

# **Exploiting opportunities in intra-regional trade in food staples in COMESA region**

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# **Exploiting opportunities in intra-regional trade in food staples in COMESA region**

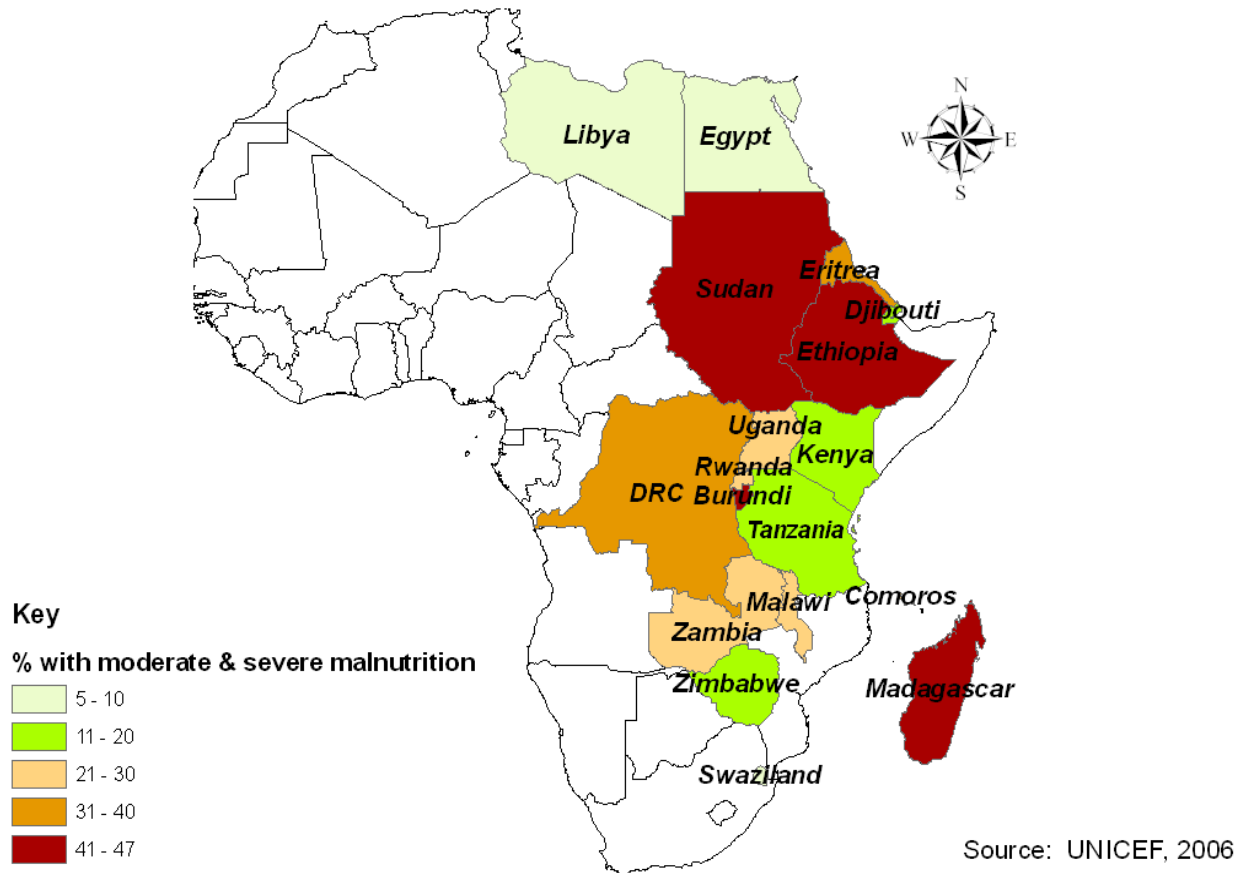
## **Abstract**

Shrinking productive land coupled with climate change has led to rising food insecurity in COMESA region. The situation has been exacerbated by the rise in food prices as witnessed in the vast majority of COMESA member countries and elsewhere in the world. Intra-regional trade in food staples offers prospects for enhancing food security through cross border trade and movement of food from surplus to deficit areas. The objective of the current study is to analyze the opportunities available in intra-regional trade in food staples in COMESA region. Using data for selected countries in COMESA region, the study finds that, while some countries, or even some regions within the same country, are food surplus, others are food deficit and literally lacking food to buy in some seasons. This creates a framework for a win-win situation—the food surplus countries/regions could get better prices for their products by selling to food deficit countries/regions while food deficit countries/regions could avoid food shortages and extreme food price volatility by allowing inflow of food staples from surplus countries/region. The regional diversity, differential rainfall patterns across the countries coupled with the phenomenon of staggered harvesting due to spatial climatic variability has and will continue to be major stimulus for cross-border trade from food surplus areas in one country to food deficit areas in neighboring countries. The study also finds that a more liberalized cross-border trade leads to reduced price volatility. Further, the analysis of the results shows that trade in staples has grown rapidly in the recent past in the COMESA region. Consequently the impacts of regional trade in food staples in the region cannot be debated. The region is also faced with numerous tariff/non-tariff barriers, poor infrastructure and lack of market information which translates to increased transaction costs. The study recommends a regional approach to enhance food security and agricultural growth, rather than a national isolated approach. There is need for a clear follow up and monitoring of the implemented COMESA commitment of eliminating NTBs and prevention of entry of new NTBs. Regional approach is highly advocated to elimination of the NTBs as they are similar across countries in addition to investment in improved infrastructure.

**Key words:** COMESA, Food staples, Trade

## 1. Background

Despite improved economic growth in recent years, poverty levels and food insecurity remain unacceptably high in COMESA region. Hunger is still a major problem among COMESA member countries (Figure 1). This scenario has degenerated, especially in periods of food price crisis, 2007-2011. Further, fighting food insecurity is a cross-cutting issue related to poverty alleviation, education and health policies, as well as economic development.



**Figure 1: Proportion of children under 5 years with moderate and severe malnutrition 1996-2005**

Agricultural growth has a critical role in food security and poverty reduction in the COMESA region (COMESA, 2009). But increasing agricultural production and productivity may not be realized in the short run. Thus, regional trade in food staples could be the easiest and the fastest mechanism for enhancing food security and curbing extreme food price volatility (Haggblade *et al*, 2008a). Further, regional trade is an important channel for the diffusion of technology which stimulates long-term growth and development. There are dual pathways through which regional trade enhances food security—indirectly by promoting economic growth, which improves

income and, hence, the access to food and directly by augmenting domestic food supplies, thereby increasing the availability of food and pushing down food prices.

Given population growth (Table 1) and growing urbanization, COMESA's market demand for food staples will grow dramatically in the coming decades, and this underscores the need to exploit the potentials in regional trade. Facilitating expansion of regional markets will, therefore, be critical efforts aimed at stimulating agricultural production, broad-based income growth and poverty reduction, and for ensuring food security of vulnerable populations in deficit zones.

**Table 1: Population and GDP growth rates in COMESA member countries**

<b>Country</b>	<b>Total Population (thousands), 2010</b>	<b>Population Growth rate (%), 2005-2010</b>	<b>Real GDP Growth Rates. 2010</b>
Burundi	8 519	3.1	3.6
Comoros	691	2.4	1.9
Congo Dem. Rep.	67 827	3.0	6.3
Djibouti	879	1.8	3.9
Eritrea	5 224	3.4	1.4
Ethiopia	84 976	2.8	9.7
Kenya	40 863	2.8	3.6
Malawi	15 692	3.0	6.0
Mozambique	23 406	2.5	5.8
Namibia	2 212	2.0	3.0
Rwanda	10 277	2.9	5.1
Sudan	43 192	2.3	5.4
Swaziland	1 202	1.4	2.2
Tanzania	45 040	3.1	5.7
Uganda	33 796	3.6	7.4
Zambia	13 257	2.6	5.8
Zimbabwe	12 644	0.3	6.0

**Source: African Economic outlook, 2010**

The rest of the paper is organized as follows: part 2 discusses the study conceptual framework, part 3 discusses the trends of production and supply of food staples in the COMESA region; section 4 examines trends and volatility of food prices; section 5 covers trade patterns, challenges and prospects among COMESA member countries before conclusion and policy recommendations are made in section 6.

## **2. Conceptual framework**

The potential of intra-regional trade with food staples is one very promising approach to enhancing food security in COMESA region. Intra-regional trade takes place formally and/or informally. Formally involves all trade that is officially traded and is recorded at the customs border points while informal trade accounts for all trade that is not officially recorded at the custom border. The two forms of trade create free movement of food staples in the region. The

free movement of food commodities from a surplus to a deficit area can ensure that sufficient food is available. In this way, regional trade contributes to food availability.

The supply of food via regional trade takes place either by ensuring ongoing trade flows or during limited periods in time when food is needed. The stability of food supplies can contribute to preventing food crises. Further, the free movement of food within a region may reduce the volatility of food prices. Consumers through open borders benefit from relative price stability in terms of purchasing power while producers benefit from the available cross border markets. However, for the potentials of intraregional trade to be felt, there is need for the political will in coming up and implementing open border policies.

To achieve food security through regional trade, the demand and consumption of a specific food staple have to coincide between a food surplus country/area and a food deficit country/area to trigger cross-border trade. Furthermore, the produced and consumed food items have to correspond in the deficit and surplus areas. Otherwise production cannot meet the demand. There is also need for established trade relations between the trading partners in the different areas.

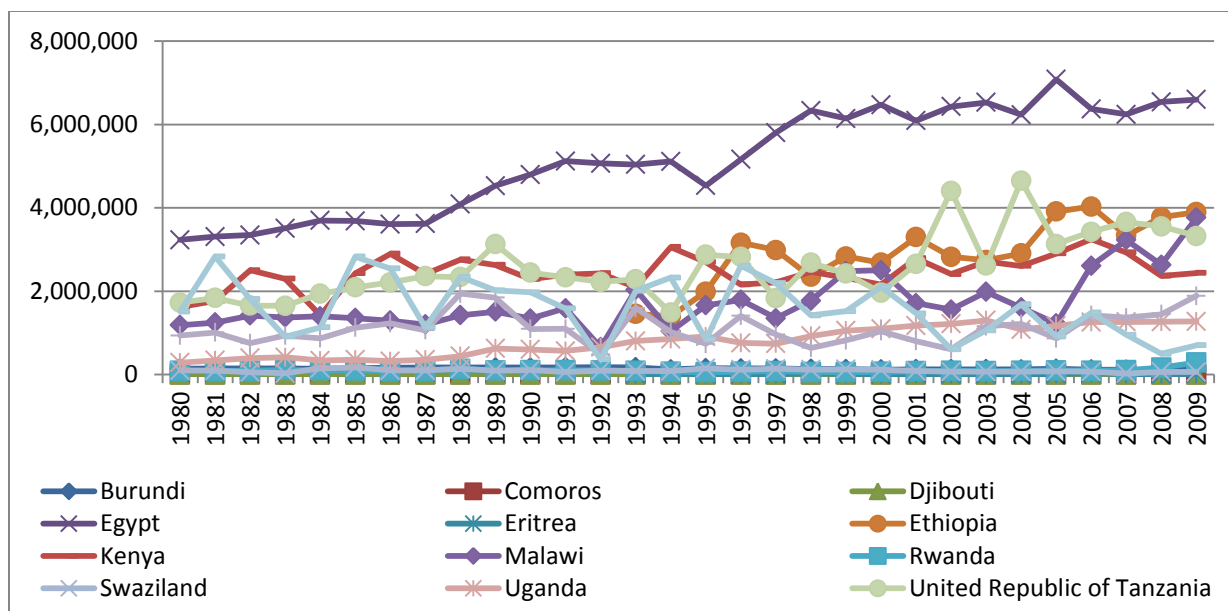
For intraregional trade to function in the long run there is need for reduced transportation costs, seasonality and competitiveness in the trading partners. Differences in seasonality may contribute to the availability of food in cases of shortages, by trading across-borders. With regard to production costs, food surplus countries have to compete with other exporting countries and thus have to produce at competitive costs. In conclusion, the main contribution of intra-regional trade to food security is to enhance the availability, accessibility, and stability of food to consumers.

### **3. Trends in production and supply of food staple in COMESA region**

This section examines the production and supply trends of food staples in the COMESA region.

#### **3.1 Production trends**

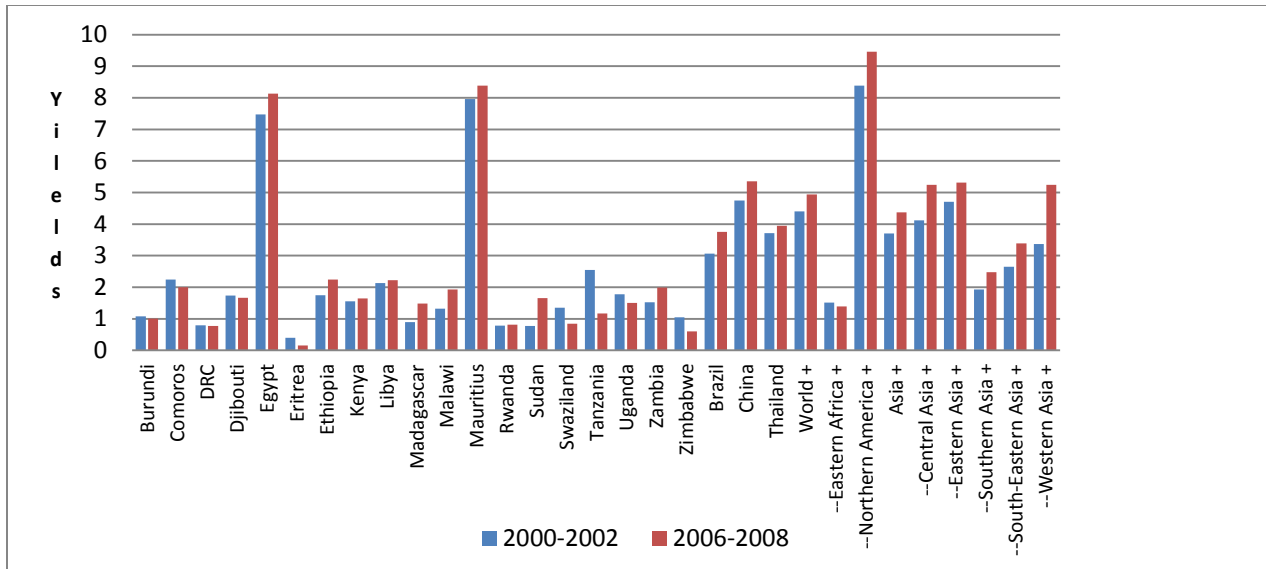
The main food staple in the COMESA region is maize. Production of the maize crop has, however, been quite erratic in most of the countries possibly due to over-reliance on the natural weather associated with erratic rainfall among other factors (Figure 2).



Source: FAOSTAT

**Figure 2: Maize production (Tones) in COMESA region**

Further, maize yields in a majority of countries in the COMESA region are very low and in most cases have been less than 2 tons/ha for many years, except for Egypt and Mauritius. This compares very poorly with other regions of the world such as Asia, Europe and North America (Figure 3). Despite maize being the key staple in the region, the yields are currently lower than they were at the beginning of the decade. Comparison of the maize yield figures for years 2000-2002 to those of 2006-2008, indicates that maize yields have declined in several countries (figure 3). The countries that registered a decline include Eritrea (59%), Tanzania (54%), Zimbabwe (42%), Swaziland (38%), Uganda (16%), Comoros (11%), Burundi (6%), Djibouti (4%) and DRC (2%). The countries that registered productivity increases were Sudan (115%), Madagascar (65%), Malawi (46%), Ethiopia (29%), Egypt (9%), Kenya (6%), Mauritius (5%), Libya (4%) and Rwanda (4%). The countries with low productivity can benefit from countries with high productivity which can be attained through open cross border trade.

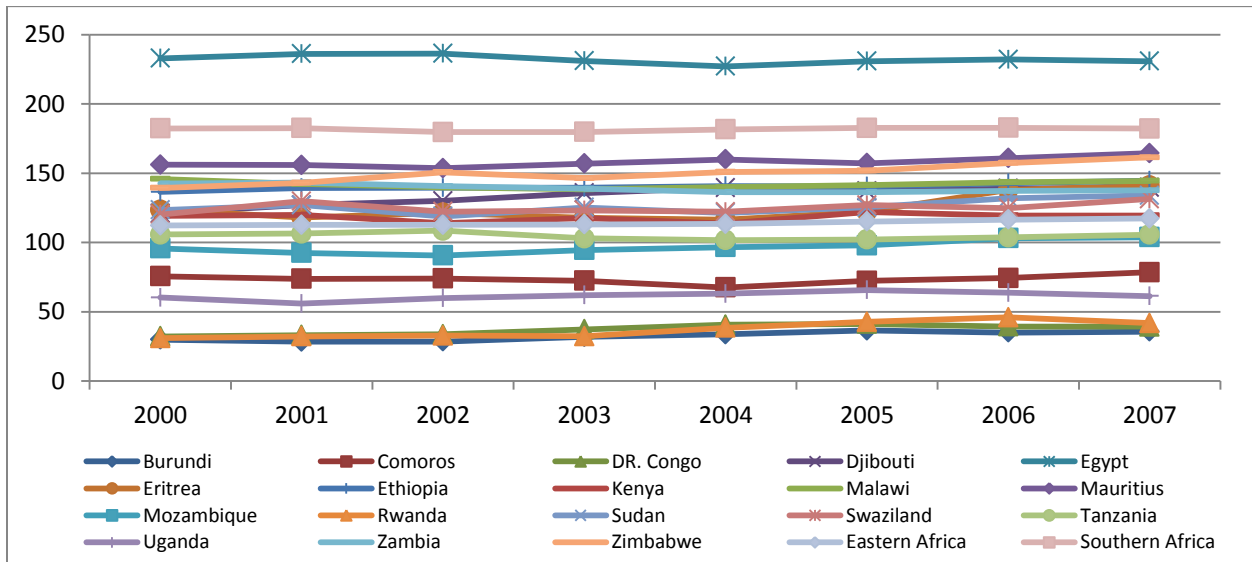


Source: FAOSTAT

**Figure 3: Maize yields in tones/ha (Averages for 2000-2002 and 2006-2008)**

### 3.2 Supply of food

Food supply situation in the COMESA region has been relatively constant with only a slight increase over the 2000 to 2007 period (Figure 4). Figure 4 indicate huge differences in per capita cereal supply between countries—some countries like Egypt have over 200 kg per person per year while others such as Burundi, DRC and Rwanda have an average of less than 40 kg per person per year. Southern Africa region has more food supply than the Eastern Africa region, a manifestation of potential for food movement across countries. COMESA countries should put in place measures that would progressively ensure that food can move easily and cost effectively between countries and between regions within a country.



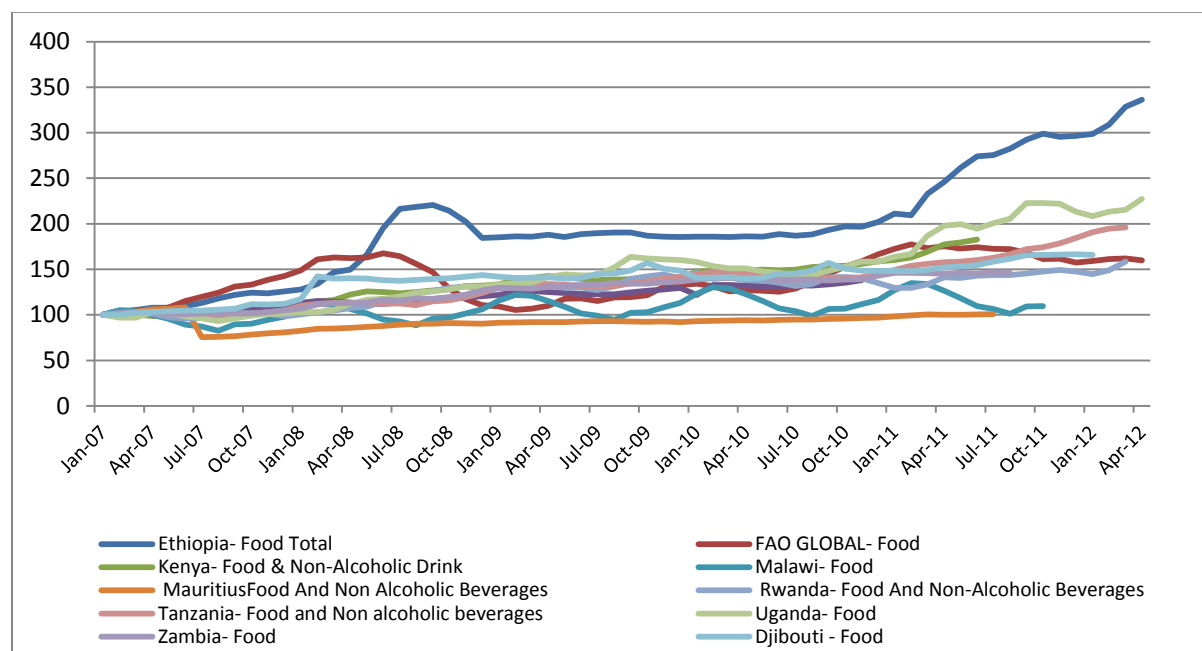
Source: FAOSTAT

**Figure 4: Per capita cereals supply quantity kg/capita/year**

#### 4. The trends and volatility in prices of key staple crops and livestock products

##### 4.1 The trends in prices of key staple crops and livestock products

Countries in the COMESA region were affected by the global food price crises of between 2006 and 2010, a period characterized by high and volatile food prices. The situation had a negative impact on the welfare of both producers and consumers. All countries in COMESA region were affected at varying levels by rising food prices. In the recent past, 2011-2012, the global and domestic prices of many food commodities increased substantially (Figure 5). In majority of countries in COMESA region, since the first quarter of 2011 to first quarter of 2012, the countries have reported an upward trend in domestic food prices above the peak experienced during the global food crisis in year 2008. The food price index has been increasing in eastern Africa countries in year 2012. Highest prices are reported specifically in Ethiopia, Kenya, Rwanda and Uganda where the countries experienced a complete failure of the 2010 October-December rains. Over the period, when prices are high and the stocks are depleted, the countries affected would exploit the opportunity in open borders by buying commodities in countries with surplus and low prices.

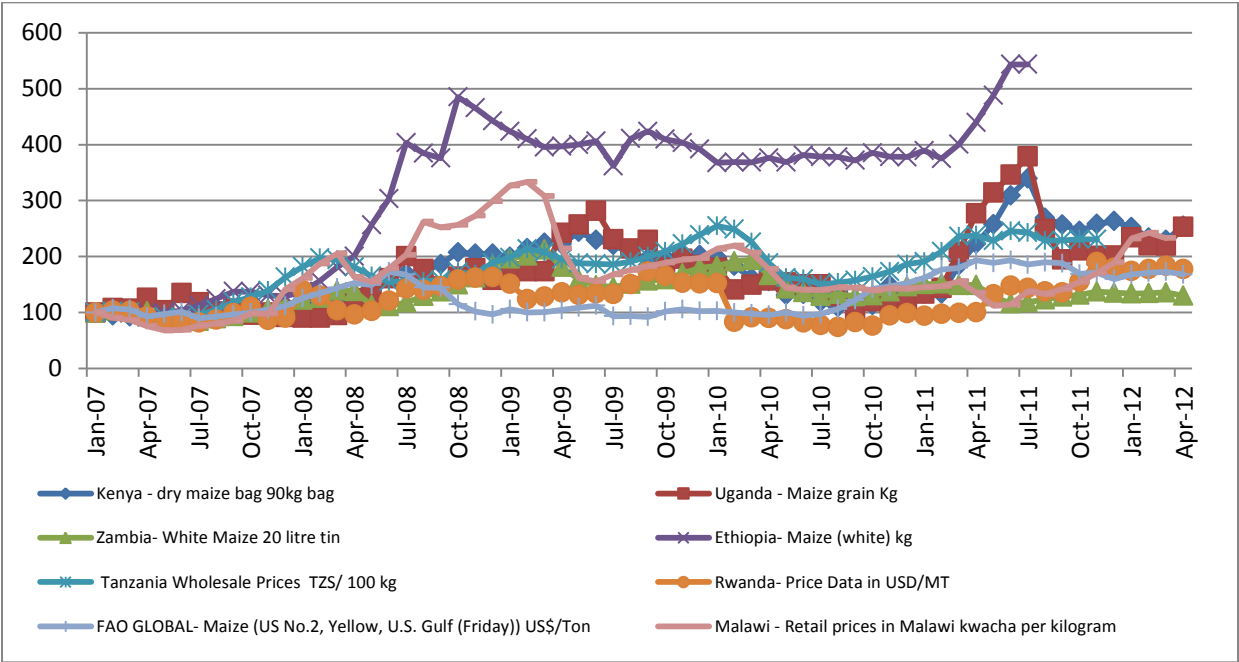


Data source: FAO Global: FAOSTAT; Kenya: Central bank of Kenya; Ethiopia: Ethiopia central statistical agency; Rwanda: National institute of statistics of Rwanda; Tanzania: Tanzania national bureau of statistics; Uganda: Uganda bureau of statistics; Malawi: Malawi national statistical office; Madagascar: Madagascar national institute of statistics; Mauritius: Mauritius government website; Zambia: Zambia central statistical office.

**Figure 5: Food Price Indices 2007=100**

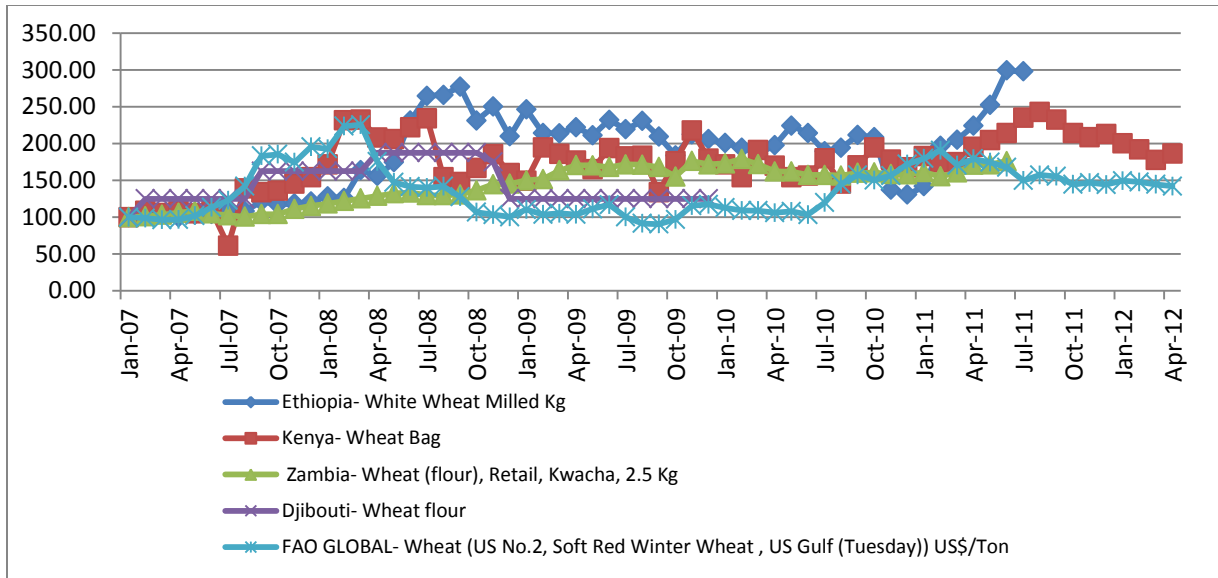


Both global and domestic maize and wheat price index took a downward trend after the food price crisis experienced in year 2008 (figure 6 and 7). Since then, global maize and wheat price index have remained relatively low and stable with a noted increase in the last half of 2010 especially of wheat prices. On the other hand, maize and wheat domestic price index in most EA countries have remained high, volatile and above the global price index even after the food crisis (Figure 6 and 7). During the last quarter of year 2008, global maize prices dropped by 12% while domestic maize prices in same quarter (last quarter of year 2008) increased in all domestic markets in EA (Kenya, Zambia, Ethiopia, Tanzania and Rwanda maize prices increased by 3,10,7,6 and 4% respectively). Further, the wheat price analysis also shows a similar trend in the region with global wheat prices dropping by 7% but increased by approximately 4% in both Kenya and Zambia during the last quarter of 2008. This trend of prices and the index confirms high price differentials among the countries in the region with food prices increasing at different rates and at different times among the countries. This implies that food access situation is different in different countries at different times. When prices are high in one country and the consumers do not have food access at that time, availability coupled with low prices can be exploited from another country which can be attained through open borders.



Data source: FAO global: FAOSTAT; Kenya: Ministry of Agriculture; Ethiopia: Central statistics agency; Rwanda: RATIN; Uganda: Uganda Bureau of statistics; Tanzania: Bank of Tanzania; Zambia: Central statistical office.

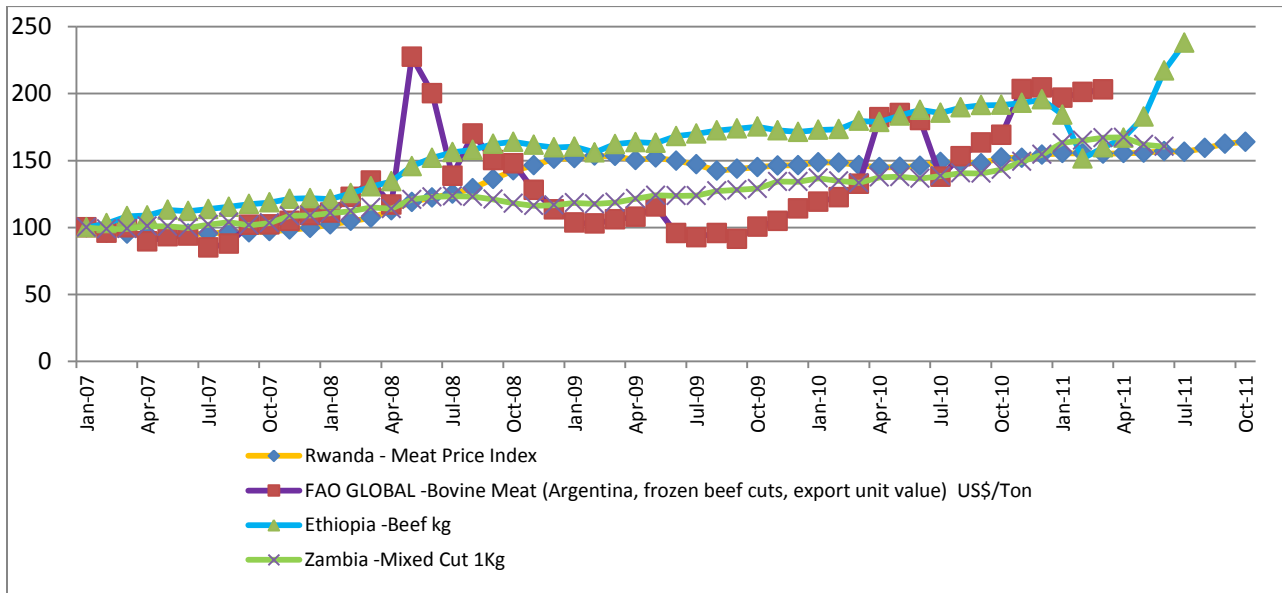
**Figure 6: Maize price indices (January 2007=100)**



Data source: Ethiopia: Central Statistical agency; Kenya: Ministry of agriculture; Zambia: Zambia statistical office; FAO Global: FAOSTAT; Djibouti: Ministry of Economy, Finances and planning, in charge of Privatization.

**Figure 7: Wheat price indices (January 2007=100)**

On the other hand, the year 2010 saw domestic meat prices in selected EA countries continue to increase (Figure 8). Over the period, first half of 2011, various countries in EA experienced drought in livestock producing areas: Kenya, Ethiopia and Uganda which may have triggered the high bovine meat price due to reduced supply in the market. This creates an opportunity for cross border trade especially in times of disaster.



Data Source: FAO Global: FAOSTAT; Ethiopia: Central Statistical Agency; Zambia: Central Statistical Office, Monthly Statistical Bulletins; Rwanda: National Statistical Institute.

**Figure 8: Meat price indices (January 2007=100)**

## 4.2 Food price volatility

Further analysis of the domestic food prices of selected countries in COMESA region shows that the food prices are much more volatile than the corresponding global prices (Table 2). Volatility refers to variations in prices over time. This was measured by the use of the coefficient of variation (CV).

The CV is calculated as follows

$$CV = \frac{SD}{Mean} \times 100$$

Where, SD is standard deviation.

The coefficient of variation of domestic prices of maize in Kenya, Uganda, Tanzania and Rwanda is significantly greater than the coefficient of variation of the global maize price (Table 2). This indicates that the domestic food prices are more volatile than the global food prices. Rwanda reports the highest CV followed by Kenya, then Tanzania and Uganda. The CVs are different among the countries of focus. This implies that the severity of high food prices is different in different countries and that the price of a commodity may display different behavior in different countries in the region as also reflected by the trend analysis (see figure 6, 7 and 8).

**Table 2. Volatility of global and domestic maize prices**

Countries	Coefficient of Variation %
Kenya	23.55
Uganda	17.30
Ethiopia	3.73
Tanzania	22.07
Rwanda	33.46
Global (US No.2, Yellow, U.S. Gulf)	7.06

Data source: FAOSTAT (Global), Ministry of Agriculture (Kenya), Central statistics agency (Ethiopia), RATIN (Tanzania and Rwanda), UBOS (Uganda).

Further, the GARCH model was applied to time series analysis of maize prices in Kenya, Tanzania, Uganda and globally to show volatility of the maize prices. The GARCH model treats heteroscedasticity as a variance to be modeled, while allowing it to depend upon its previous lags and also predicting the variance of each error term. Specification of the conditional variance is

$$\ln \sigma^2_t = \omega + \gamma \frac{\varepsilon_{t-1}}{\sigma_{t-1}} + \alpha \left[ \frac{\varepsilon_{t-1}}{\sigma_{t-1}} \right]^2 + \beta \ln(\sigma^2_{t-1})$$

Where

$\ln \sigma^2_t$  is the conditional variance to be modeled and ensures that  $\sigma^2_t$  is not negative even if the parameters are negative.

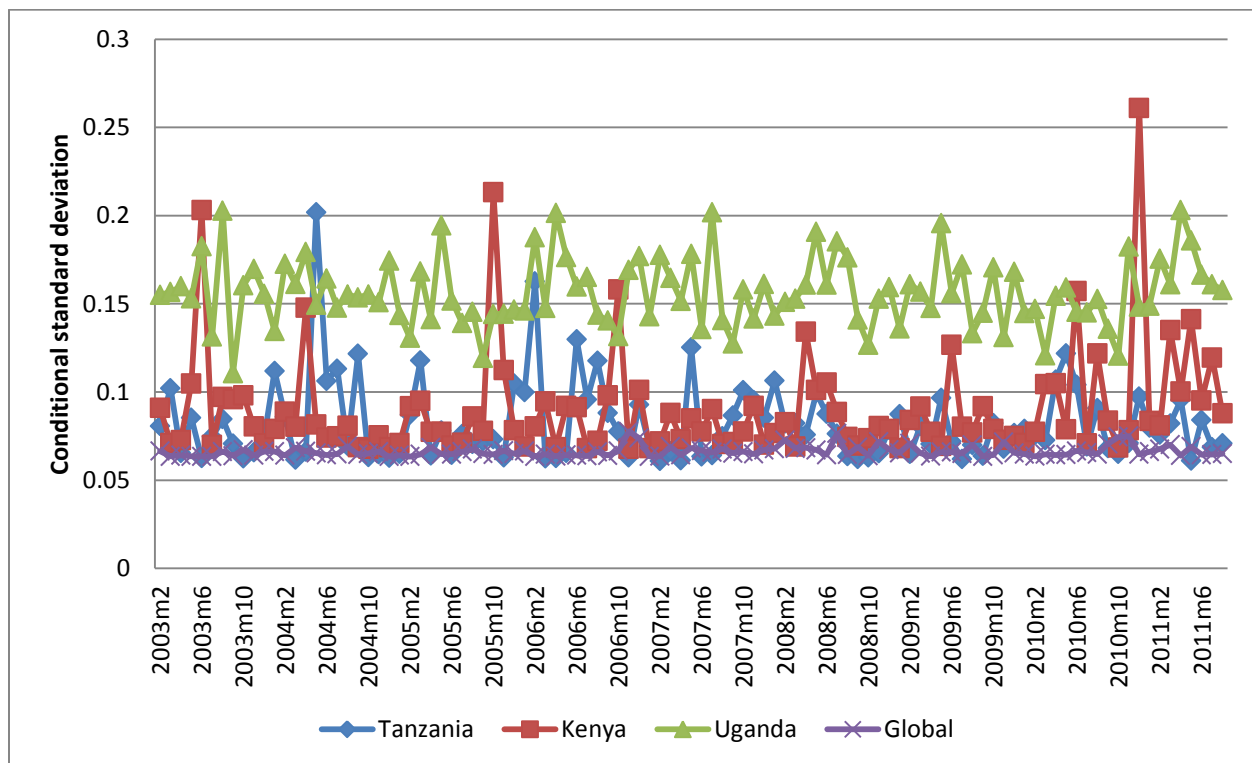
$\gamma$  measures asymmetry/leverage effect - price response to market shocks- unanticipated changes in prices

$\alpha$  measures symmetric effect/ sensitivity of volatility to market events

$\beta$  measures persistence in conditional volatility irrespective of anything happening in the market;

$\omega$  constant

The results of the GARCH analysis revealed that maize prices are more volatile in Kenya than in Tanzania and Uganda (Figure 9). The domestic maize prices in Kenya, Tanzania and Uganda are more volatile than the global maize prices. The extent of volatility is also observed to decline between 2006 and 2010. During this period, 2006 to 2010, the EAC custom union came into force starting 2005. One benefit of the custom union is the free trade. This indicates that liberalized trade in food staples ensures that the farmers in surplus regions/countries are able to sell their produce to deficit areas thus earns better returns for their output while consumers in the deficit regions/countries enjoy guaranteed availability of food staples at fair prices.



Data source: Tanzania: Bank of Tanzania; Kenya: Ministry of Agriculture; Uganda: Uganda bureau of statistics; Global: FAOSTAT

**Figure 9: Maize price volatility**

### 4.3 Maize price returns

Returns of maize prices were computed using logarithmic price relatives

$$R_t = \ln \frac{P_t}{P_{t-1}}$$

Where  $P_t$  is the monthly price at current time  $t$  and  $P_{t-1}$  is the previous price.

The price returns also show volatility of the maize prices, where large positive changes are followed by large negative changes (see figure 10). Kenya reported large positive changes which are followed by large negative changes more than the other countries. The global maize prices show the least degree of change between the positive and negative changes (figure 10).

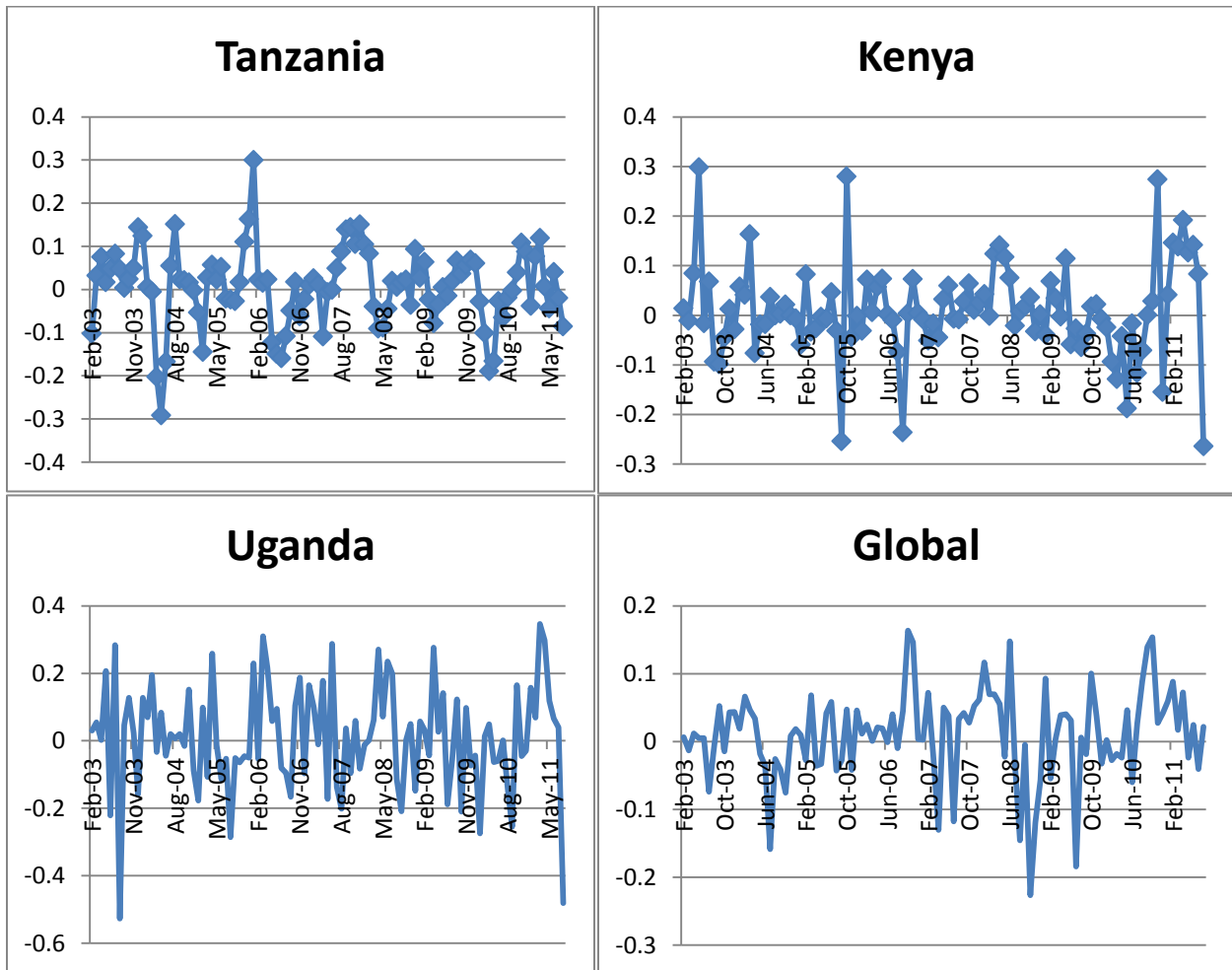
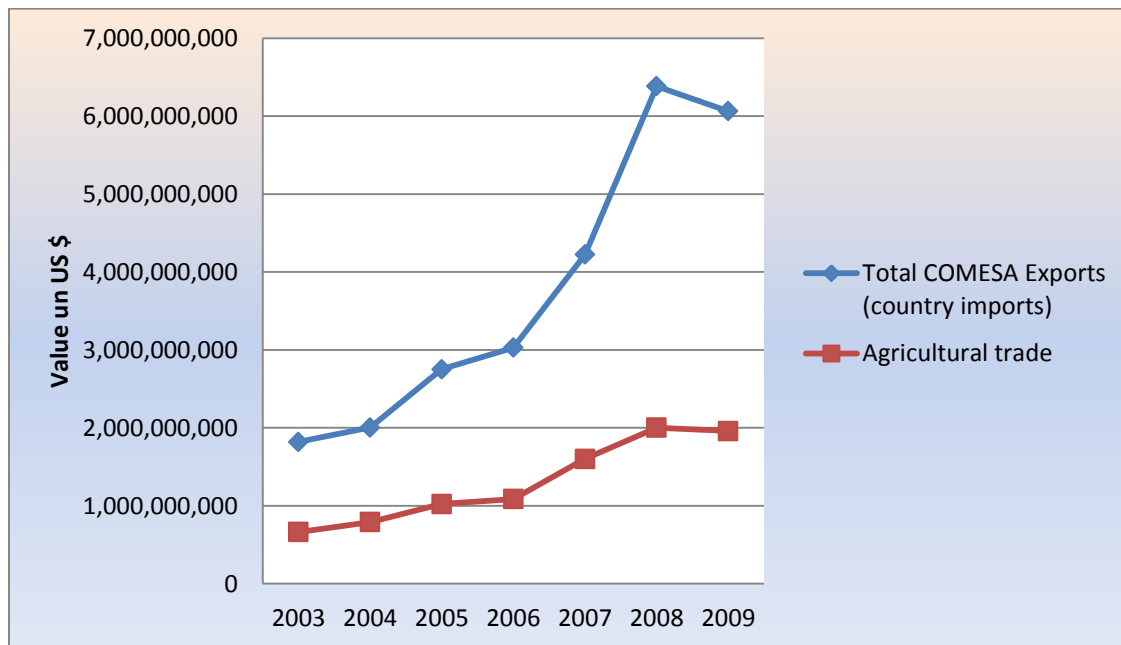


Figure 10: Maize price returns

## 5. Regional trade patterns, challenges and Prospects

### 5.1 Trends in Agricultural trade in COMESA

Generally there has been an increasing trend in intra-COMESA total trade and agricultural trade from year 2003 until the recent slowdown in 2008 and 2009 (Figure 11). Agricultural trade is an important component of the total trade in the COMESA region, accounting for about a third of the total trade. Trade statistics for year 2009 indicate that agricultural trade (represented by agricultural raw materials and food products) accounts for about 32 percent of the total intra-COMESA trade. Year 2009 total intra-COMESA trade amounted to US\$6 billion. Of this, food and agricultural raw materials constituted US\$ 1.9 billion.



Data Source: COMStat, 2010

**Figure 11: Trade in the COMESA region**

Trade in food staples is a key aspect in the agricultural sector. It has grown rapidly in the recent past in the COMESA region (Annex 2) due to population growth which has led to expanding markets, favorable economic prospects and rapid rate of urbanization in the region. The regional diversity and differential rainfall patterns across the countries has and will continue to be a major stimulus for cross-border trade from food surplus areas in one country to food deficit areas in neighboring countries. Further, year 2010 total value of food staples trade is estimated at US\$ 394,961,000 (Annex 1) which comprises of both formal and informal trade in the region. COMESA region experiences informal trade activities which increase food access and the potential can be exploited through implementation of a more liberalized cross border trade devoid of tariff as well as non-tariff measures. This shows the existence of intra-regional trade whose potentials as mentioned can be exploited.

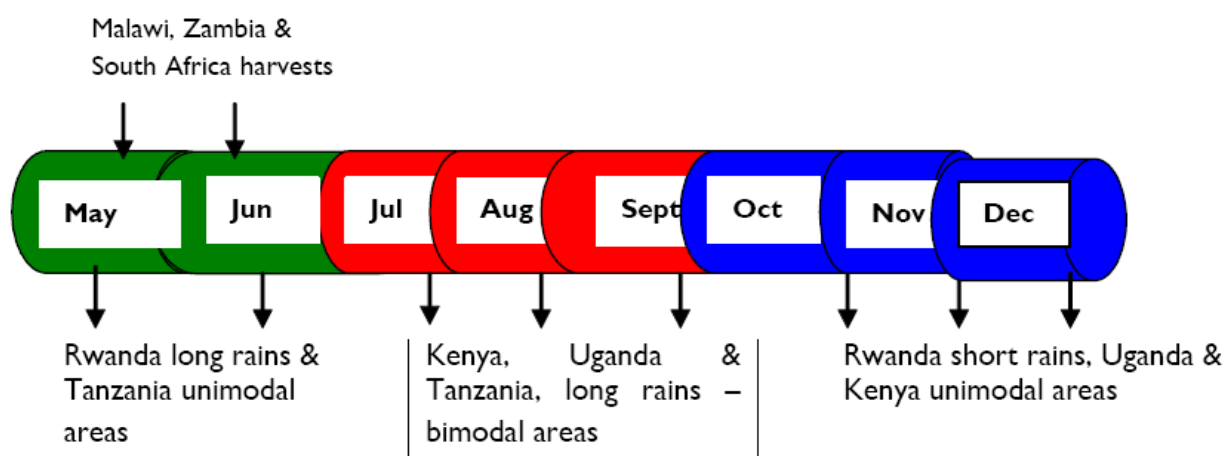


### 5.3 Factors Motivating Cross-Border Trade

Potential for cross-border trade lies in the diversity of factors that influence particularly agricultural production. Among the critical factors include the following:

#### 5.3.1 Agro-ecological zone and differentiated harvesting seasons

Heterogeneity in production due to differentiated harvesting season motivates cross border trade ensuring food access throughout the year. Diversity in agro-ecological zones implies diversified agricultural production; even where countries produce similar agricultural products, spatial climatic variability implies that supplies are available at different times of the year due to staggered harvesting in the region (Figure 13).



Data source: FEWS NET, 2008

**Figure 13: Heterogeneity in harvesting seasons across COMESA member countries**

#### 5.3.2 Regional production volatility

Figure 2 reports high variability in production of maize among the COMESA member countries. This can also be explained by the high incidences of drought experienced especially in Eastern Africa. Areas with low food supply are able to receive food from areas with increased supply.

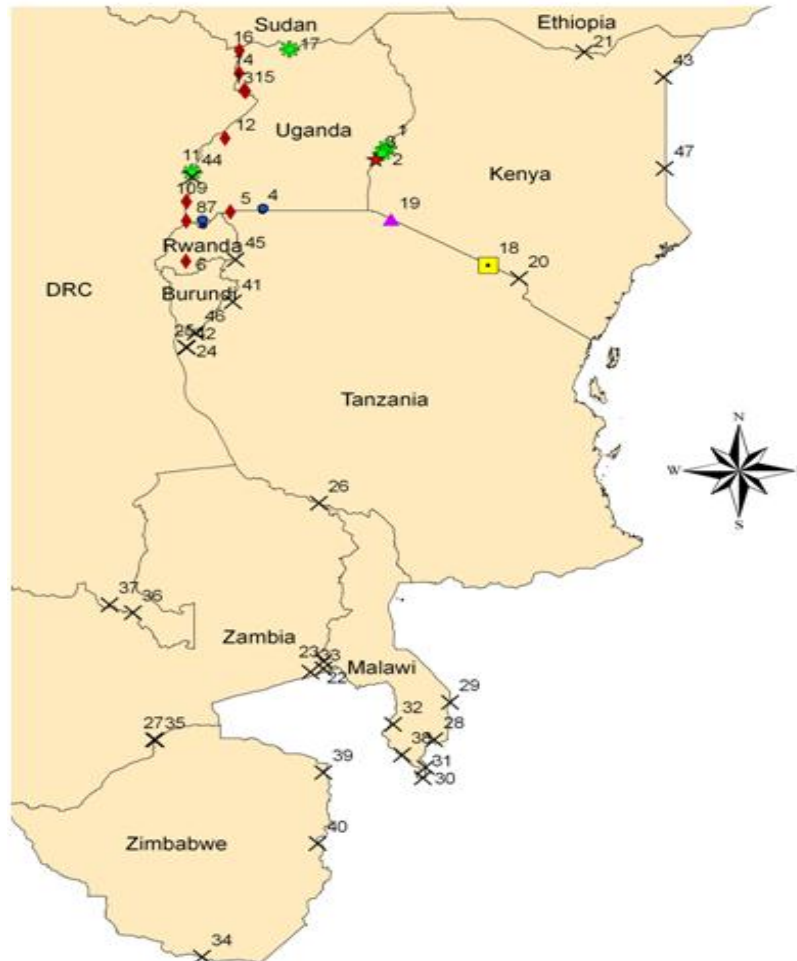
#### 5.3.3 Substitution among food staples

Maize serves as the primary food staple in most COMESA member countries. However, there are reported evidence of consumption and substitution of maize with other staple foods. Empirical work in Mozambique shows high levels of cassava consumption as well as substitution between maize and cassava, even in urban areas (Tschirley and Abdula, 2007). In Malawi and Zambia, substitution with cassava is noted when maize is in short supply. Uganda's main staple food is bananas with reported high production of maize which is traded with the neighboring countries.



### 5.3.4 Political boundaries cut across natural markets

The markets at the border are thus trading posts for the neighboring countries enhancing the movement of people in addition to the movement of food staples across countries from those countries with high supply and low prices to the neighbors with low supply and high prices.



#### Town Names

1=Lwakhakha; 2= Malaba; 3= Busia; 4= Mutukula; 5= Kikagati; 6= Cynika 7= Katuna;  
 8= Bunagana; 9= Ishasha DRC; 10= Ishasha; 11= Mpondwe; 12= Ntoroko; 13= Goli;  
 14= Vurra; 15= Paidha; 16= Oraba; 17= Nemule; 18= Namanga; 19= Isabania; 20= Oloitoktok;  
 21= Moyale; 22= Mchinji; 23= Songwe/ Kasumuru; 24= Mulungu/ Kigoma; 25= Zombe/  
 Kaseya; 26= Nakonde/ Tunduma; 27= Chirundu; 28= Muloza (Mulanje district); 29= Nayuchi;  
 30= Tengani; 31= Marka; 32= Mwanza; 33= chadiza; 34= Beitbridge; 35= Chirundu;  
 36= Momkambo; 37= Kasumbalesa; 38= Mkumaniza; 39= Nyamapanda; 40= Machipanda;  
 41= Kibondo; 42= Kigoma; 43= Elwark; 44= Mpondwe; 45= Rusumo; 46= Manyovu; 47= Doble

Source: Author compilation, 2011

**Figure 14: Map of markets at borders with trade in staple foods in ESA**

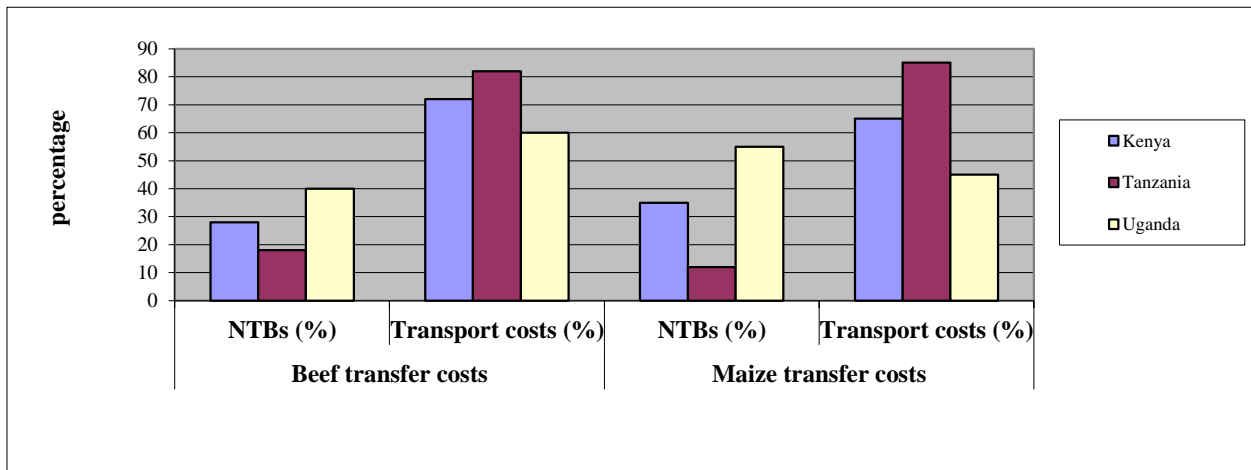
## 5.4 Benefits of regional cross border trade in COMESA region

Individual countries in COMESA region have small domestic markets, high production costs, low production and deficient investment climates. The countries also report low economic growth rate as there is limited progress in poverty reduction and achievement of MDGs by individual countries. Thus regional diversity including integration will exploit combined resource endowments and potential for economies of scale leading to trade creation, mainly access to market and competition, investment facilitation and regional growth spillover benefits. Cross border trade will benefit the traders from the expanded market base from the COMESA region increasing population. Further, the cross border trade creates opportunities for cross-border investment. Trade can also moderate price shocks in the market (Haggblade et al, 2008b). During drought, staple food production falls and the domestic supply is affected negatively with the food prices going up. With open borders, trade takes place allowing for food imports at low prices to the areas with low food supply. The areas not affected by drought or even low supply can supplement the areas with a deficit provided governments allow food to flow freely across their borders. This may result in price capping. Therefore open borders can be said to offer a means of reducing domestic price volatility of staple foods and lowering the food prices which improves the welfare. When regional markets are functioning, they bear the potential of reducing the dependence from global market supplies and prices, strengthening regional cooperation. Regional cross border trade contributes to increased competitiveness of the region which is beneficial to trade. Promoting cross border trade in food products will not only contribute to reducing food insecurity in the region but will at the same time contribute to the economic development.

## 5.5 Challenges of trading in food staples in COMESA region

### *High transport costs*

Transport costs are very high in COMESA region due to high fuel costs and high vehicle maintenance costs due to poor road infrastructural system. This translates to high food prices. Reduced transportation costs translates to producers' increased profitability and competitiveness due to lower marketing costs, while consumers would benefit from lower prices due to reduced food prices. Transportation costs account for over 50% of the total transfer costs (Figure 15).



Source: Karugia *et al*, 2009

**Figure 15: proportion of transfer costs in East Africa**

### ***Lack of information***

Lack of information is rampant among all stakeholders despite the tremendous amount of information on food situation in COMESA region, both online and hard copies from research. Yet this information is rarely available where and when it is needed neither. In the region, the stakeholders in market value chain cannot tell the food surplus areas for opportunity exploitation. There are also access issues where those who require information most do not have access to it. Traders cannot exploit the areas of surplus and deficit, and farmers cannot exploit quick opportunities arising from high food prices due to lack of market information. It is not unusual to find that policymakers and public officials, NGO representatives and private sector players do not have high quality evidence-based information for making good decisions. This shows lack of link between research and development which affects food security in addition to affecting trade.

### ***Export-import ban***

During times of deficit, national governments impose export-import bans to protect the country's food security. This controls trade flows as food staples cannot be exported to other countries. For example, the export bans imposed by Tanzania, Ethiopia, Sudan, Djibouti and Kenya during the food price crisis. Tackling export-import bans allows free movement of the foods thus reducing food price volatility which eases the food crisis.

### ***Non predictability***

Agricultural sector is facing the impact of climate change with increases uncertainties in food production and subsequent market behavior. Monitoring regional and national food supply and demand projections in conjunction with increasingly accurate early warning information will allow timely planning for food supplies. FEWS NET has highly invested in early warning system in the region which needs to be enhanced.

### ***Non tariff barriers (NTBs)***

Under the EAC protocol, NTBs are defined as being laws, regulations, administrative and technical requirements other than tariffs imposed by a partner state whose effect is to impede trade (EAC, 2004). A recent study by Karugia *et al.* (2009) revealed similar NTBs experienced in the three EAC countries (Kenya, Uganda and Tanzania) and in the two commodities considered in the study, maize and beef. The NTBs identified by the Karugia study include administrative requirements (mainly licenses, municipal and council permits), taxes and duties (mainly excise and cess duties), roadblocks, cumbersome customs procedures, weighbridges, licensing procedures, corruption, and transiting costs. The licenses required include a business license, road-transport license, and livestock-clearance certificate. Not only do these NTBs imply extra monetary costs, they also result in potential trade time being wasted by traders and transporters. NTBs hinder free flow of goods and services in the region and have been identified by COMESA as a hindrance to the region's growth. Countries in the COMESA region have collectively committed themselves to eliminate all the existing barriers to trade and to further refrain from introducing new ones as espoused in the Custom's Union Protocol. In an effort towards the realization of this goal, COMESA established a permanent mechanism to resolve disputes arising from NTBs in 2006. The mechanism requires countries to give prior notification

of NTBs made by any member country. Other actions undertaken by the COMESA in relation to the elimination of NTBs include: development of a monitoring mechanism; training of customs officers; harmonization of standards and regular meetings by directors of customs to discuss ways of dealing with NTBs. Despite the efforts, numerous NTBs which increase trade transaction costs are still reported in the region.

### ***High cost of production and low intensity in input use***

Countries in the region experience high cost of agricultural production. Fertilizer and certified seed prices are very high resulting to low intensity of use which translates to declining land productivity. The low yields leads to most farmers being subsistence farmers with minimal surplus for sale even locally. However, if there is increased use of fertilizers and certified seeds, the land productivity is increased, yields increase with surplus for sale consequently increasing intra-regional trade.

## **5.6 Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of COMESA intraregional trade**

The SWOT analysis of regional trade was analyzed to assess the potential of intra-regional trade. The SWOT analysis is a method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats. The SWOT analysis may help the farmers to identify the potentials to increase production and for traders to intensify cross-border trade.

As strengths, diversified climatic condition implies diversified agricultural production; even where countries produce similar agricultural products, spatial climatic variability implies that supplies are available at different times of the year due to staggered harvesting in the region (see section 5.3.1). The region has potential for cross border trade where food staples can move from surplus to deficit areas within a country and within the COMESA region. As opportunities, informal trade channels open alternative and more flexible markets to traders, the high food price levels in the region enables traders to generate higher income, and the high population at regional level offers increased market base. Existing market distortions, a high number of NTBs, ad hoc export ban and limited market information along the various food staples value chain are major threats for traders. In addition, the underdeveloped transport infrastructure increases the transaction costs threatening the potential of regional trade. One weakness noted is the mistrust among the traders. There is limited/minimal public private partnership in intraregional trade due to the mistrust among the two groups.

From table 3, the intra-regional trade weaknesses can be converted into strengths and threats into opportunities.

**Table 3: SWOT analysis of COMESA intraregional trade**

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"><li>• Diversified climatic condition</li><li>• Food surplus and deficit regions</li></ul>	<ul style="list-style-type: none"><li>• Mistrust among the traders</li><li>• Difference in staple foods among the countries in the region</li></ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"><li>• Informal trade channels</li><li>• High food prices</li><li>• Increased regional market base</li></ul>	<ul style="list-style-type: none"><li>• NTBs</li><li>• Market distortions</li><li>• Ad hoc trade policies e.g. Export ban</li><li>• Limited market information</li><li>• Underdeveloped transport infrastructure</li></ul>

Source: Author compilation, 2012

## **6. Conclusion**

The role of regional trade is not debatable. Increasing regional trade in agriculture and especially in food staples has the potential to moderate the prices and increase availability of food, consequently stimulating agricultural development. However, trade barriers of various kinds impede regional cross border trade and create a less than favorable investment climate for all stakeholders. This is coupled with ad hoc trade policies like export bans that are occasionally imposed by some countries and affect regional trade flows.

To increase regional trade and improve food security in COMESA region, this paper recommends:

1. A regional approach to food security and agricultural growth, rather than a national isolated approach that does not exploit the regional opportunities in trade and investment. This can be obtained through consultations and consensus among the various governments
2. Clear follow up and monitoring of the implemented COMESA commitment of eliminating NTBs and prevention of entry of new NTBs
3. Enhance investment in early warning system
4. Improved flow of market information to all trade stakeholders and
5. Investment in improved infrastructure.

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**Annex 1: Total intra-COMESA Staple Food Exports in 2010 (US\$ 1000)**

Product	Burundi	DRC	Djibouti	Ethiopia	Kenya	Malawi	Rwanda	Tanzania	Uganda	Zambia	Total
Maize grain	0	159	0	21	17	127	260	599	36213	274	37669
Rice grain	36	97	0	0	4315	348	56	26255	17256	21	48384
Beans & pulses	111	3017	102	4430	1570	406	1872	3525	33609	643	49284
<b>Grain &amp; pulses</b>	<b>147</b>	<b>3273</b>	<b>102</b>	<b>4451</b>	<b>5901</b>	<b>882</b>	<b>2187</b>	<b>30379</b>	<b>87078</b>	<b>937</b>	<b>135337</b>
Maize flour	643	11	0	0	801	0	515	167	24229	1004	27370
Wheat flour	1	13	0	0	1444	5	39	43810	7200	23271	75784
<b>Processed flour</b>	<b>644</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>2245</b>	<b>5</b>	<b>554</b>	<b>43978</b>	<b>31429</b>	<b>24276</b>	<b>103154</b>
Live animals	0	0	0	38	181	0	4188	21	3895	154	8477
Milk and cream	7	184	39	0	12992	1	12	721	52886	709	67551
Bovine meat	0	0	0	0	960	0	13	0	1428	183	2584
Fish	130	153	0	0	1251	42	2539	8914	44846	304	58179
<b>Livestock products</b>	<b>137</b>	<b>337</b>	<b>39</b>	<b>38</b>	<b>15384</b>	<b>43</b>	<b>6752</b>	<b>9656</b>	<b>103054</b>	<b>1350</b>	<b>136791</b>
Onions	45	462	0	2825	162	0	63	637	2065	95	6353
Tomatoes	0	18	0	2204	15	0	3	215	3809	5	6270
<b>Vegetables</b>	<b>45</b>	<b>480</b>	<b>0</b>	<b>5029</b>	<b>177</b>	<b>0</b>	<b>66</b>	<b>852</b>	<b>5874</b>	<b>100</b>	<b>12623</b>
<b>Roots &amp; tubers</b>	<b>6</b>	<b>1243</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>19</b>	<b>376</b>	<b>5409</b>	<b>0</b>	<b>7056</b>
<b>Total</b>	<b>979</b>	<b>5358</b>	<b>141</b>	<b>9518</b>	<b>23711</b>	<b>929</b>	<b>9578</b>	<b>85240</b>	<b>232843</b>	<b>26663</b>	<b>394961</b>

Data source: COMSTAT and UBOS



**Annex 2: Percentage changes in total intra COMESA food exports (nominal values) in staple foods for selected countries in ESA (2008 -2010)**

	<b>Burundi</b>	<b>DRC</b>	<b>Djibouti</b>	<b>Ethiopia</b>	<b>Kenya</b>	<b>Malawi</b>	<b>Rwanda</b>	<b>Tanzania</b>	<b>Uganda</b>	<b>Zambia</b>	<b>Total</b>
Maize grain	-100	-75			-100	-97	429	-86	69	-98	-24
Rice grain	-17	-64		-100	466	-88	356	183	99	-82	120
Beans & pulses	1812	20	-56	23	111	-65	-58	-26	-11	-52	-13
<b>Grain &amp; pulses</b>	<b>-62</b>	<b>-4</b>	<b>-56</b>	<b>24</b>	<b>-7</b>	<b>-89</b>	<b>-51</b>	<b>66</b>	<b>28</b>	<b>-94</b>	<b>6</b>
Maize flour	49359	-89		-100	-46		-51	-64	103	-82	32
Wheat flour	638	274			185	-97	-96	634	-46	-15	57
<b>Processed flour</b>	<b>45879</b>	<b>-76</b>		<b>-100</b>	<b>12</b>	<b>-97</b>	<b>-73</b>	<b>583</b>	<b>25</b>	<b>-26</b>	<b>50</b>
Live animals				-95	781		5	-99	0	2	-18
Milk and cream	-72	-44			9	-99	140	-69	1201	-49	235
Bovine meat		-100		-100	11		180	-100	139	-38	12
Fish	67	-85	-100		-13	189	1876	110	-5	-73	5
<b>Livestock products</b>	<b>34</b>	<b>-75</b>	<b>264</b>	<b>-95</b>	<b>8</b>	<b>-61</b>	<b>64</b>	<b>11</b>	<b>84</b>	<b>-54</b>	<b>55</b>
Onions		-22	-100	151	-26		2640	269	133	708	111
Tomatoes	-96	-68	-100	37	-83		-74	-77	61	-95	21
<b>Vegetables</b>	<b>905</b>	<b>-26</b>	<b>-100</b>	<b>84</b>	<b>-42</b>		<b>324</b>	<b>-24</b>	<b>81</b>	<b>-14</b>	<b>54</b>
<b>Roots &amp; tubers</b>	<b>-76</b>	<b>84</b>			<b>-56</b>		<b>2548</b>	<b>-31</b>	<b>178</b>		<b>121</b>
<b>Total</b>	<b>89</b>	<b>-13</b>	<b>-41</b>	<b>36</b>	<b>3</b>	<b>-89</b>	<b>-10</b>	<b>143</b>	<b>51</b>	<b>-48</b>	<b>33</b>

Data source: COMSTAT and UBOS