply urban centers, to improve sanitary quality of milk and, provided they have the capacity to produce UHT milk, to compensate production seasonality. It is also important to improve the quality of the milk that is directly traded by hawkers and traders, through a better implementation of the legislation and through training farmers and traders. Should the authorities short-term effectively prohibit the sales of unboiled milk? Is it realistic in the current situation of the countries? This issue must be carefully thought through an inclusive debate process. ●

Conclusion and Recommendations

Almost four out of ten (37%) EAC inhabitants are suffering from food insecurity. Over the last decade, food insecurity has been worsening (+9 million people undernourished between 2004-06 and 2010-12). Improving food and nutrition situation of the population is a priority for the region. In the next years, population growth will result in increased food needs

Incomes rising will probably be accompanied by a qualitative change of diet, with increased consumption of rice, animal products and fruits and vegetables. The nature of this evolution, its nutritional benefits and its impact on food self-sufficiency will also depend on the nature of the national agricultural, food and trade policies in the region, as well as the regional policies.

The region currently produces most of the food products consumed by the population, with a certain level of dependence on certain products vis-à-vis the global market, especially for rice which imports account for 18% of the consumption. The region also contributes to food security in neighboring countries. The potential for developing production is high, especially through increased yields of animal and crop productions. Some agricultural policies implemented over the last decade have also led to a substantial increases in production (milk in Kenya, Uganda and Rwanda; rice in Tanzania, etc.). Greater emphasis on this potential would improve the food security of the population, making thus possible to meet increased needs and contribute to the economic and social development, while reducing food dependency on certain products.

In order to meet the food needs of the population, a better use of production potential of the region is required. It also implies the development of trade flows between areas of surplus and deficit areas, and thus of the intra-regional trade.

The results of the literature review and field studies show that the main limitations to the development of intra-regional trade are at the production level. However, deficiencies of value chains organization and functioning and some limitations to intra-regional trade negatively affect market access for farmers as well as the price they receive for their products. This reduces their short term possibility and interest to produce for the market and negatively affects their income and thus their ability to invest in increasing production. These value chains and trade limitations thus indirectly limit the production itself.

Some of the constraints to intra-regional trade are not specific limitations to cross border trade: they also affect trade within each country. These include the low development of transport infrastructure, storage and processing facilities, balances of power within value chains that adversely affect farmers and reduce farm-gate prices.

Other limitations are more specific to trade between countries. Tariff barriers within the EAC have been removed. However, various non-tariff barriers remain: bans exports, particularly by Tanzanian Government; costs and delays for trading goods from one country to another. These limitations also reflected negatively on the prices paid to farmers. More generally, they generate a distribution of the added-value that is negative for the productive sectors (agriculture, processing of agricultural products) and consumers.

Thanks to high Common External Tariff levels for basic foodstuffs, the East African market is relatively (although not completely) protected. Thus, despite value-chains and intra-regional trade limitations above mentioned, farm-gate prices are relatively profitable. This protection, as well as some proactive agricultural policies, has made possible a significant increase in agricultural production over

the recent years. From the point of view of farmers, external protection partially offset intra regional limitations (value chains, intra-regional trade).

Enhancing the potential of agricultural production in the region and the marketing of this production to deficit areas may result in the development of trade between countries in the region (case of rice, for example). But it could also strengthen the ability of each country to meet its own food needs without having to resort to imports from the other EAC countries (case of the milk, for example).

The main recommendations are the following:

● **Maintaining effective tariff protection** (and sometimes strengthening its effectiveness through reinforced controls) **for the main agricultural and food products.** The countries of the region should be able to resist the pressures for liberalizing external trade. Developed countries (included the European Union in the framework of the EPA negotiations) should fully recognize their right to food sovereignty.

Agricultural policies aimed at developing agricultural production (including enhancing agricultural investment, irrigation works, agricultural credit, input supply, research and technical support) and value-chains, as well as a better added value distribution for the benefit of farmers and consumers. One of the main objectives should be to protect farmers against seasonal price fluctuations. Policies should therefore focus on developing value-chains as a whole and to strengthen the organization, the role and the negotiation power of small-holder farmers. It includes:

- improving physical access to markets, Improved road and railway infrastructures are necessary to better connect regional markets;
- on-farm and local warehousing facilities;
- processing and packaging agricultural products;
- market information systems;
- improving cooperation between stakeholders of a particular sector and the coordination of their activities along different levels of a value chain, including through contracts that provide more security and facilitate access to credit;
- supporting capacity building of producer organizations;
- banking policies should facilitate the provision of financing with favorable conditions for the development of agricultural production as well as processing and marketing, focusing (instead of excluding as is sometimes the case today!) cooperative structures involving farmers themselves.

● It is important that the States of the region and the regional authorities continue their **efforts to reduce non-tariff barriers to intra-regional trade, to reduce costs and delays.** Efficiency of border administrative procedures and fight against bribery are key issues, as well as mutual recognition of quality marks, improving licensing system (annual licences, electronic or internet-based system) and reviewing harmonized EAC standards (dairy sector), adjusting to the realities in East Africa, taking account the experience of other Southern countries¹⁵¹.

● **The elimination of export bans is necessary to ease intra-regional trade and promote the development of production.** However, the reasons that justify the current policy of restricting exports must be fully taken into account. In fact, in the absence of emergency and buffer stocks, as well as of capacities to transfer surpluses from surplus areas to deficit areas (roads, market information, value-chain organization), the food security of the population is potentially threatened in some areas. The easier solution for substituting export bans could be increasing cheap imports from outside the region through CET exemptions whenever there is a food crises or price rising somewhere in the region. However, such measures would discourage the development of regional production and its long-term capacity to deal with such deficits. With the support of international cooperation, the region should implement food security policies that include, in addition to a substantial improvement in local small-scale farmers storage capacities, local, national or regional buffer and emergency stocks; market monitoring and information systems (that should involve the stakeholders who are currently taking initiatives in this area) and appropriate measures to enable the effective supply deficit areas with stock areas surplus.

International cooperation should support such policies, as well as autonomous initiatives of producer organizations or initiatives that involve various chain stakeholders¹⁵². ●

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152. *Agricultural policies should not solely aim at an immediate increase of agricultural production at any price. They should take into account the overall economic, social and ecological impacts, short and long-term. In order to reduce food insecurity, to allow improvement of the living conditions of many to meet the challenges of employment and to preserve the ecological potential of the region, giving the priority to small-holder farmers and protecting them against land-grabbing process are key issues. Private investments should be oriented to activities that are complementary to agricultural production itself (food processing, etc.) while being sufficiently framed to contribute effectively to the general interest.*

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BENEFITS OF GRAIN EXPORT BANS DEBATED IN TANZANIA

Tanzania is one of many African countries where the availability of key grains like maize, all of them mostly rain-fed, can be very unpredictable from season to season, depending on the climate.

When there is a shortage of these grains for one reason or another, the food security (and therefore political) implications are so pressing that governments feel forced to intervene. Governments that make a lot of noise about the necessity of other countries opening up their markets more, suddenly have no qualms about instituting measures like price controls and export bans.

A meeting held in Tanzania to discuss the pros and cons of these periodic grain export bans had a number of speakers saying they not only don't achieve the intended result (securing local supply in a time of shortage and keeping prices 'reasonable'), they cause a number of other problems as well, including inviting retaliation from trade partners. In any case, another speaker said, where rice dynamics favour farmers or traders exporting rather than selling on the local market, they will find a way to get the commodity to the more lucrative market, export ban or not

Prediction: Particularly for maize, for the foreseeable future no amount of research, data or arguing will stop African governments interfering with maize marketing at one level or another, including banning exports (or trying to) when there shortages. Almost all African governments panic when there is a maize shortage.

<http://www.africanagricultureblog.com/2012/09/benefits-of-grain-export-bans-debated.html>

Annex I. The East African Community Customs Union¹⁵³

According to the Protocol for the Establishment of the EAC Customs Union, its objectives are: a) To further liberalize intra-regional trade in goods on the basis of mutually beneficial trade arrangements among Partner States; b) To promote efficiency in production within the Community; c) To enhance domestic, cross-border and foreign investment in the Community, and; d) To promote economic development and diversification in industrialization in the Community.

Co-operation will apply to any activity undertaken by the Partner States in the field of customs management, and includes the following: a) Customs administration; b) Matters concerning trade liberalization; c) Trade related aspects including the simplification and harmonization of trade documentation, customs regulations and procedures; d) Trade remedies; e) National and joint institutional arrangements; f) Training facilities and programmes on customs and trade; g) Production and exchange of customs and trade statistics and information; h) The promotion of exports

The Protocol consists of nine parts as follows: Interpretation; Establishment of the East African Community Customs Union; Customs Administration; Trade Liberalization; Trade Related Aspects; Export Promotion Schemes; Special Economic Zones; Exemption Regimes; General Provisions.

The Protocol provisions on customs administration cover the following areas: Communication of customs and trade information (including a harmonized system to facilitate the sharing of information); Trade facilitation (including the adoption of common standards of trade documentation and procedures within the community); Simplification, standardization and harmonization of trade infor-

mation; harmonized Commodity Description and Coding System; Prevention, Investigation and Suppression of Customs Offenses (through according each other mutual assistance, exchange of information, and consultations on establishment of common border posts).

Trade liberalization refers to the removal of obstacles to free trade (elimination of all tariff and non-tariff internal barriers and CET see above).

Trade Related Aspects refers to a) common rules of origin; b) respect of national treatment among the EAC countries; c) anti-dumping measures regulations; subsidies (that have to be notified to the other Partner States and offset by a countervailing duty levied on any product of any foreign country imported into the Customs Union); d) safeguard measures in case of situations where there is a sudden surge of a product imported into a Partner State, under conditions which cause or threaten to cause injury to domestic producers; e) cooperation in detection and investigation of dumping, subsidies and sudden surge of imports, and in imposition of agreed; f) competition (in order to prohibit any practice, including agreements, that adversely affects free trade; g) Restriction and prohibitions to trade (due to security laws and regulation, control of arms and ammunition, protection of human life, the environment and natural resources, public safety, public health and public morality, protection of animals and plants); re-exportation of goods (exemption of import and export duties); h) establishment of the East African Community Committee on Trade Remedies.

Through export promotion schemes, the Partner States agreed aim at accelerating their development, promoting and facilitating export-orientated investments, producing export competitive goods, and attracting foreign direct investment. Goods benefiting from export promotion schemes shall

¹⁵³. More information in <http://www.eac.int>

be primarily sold for export. In the event that such goods are sold in the community, the goods attract the full duties, levies and other charges provided for in the common external tariff. The sale of these goods within the Customs Union is subject to the authorization by a competent authority, and such sales will be limited to 20% of the annual production of the company.

Other export promotion schemes provided for in the Protocol include duty drawback scheme; duty and VAT remission schemes; manufacturing under bond schemes; export processing zones.

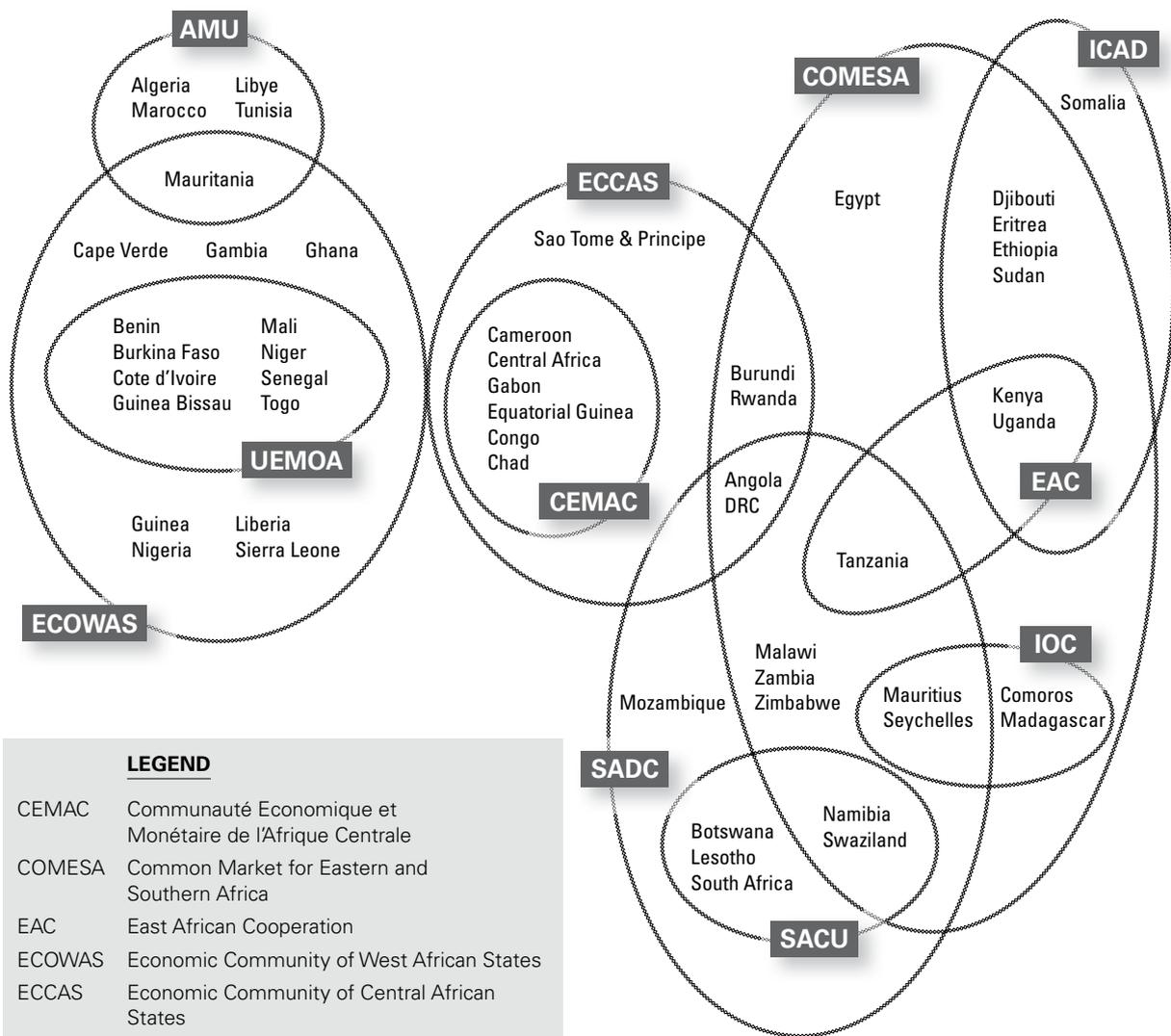
Regarding special economic zones, the protocol provides that Partner states may provide for the establishment of free ports for the purpose of facilitating and promoting international trade and accelerating

development within the Customs Union. Functions of the free ports are provided. The Protocol further provides for the establishment of other special economic arrangements for purposes of development of the economies of the Partner States.

Partner States have agreed to harmonize their exemption regimes in respect of goods that are excluded from the payment of import duties. A harmonized list of exemption regimes was adopted as specified in the Customs law of the Community.

Among the general provisions, necessary safeguard measures shall be taken in the event of serious injury occurring to the economy of a Partner State and partner States shall honor their commitments in respect of multilateral and international organizations to which they belong. ●

Annex II. Regional Integration Arrangements in Africa



LEGEND	
CEMAC	Communauté Economique et Monétaire de l'Afrique Centrale
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Cooperation
ECOWAS	Economic Community of West African States
ECCAS	Economic Community of Central African States
IOC	Indian Ocean Commission
SACU	Southern African Customs Union
SADC	Southern African Development Community
UEMOA	Union Economique et Monétaire Ouest-Africaine
AMU	Arab Maghreb Union
IGAD	Intergovernmental Authority on Development

Source: IMF Working Paper No. WP/05/143

Annex III. Names and Institutions Contacted in the Field

(a) MAJOR PLAYERS IN THE DAIRY SECTOR IN TANZANIA

Contact person	Company / Institution Name	Location	Tel. No.
Michael Karata	Tanga Fresh Ltd	Tanga	784227811
Dr. Mayasa A. Simba	Tanzania Dairy Board	Dar-es-Salaam	0713324337/787324337
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Benson Irungu Mwangi	Brookeside		0272500542
Devangwa Mmari	Tan Dairies	Dar-es-Salaam	715918771
Edmundi Mariki	Tanzania Milk Processors Association (TAMPA)	Dar-es-Salaam	0713806440

(b) MAJOR PLAYERS IN THE RICE SECTOR IN TANZANIA

Contact person	Company / Institution Name	Location	Tel. No.
Mr. L. N. Nyari	Mohamed Enterprise (T) Ltd	Dar-es-Salaam	0755762244 (Nyari) 0754600000 (Gulam- Managing Director)
Mr. Graham	Kilombero Plantation Limited	Dar-es-Salaam	0754580316
Onasimo Ntikha	Food Security Unit, MAFC	Dar-es-Salaam	0715526729
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(c) OTHER CROSS-CUTTING PLAYERS

Contact person	Company / Institution Name	Location	Tel. No.
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	Uchumi Supermarket	Dar-es-Salaam	

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