Towards Creating an Enabling Environment for Grain Trade in Africa: Technology, Investment, Information, Policy and Services (T.I.I.P.S.)
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Dear Reader,

Welcome to the fifth edition of the ATPAF-ESA Bulletin. Regular readers will be aware that the Bulletin is one of EAGC’s principal tools for disseminating information on topical agricultural trade policy matters, which affect our region. This is so as to create awareness on these matters and inform on policy decisions in the sphere of agricultural trade.

This edition is very special as it is based on the proceedings of the 6th African Grain Trade Summit that was hosted in Kigali, Rwanda in October 2015 and graced by Rt. Hon. Anastase Murekezi, the Prime Minister of the Republic of Rwanda.

The African Grain Trade Summit is a biennial, high-level, public-private policy dialogue that facilitates reflection on the development trends in the grain sector in Africa, and formulates actionable policy recommendations to address pressing problems.

With its theme, Towards Creating an Enabling Environment for Grain Trade in Africa: Technology, Investment, Information, Policy and Services (T.I.I.P.S), the Summit convened high-level policymakers and industry practitioners for discussions on the latest technological innovations that address challenges along the grain value chain. It also included discussion on best modalities for promoting investment in agribusiness and grain trade; the role of information in developing the grain sector; and policy frameworks and service delivery for supporting the growth and development of the grain sector and agribusiness in general.

The presence of an enabling environment for grain trade in Africa is a matter of priority as EAGC strives to facilitate efficient, structured, inclusive and profitable grain trade in the region. Therefore, the resolutions of the Summit inform our policy advocacy agenda as we pursue the necessary policy reforms to improve the policy environment for the grain sector.

This bulletin, thus, provides a synthesis of some of the papers presented by industry experts and researchers on the different thematic areas of the summit.

In this edition, we revisit some of the main trade policy challenges facing the region such as the rice trade within the EAC. Widespread importation of Asian rice into Tanzania without the requisite duties being paid and re-export to other EAC partner states has resulted in the imposition of 75% import duty and VAT on all rice consignments entering Uganda and Rwanda that originate from Tanzania. Consequently, rice producers in Tanzania not only face increased competition in their domestic markets but are also locked out of lucrative regional markets.

We also explore the role of technology along the grain value chain for improved efficiency and market linkages. Specifically, we look at post-harvest handling technologies that seek to promote food safety, food quality and reduced post-harvest losses. There are technologies for market linkages and market information, and the inherent challenges in scaling up these technologies to make them more sustainable and affordable to industry actors.

This bulletin also looks at the role of research in the grain sector. Specifically, we evaluate the threat posed by the Maize Lethal Necrosis Disease, which is prevalent in most countries in Eastern Africa.

The MLN disease can destroy entire harvests of maize and is thus a severe food security risk in the region and threatens the livelihood of millions of farmers. Trade linkages between Eastern and Southern parts of Africa also exposes the latter to the risk of ‘importing’ the disease from the former. There is, therefore, need for urgent action to develop MLN-resistant maize varieties and formulate robust policy frameworks to tackle the pandemic.

We also acknowledge the role that the International Maize and Wheat Improvement Centre (CIMMYT) is playing in combating the spread of MLN in Eastern Africa. This has been through research on resistant varieties and establishing Communities of Practice, to facilitate sharing of best practices in controlling the disease amongst researchers and industry actors in the region.

My sincere gratitude to all the contributors to this edition of the Bulletin for their expertly-written and informative papers. Indeed, the Bulletin was created as a collaborative space, which provides an outlet for research and analysis on matters relating to agricultural trade policy for all industry stakeholders.

Please keep your articles, policy briefs and analytical papers coming.

To our readers, enjoy this edition of the Bulletin. It is my hope that you will find it inspirational and enlightening, so that we can all join forces towards creating an enabling environment for the grain sector in Africa, for a shared prosperity.

Gerald Makau Masila
Executive Director, Eastern Africa Grain Council
The African Grain Trade Summit

The African Grain Trade Summit (AGTS) is a biennial platform for high-level policy dialogue for the continent’s grain sector, providing a lively discussion amongst policymakers, the private sector, civil society and development organisations on topical matters affecting the grain sector and regional development. The Summit is a continentally-recognised grain industry conference, which attracts stakeholders along the grain value chain from around the African continent. They come for discussions about key grain industry issues and developing trends in grain trade on the continent.

The first African Grain Trade Summit in 2005 called for the establishment of a regional body that would provide a VOICE for the grain sector, paving the way for the establishment of EAGC in 2006. Since then, the biennial event has proven to be one of EAGC’s most potent tools achieving progress in the agriculture and trade policy arena, as you will see in the Summit timeline below.

The 6th African Grain Trade Summit, with the theme, “Towards Creating an Enabling Environment for Grain Trade in Africa: Technology, Investment, Information, Policy and Services (T.I.I.P.S.)” was held from October 1 to 3rd, 2015 in Kigali Rwanda. The Summit’s main objective was to facilitate the formulation of regionally-focused approaches for addressing matters affecting grain trade growth and development in Eastern and Southern Africa.
1. COMMUNIQUE FROM THE 6TH AFRICAN GRAIN TRADE SUMMIT

The Eastern Africa Grain Council (EAGC) in partnership with the Government of Rwanda and with support from various partners successfully hosted the 6th African Grain Trade Summit from October 1 to 3rd, 2015, at Kigali Serena Hotel in Kigali, Rwanda. The partners included USAID East Africa Trade and Investment Hub, DFID-funded FoodTrade East and Southern Africa project, Swedish International Development Agency (Sida) and the Technical Centre for Agricultural and Rural Cooperation (CTA).

Through its theme, “Towards Creating an Enabling Environment for Grain Trade in Africa: Technology, Investment, Information, Policy & Services (T.I.I.P.S.)”, the Summit created a public-private dialogue among more than 200 international and African-wide stakeholders from the grain value chain, on the key pillars of successful grain trade on the continent.

The chief-guest at the Summit was the Rt. Hon. Anastase Murekezi, the Prime Minister of Rwanda. Also in attendance were Hon. Francois Kanimba, Minister of Trade and Industry; Hon. Geraldine Mukeshimana, Minister for Agriculture and Animal Resources; Hon. Tony Nsanganira, State Minister for Agriculture; Ambassador Michael Ryan, Head of European Union Delegation to Rwanda; and Dr. Michael Hailu, Director of the Technical Centre for Agricultural and Rural Cooperation, among others.

Group photo featuring Rt. Hon. Anastase Murekezi, Prime Minister of Rwanda (1st row centre) with speakers and distinguished guests at the 6th African Grain Trade Summit held recently in Kigali, Rwanda
In his keynote address while opening the Summit, President Paul Kagame emphasised on the importance of quality standards and food safety in structured trading systems for staple foods, and the need for greater private sector participation in post-harvest services. In the address read on his behalf by his representative to the summit, Rt. Hon. Anastase Murekezi, Prime Minister of Rwanda, he also urged delegates to work as a team to develop and adopt new technological solutions to address the constraints facing the grain sector and the broader agricultural sector on the continent.

Dr Bernard Otim, Chairman of EAGC, noted that the 6th African Grain Trade Summit was a timely opportunity for dialogue, which presented opportunities for enlightenment, debate and ultimately crafting of solutions that will improve the trading environment for grains.

The Executive Director of EAGC, Gerald Masila, noted that the Summit has a rich history of successes in improving the grain sector in Eastern Africa, highlighting the fact that EAGC itself traces its origins to the 1st African Grain Trade Summit held in 2005 where stakeholders called for a private sector-led organisation that could represent the interests of the regional grain sector.

Speaking on behalf of sponsors and development partners, Ambassador Michael Ryan, head of the European Union Delegation to Rwanda, acknowledged the growth in use of technology in agriculture and Rwanda’s commitment to developments in ICT. He also noted that malnutrition is a critical challenge facing the continent and called on delegates to discuss measures to address the problem.

Dr. Michael Hailu, director Technical Centre for Agricultural and Rural Cooperation (CTA), acknowledged the importance of facilitating grain trade to feed Africa’s growing population, combat food insecurity and to reduce the continent’s food import bill, which currently stands at about $40 billion. Dr Hailu also called on stakeholders to continue supporting EAGC in its efforts to promote structured trade in staple foods on the continent.

Summary of Key Discussions at the Summit

The various panels of experts and dignitaries at the Summit

Session 1: Regional Media Development Dialogue on Non-Tariff Barriers to Trade in Staple Foods

A high-level panel of experts discussed the continued impact of Non-Tariff Barriers to trade in staple food commodities, and:

i. NOTED that protectionist attitudes by governments, stemming from the need to support their respective producers, are the reasons for continued existence of NTBs. The experts also acknowledged that elimination of such barriers will be gradual, since each country has different capacities to implement agreements to ease such barriers, given the divergences in their state of development.
ii. Further NOTED that food safety and standards parameters should not impede trade in staple foods. They called for a mix of both traditional and modern approaches to ensure compliance to safety and quality standards parameters, such as greater investment in aflatoxin testing infrastructure and bringing into the mainstream indigenous knowledge on toxin control that has existed for generations.

iii. STRESSED the importance of looking beyond traditional metrics in agriculture such as production and productivity, and the need to place greater emphasis on measures to encourage greater private sector investment in value addition services.

Session 2: Policy as an Enabler for Grain Trade in Africa

iv. NOTING that government trade policies and their implementation discourage private sector investment, the Summit HIGHLIGHTED that current approaches to government procurement of grains for strategic food reserves are among the factors restricting private sector investment, and thus such government practices hurt the entire grain value chain, particularly producers and consumers.

v. Further NOTING that countries in East Africa are at different levels of development, the Summit ACKNOWLEDGED the need for those countries that are adversely affected by harmonisation of regional trade policies to be compensated for any welfare losses incurred through harmonisation of policies, to facilitate smoother implementation of harmonised trade policies.

Session 3: The Role of Technology in Improving Grain Trade in Africa

vi. ACKNOWLEDGING that there have been numerous technological innovations providing solutions to various challenges in the grain value chain, delegates also NOTED that such solutions provide greater choice for value chain actors and will assist to create an environment where structured grain trade can thrive.

vii. While STRESSING that such technological innovations need a proper ecosystem to flourish, the Summit further EMPHASISED the need for a supportive regulatory, business and social environment.

Market Information Systems (MIS) as a Tool for Evidence based Advisory for Trade and Policy

viii. While ACKNOWLEDGING that Market Information Systems (MISs) are a necessary but not sufficient component of promoting more efficient trade in staple foods, the Summit RECOGNISED that support services such as financial products are equally critical if MISs are to successfully contribute to grain trade. The Summit further NOTED that more effort is required to build the capacity of intended beneficiaries of MISs, to enable them to make effective use of such systems. It was also noted that increasing the use of MISs is critical for making such systems more relevant and sustainable in their own right.

Structured Trade and Regulatory Options for Commodity Markets

ix. While NOTING that the Warehouse Receipts System has succeeded in some countries, there are still inherent challenges such as lack of trust in the system by some players, particularly small-scale farmers. This HIGHLIGHTED the need to ensure that WRS regulatory frameworks address any unique requirements in the grain value chain and their interrelationships with regional commodity trade platforms.

Summit Side Events

1. Meeting of the African Grain Councils

The 6th African Grain Trade Summit WITNESSED the 1st meeting of the Eastern Africa, West Africa and Southern Africa grain sector associations in the form of the Eastern Africa Grain Council, the West Africa Grain Network and the Grain Network of Southern Africa Stakeholders. This historic meeting explored areas of collaboration between the three organisations.

As the most established of the three organisations, it was
AGREED that EAGC will explore opportunities to expand its Market Information System to cover the West Africa and Southern Africa grain markets, and assist in conducting a needs assessment in both West Africa and Southern Africa. The three organisations also AGREED to set up a coordinating process in the next 12 months to facilitate the coordination of activities of the three grain sector organisations.

2. Business-to-Business Linkages at the Summit

The Summit provided an immense OPPORTUNITY FOR NETWORKING and forging of business partnerships among grain sector stakeholders. As such, the Business to Business (B2B) sessions at the Summit was one of the most successful trade facilitation sessions ever convened by EAGC. An estimate US$ 57 million worth of grain trade through 21 trade agreements were signed by business persons at the Summit. To further showcase the reach of EAGC beyond grains, the B2B meeting also witnessed over US$ 11,000 worth of trade in non-grain commodities being concluded at the Summit.

3. Field Visits in Kigali

On day three of the Summit, delegates visited the Kigali Special Economic Zone and Minimex Ltd maize milling plant where they noted the investment opportunities in the grain sector in Rwanda. Delegates also visited the Kigali Genocide Memorial to pay their respects to the victims of one of the worst tragedies ever faced in Africa.

4. The Welcome Cocktail and Gala Dinner
Delegates were treated to a welcome cocktail on the eve of the Summit, which facilitated networking and set the tone for the meeting. A special gala dinner was also hosted on the evening of the first day of the Summit, which featured a celebration of **African Fashion and Cuisine**, as well as Rwanda’s cultural heritage.

5. Media Coverage of the Summit

The Summit **RECEIVED** unprecedented coverage on print, electronic and social media. It engaged over 1.5 million people on social media and reached over 3.4 million globally. Several news outlets from across Africa **RECOGNISED** the event, providing further evidence of its continental reach and relevance. Presented below are links to Summit media coverage and presentations:

- [http://graintradesummit.com/index.php/about/agenda/summit-presentations](http://graintradesummit.com/index.php/about/agenda/summit-presentations)

**KEY RECOMMENDATIONS AND WAY FORWARD FROM THE 6TH AFRICAN GRAIN TRADE SUMMIT**

Policy: An Enabler for Structured Grain Trade and Investment in Africa

**Key Recommendation**

i. EAGC should spearhead private sector-led **ACTION GROUPS**, which will lead engagement with governments on policy issues. The governments should **DESIGN AND ADOPT** mechanisms to fast-track implementation of harmonised trade policies.

The Role of Technology in Improving Grain Trade in Africa

**Key Recommendation**

ii. EAGC should **IDENTIFY** and **PROMOTE** uptake of effective and affordable technologies in grain trade. The funding of these technologies should use a PPP approach to make them more affordable. Meanwhile, governments should **DESIGN** policies that **ENCOURAGE THE ADOPTION** of such appropriate technologies.

Market Information Systems (MIS) – Evidence based Advisory for Trade and Policy

**Key Recommendations**

iii. EAGC in collaboration with other stakeholders should **PROMOTE** the use of MISs to make them more sustainable.

iv. The EAC should collaborate with EAGC to **EDUCATE** private sector actors about the virtues of the Regional Food Balance Sheet (RFBS), so that more of them can participate effectively. Governments should **COMMIT** to continue funding RFBS to enable it meet its objectives.

Research for Improved Competitiveness in Grain Trade

**Key Recommendations**

v. Governments should **INVEST** in a comprehensive system of labs to enable early diagnosis and warnings against the Maize Lethal Necrosis Disease.

vi. Organisations such as EAGC and other industry associations should **ESTABLISH COMMUNITIES OF PRACTICE** to collaborate with governments in developing appropriate MLN prevention policies.

Structured Trade and Regulatory Options for Commodity Markets

**Key Recommendation**

vii. Governments in Eastern Africa should **HARMONISE** Warehouse Receipt Systems to facilitate structured trading in grains within the region. They should also create synergies with regional trading platforms and commodity exchanges.

Services: Facilitating Investment and Reducing the Cost of Doing Business in Grain Trade
Key Recommendation

viii. Institutions such as EAGC should **ASSIST** small holder farmers to strengthen their governance and enable them to access capital. This would ensure that they build up economies of scale that would better take advantage of available credit and other funding opportunities.

Follow up Actions by EAGC

- Preparation of a **POLICY BRIEF** to be submitted to regional governments providing greater detail on policy constraints and recommendations from the Summit.

- Preparation of a **POLICY BULLETIN** under the Agricultural Trade Policy Advisory Forum for Eastern and Southern Africa (**ATPAF-ESA**), to create more awareness of agricultural trade policy challenges facing the grain sector in Africa.

- Coordination of stakeholders to **IMPLEMENT** recommendations put forward from the Summit to facilitate creation of an enabling environment for grain trade on the continent.

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Rt. Hon. Anastase Murekezi, Prime Minister of Rwanda presented a token of appreciation to Hon. Francois Kanimba, Rwanda’s Minister of Trade during the Summit. Looking on is Hon. Geraldine Mukeshimana, Rwanda’s Minister of Agriculture.

Dr Bernard Otim, EAGC Chairman addressing delegates during the opening of the 6th African Grain Trade Summit.

Delegates paying their respects at the Genocide Memorial in Kigali after the Summit.

Delegates during a field visit to Minimex Ltd after the Summit.

Hon. Francois Kanimba and Hon. Tony Nsanganira, Minister of State for Agriculture in discussions during the Summit.
2. ADDRESSING NON-TARIFF BARRIERS TO TRADE IN STAPLE FOOD COMMODITIES IN EASTERN AND SOUTHERN AFRICA: RECENT DEVELOPMENTS AND FUTURE OUTLOOKS

By Kim Mhando, Eastern Africa Grain Council

Introduction

Eastern and Southern Africa regions have contrasting natural resource endorsements in agriculture. They are blessed with arable land and favourable climate, but also possess vast swathes of arid and semi-arid land. Due to this they have contrasting capacities to produce food, making the ability to move food from areas of surplus production to those of deficit critical for ensuring food security.

The potential for intra-regional trade in foods provides an opportunity for using agriculture as a means of driving economic growth, and improving the livelihoods of farmers within the region, who make up 70 to 90 per cent of the population in Eastern and Southern Africa.

However, the efficient flow of staple foods from surplus producers to off-takers – and ultimately the consumers – is impeded by the proliferation of Non-Tariff Barriers (NTBs), which manifest themselves through administrative procedures, ad-hoc changes in government policies and inefficient sanitary and phytosanitary controls, to name but a few. By inhibiting trade in staple foods, NTBs pose a risk to food security and to the livelihoods of those dependent on agriculture.

The challenge posed by NTBs has been recognised by governments in the region, who have initiated policy responses to tackle them. This article analyses recent developments in tackling NTBs and future prospects for NTB-free trade in staple foods in the region.

Recent Developments

In recent times, regional governments – particularly those in East Africa – have taken significant steps to address NTBs. Among the most recent developments has been the adoption of the EAC harmonised Staple Foods Standards, which were gazetted by the EAC in December 2013.

The Standards, popularly referred to as EAS2013, are the culmination of a five-year process to harmonise pre-existing domestic staple foods standards in EAC Partner States. The intention of harmonisation is to promote trade in staple foods by eliminating the costs associated with compliance to multiple domestic standards, when trading across borders. The Standards, therefore, put in place common
quality and safety parameters for 22 of the most commonly traded staple foods including maize, rice and wheat.

They also support uniformity in enforcing food safety parameters such as moisture content limits for control of aflatoxin, a potentially lethal toxin produced by fungi, which infect grains that have high moisture content.

However, implementation of the standards has not been a smooth process and is currently well-below expectation, due capacity constraints facing public agencies tasked with enforcing them. Further, there is still limited awareness of the standards among value chain actors, who also have limited incentives to comply with them. EAC states have also not harmonised sampling and testing methodologies, which creates the potential for discrepancies in testing and grading results and eventually trade disputes.

In addition to the EAS 2013, the East African Legislative Assembly passed the Elimination of the Non-tariff Barriers Bill in March 2015. The Bill seeks to banish NTBs in the EAC, giving effect to Article 13 of the EAC Customs Union Protocol. In the protocol, Partner States agreed to immediately remove NTBs on importation of goods originating from Partner States. The Bill, therefore, puts in place a legally-recognised mechanism for monitoring and eliminating NTBS, including provisions for sanctions to countries which fail to comply with the law’s provisions. It currently awaits assent into law by the EAC Heads of States.

While the legislation aims to eliminate NTBs to pave way for more efficient trade, unscrupulous business practices by some private sector actors give the authorities reason to maintain them. A recent case can be found in the rice value chain, where some traders in Tanzania abused the Rules of Origin to export rice imported from Asia to regional markets, under the guise of Tanzanian rice. Following the market disruption caused by this practice, Uganda and Rwanda, two of the biggest importers of Tanzanian rice, imposed the full 75% Common External Tariff on all rice imports from Tanzania, causing significant losses to genuine Tanzanian rice producers and marketers.
The lack of reliable data and information has been recognised as a major factor hindering informed policy decision-making. Consequently, the region has suffered from ad-hoc and misinformed policy directives, which has created uncertainties in regional staple food markets. Such challenges led to the formation of the EAC Regional Food Balance (RFBS) initiative, a web-based platform for monitoring food stocks at national and regional level.

The RFBS, discussed in greater detail later in this Bulletin, compiles data from official government sources, the private sector and relief agencies, to provide a more holistic impression of food availability and guide government actions accordingly. As the RFBS continues to be improved, it will play an increasing role in facilitating informed policy decision-making and is expected to improve market transparency.

Looking ahead: future prospects

To a certain extent, the prospects for grain trade in the region look bright. It has not experienced crude NTBs like export bans for a few years, while agricultural production is generally on an upward trend. The ongoing implementation of the EAC Staple Foods Standards is expected to make regional trade in food staples more efficient. This is particularly due to the fact that awareness of the Standards by value chain actors and the enforcement capacity of relevant government agencies, improves over time.

However, it should also be noted that the prospects for agricultural trade have been bright ever since countries in the region gained independence over five decades ago. While the constraints to regional trade – the NTBs – are not insurmountable, the absence of strong political will to address them is probably the biggest limiting factor of all. Leaders in the region need to show more commitment towards eliminating NTBs. Although removing NTBs is a gradual process, it is important that the process is aligned to time-bound objectives to monitor their removal and hold policymakers accountable for the process.

On a more practical level, governments should direct more resources towards efficient enforcement of the Standards; that is, enforcing the Standards in a manner that does not amount to restricting trade. The use of rapid test kits for aflatoxins and other parameters at border crossings is one such plausible measure. This will allow speedy inspection of grain commodities at the borders, rather than having to take samples to laboratories in other towns. Rwanda is currently leading the way, having deployed rapid test kits for aflatoxin to its border crossings.

Furthermore, significant efforts should be directed towards creating awareness and compliance with food safety parameters. This should go hand-in-hand with enhancing the capacity of value chain actors to comply with the Standards, particularly at the level of farmers. This includes greater emphasis on good post-harvest handling practices and making storage and post-harvest facilities more affordable and accessible.

The private sector should also play an integral role in the elimination of NTBs. Private sector-led action groups could be created to engage policymakers and drive the reform agenda. Private sector participation is important because without their buy-in, policy directives are likely to have minimal impact.
3. TRADE PATTERNS, COMPETITIVENESS AND GROWTH OUTLOOK IN COMESA REGION

By Paul Guthiga, Maurice Ogada and Joseph Karugia (ReSAKSS-ECA)

1.0 Background

This article examines trends and patterns of trade in the COMESA region and individual COMESA member states. It pays special attention to trade in agricultural products in both value and caloric content. Analysis is restricted to countries for which data is available. Further, trade outlook is discussed based on multi-country, multi-sector computable general equilibrium model (MIRAGRODEP) projections between 2013 and 2030.

1.1 Trends and Patterns in COMESA’s Trade in Goods and Services

Trade is important for the region and the individual countries because the region is not self-sufficient in production of goods and services (Wanjiku et al., 2012). Food staples, particularly, have to move from areas of surplus production to areas of deficit. For example, Kenya periodically imports maize from Tanzania and Uganda. Moreover, trade contributes greatly to the regional and country-level GDP.

For example, in 2010, COMESA generated US$ 244 billion from global trade and US$ 17.4 billion from intra-COMESA trade. However, the region’s share in the global trade remains low, at less than 1% of the total. Like Africa’s export share in global trade, COMESA’s export share dropped steadily between 1980 and 1988 when it hit an all-time low of about 0.5% (see Fig. 1.1). Between 1998 and 2008, the global share of exports grew for both Africa and COMESA, although the growth was steeper for Africa (at the continental level) than the COMESA region. After 2008, a declining trend was recorded. For EAC and IGAD countries, the global share of exports has been low at about 0.25% throughout the reference period. This could partly explain why COMESA’s share is lower than Africa’s. To provide more insight, we examine the contribution of individual COMESA countries to global exports of goods and services (Fig. 1.2).

![Figure 1.1—Evolution of COMESA’s share of global export of goods and services](Source: UNCTAD (2014))
Figure 2.2 indicates that Libya and Egypt contribute more to global exports of goods and services, relative to other COMESA countries. For example, in 1980, while Libya and Egypt had a global share of exports of about 1% and 0.3%, respectively, the other COMESA countries, individually, had barely 0.1%. This could be attributed to the two countries being exporters of oil, petroleum and gas. They are also better developed industrially. Overall, however, they witnessed a steady drop in share of global exports between 1980 and late 1990s. This was because of decline in oil exports among the Community of Sahel-Saharan States in general (Badiane et al., 2013). Recent growth in exports in some of the countries in the region and elsewhere in Africa, could be due to a rise in world prices of some raw materials, economic growth and improvements in trade infrastructure.

1.2 Trends and Patterns in COMESA’s Agricultural Trade

Trade in agricultural commodities is important in a number of ways. First, it is an important vehicle through which food and nutritional insecurity within the region may be ameliorated. Food surplus countries can sell their surplus produce to food-deficit countries. While selling their surplus output, the food-surplus countries not only avoid wastages and depressing domestic prices, but also improve the incomes of the food producers, usually the smallholders. Consequently, economic growth is enhanced, more employment opportunities are created and further investment in agriculture is catalysed.

Between 1996 and 2003, the annual average value of intra-COMESA agricultural exports was US$ 0.34 billion with an annual average growth rate of 20% (Badiane et al., 2013). The growth rate slowed to 16% between 2003 and 2013. The intra-COMESA imports grew even much faster at 24% between 1996 and 2003, and 18% between 2003 and 2013. In kilocalories, the exports dropped from 6.46 trillion kcal annually between 1996 and 2003 to 5.47 trillion kcal annually between 2003 and 2013. The annual growth rate in exported kilocalories was 12% between 1996 and 2003, and 11.5% between 2003 and 2013. The imported kilocalories were 1.4 trillion kcal annually between 1996 and 2003, and 3.82 trillion kcal annually between 2003 and 2013. Annual average change in imported kilocalories was 17% between 1996 and 2003, and 8% between 2003 and 2013. Positive growth in exports and imports among the COMESA countries may be attributed to population and economic growth overtime (Rakotoarisoa, Lafrate, and Paschali, 2011) and liberalisation of intra-COMESA trade in food staples (Guthiga et al., 2012). Table 1.1 provides a summary of trade flows within COMESA and with other RECs.
Table 1.1 — Agricultural Trade Flows in COMESA

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<td>6.37</td>
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Source: Adapted from Badiane et al. (2013)

1.3 Agricultural Trade Competitiveness of COMESA Countries

This section discusses the global market share of agricultural products from the COMESA countries as shown by Badiane et al. (2013) for the period 1995-2007. Within the COMESA region, countries which experienced an increase in their world market share of agricultural products in this period were Rwanda, Ethiopia, Malawi and Tanzania. This was attributed to the positive domestic performance effect, and the positive geographic specialisation effect, which outweighed negative sectoral specialisation effect.

While domestic performance refers to increased competitiveness, geographic specialisation effect refers to increasing exports, arising from increased demand in the importing countries. Sectoral specialisation effect refers to increased domestic demand for products, which were initially exported (see Cheptea, Fontagne and Zignago, 2014 for details). Notably, Rwanda’s global market share grew four-fold over the period of reference. This was mainly attributed to improved domestic performance.

Other COMESA countries like Burundi, Kenya, Mauritius, Uganda and Zimbabwe registered deterioration in their shares of global market for agricultural products. This was attributed to negative domestic performance in Burundi and Zimbabwe, and negative sectoral specialisation effect in Kenya, Mauritius and Uganda.

2.0 COMESA Trade Growth Outlook: 2013 to 2030

This section uses MIRAGRODEP projections of trade growth for COMESA between 2013 and 2030. Assuming there are no changes in national agricultural trade policies, population growth trends, labour endowments and total factor productivity (baseline scenario), agricultural import per capita is projected to grow by about 5% between 2013 and 2030 (Fig. 1.3). Agricultural exports per capita, on the other hand, are projected to grow by about 62% in the same period. This is not surprising because most of the COMESA countries are largely agrarian economies.
Trade between COMESA and ECOWAS is projected to grow by the largest margin (179%) in the period of reference followed by trade with CEMAC (148%), COMESA (146%), SACU (116%) and UMA (107%). Overall, COMESA’s trade with Africa in agricultural products is projected to grow by 136% while trade with the rest of the world is projected to grow by 97%.

To provide more insight, we break the projected growth in agricultural trade into net exports per capita by product (Fig. 1.4). It is projected that the net export of agricultural products per capita will increase by about US$ 3.3 by 2030. While import increases will be driven mainly by cereals (US$4.2) and sugar (US$1.9), growth in exports and the overall surplus will be driven mainly by processed food (US$2.5), cash crops (US$2.3), oil seeds (US$1.7) and vegetable oil (US$1.3).

2.1 Trade Outlook under Alternative Scenario

The alternative scenario assumed in this analysis is a 50% reduction in agricultural tariffs worldwide. Under this scenario, COMESA’s agricultural exports and imports are projected to increase by 7.3% and 16.2% above the baseline values. This reflects a degeneration of agricultural trade balance. The fact that exports are projected to increase faster than the imports shows that initial custom duties on agricultural products in COMESA are higher than in the rest of the world. This is projected to cause a real income growth of 0.2% and unskilled wages growth of 0.3%. Agricultural value addition would grow by 0.13%.
3.0 Conclusion

COMESA’s share in global exports declined steadily between 1980 and 2000. However, between 2000 and 2013, the trend reversed. The main contributors to the region’s share in global exports were Egypt and Libya, possibly driven by petroleum exports. Contributions by EAC and IGAD were minimal.

Between 1996 and 2003, the value of intra-COMESA agricultural exports grew by 20% while that of imports grew by 24%. Trade with other regional economic communities (RECs) also improved. For example, exports to ECOWAS grew by 41% between 1996 and 2003, and 25% between 2003 and 2013. Imports, however, remained negligible. Exports to and imports from SADC increased by 32% and 52%, respectively between 1996 and 2003, and by 15% and 10%, between 2003 and 2013.

MIRAGRODEP projections revealed that per capita agricultural exports and imports will grow by 62% and 5%, between 2013 and 2030, assuming everything else remains unchanged. Trade with other RECs will also improve remarkably, although trade with ECOWAS is projected to grow with the largest margin, at 179%. Trade with CEMAC, SACU and UMA will improve by 148%, 116% and 107%, respectively. Overall, the region’s agricultural trade with Africa will grow by 136% while that with the rest of the world will grow by 79%.

Assuming a 50% reduction in agricultural tariffs worldwide, exports will grow by 7.3% while imports will grow by 16.2%. This shows that the region is more restrictive in agricultural trade than the rest of the world.

About the Lead Author: Paul Guthiga is a Senior Policy Analyst at the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) based in Nairobi, Kenya. He has conducted extensive work on various aspects of intra-regional food staple trade in the COMESA region.
4. RICE TRADE IN THE EAC: POLICY CHALLENGES AND SOLUTIONS
REGIONAL INTEGRATION

By Kim Mhando, Eastern Africa Grain Council

Rice is one of the most important food staples in East Africa with consumption growing at an average of 4% per annum between 2002 and 2012 (Kilimo Trust, 2014) in the region. The growth in consumption is mainly driven by 3 factors: (i) an expanding middle class, which has a taste and financial clout to afford high consumption of rice; (ii) a rapidly growing population; and (iii) increased consumption by producers as their incomes increase (Mitchell, 2013).

Tanzania is the largest producer of rice in the EAC bloc, accounting for about 80% of the bloc’s annual rice production. With an estimated 18% of farming households growing rice, its value chain is an important provider of employment, income and food security for Tanzanian farming households. It also ensures a staple food supply for the urban population.

Given its status as the dominant producer of the crop in the EAC and due to growing demand for rice in the bloc, Tanzania is well-placed to tap into lucrative markets in the EAC Partner States, particularly in the context of the EAC Customs Union and Common Market Protocols which provide for duty free movement of locally produced goods and services between the Partner States.

Rice has also been singled out as a “Sensitive Product”, with a special 75% Common External Tariff imposed on imports of the produce from outside the EAC, in an attempt to protect EAC producers from cheap rice produced in South East Asia. To top it all off, Tanzanian rice varieties are widely regarded as premium varieties, thus attracting higher prices compared to rice from elsewhere. This is due to their rich aroma and high imbibition (a given quantity of Tanzanian rice can feed a much larger number of people than the same quantity of other rice varieties – essential for families with tight budgets).

Despite the EAC bloc providing a seemingly win-win scenario in rice trade, the reality is far from rosy. A number of policy challenges have combined to impede rice trade in the region and threaten to undermine broader regional integration efforts. This article looks at the underlying policy challenges facing rice trade in the EAC and proposes solutions to the same.

Underlying Policy Issues

The origins of the policy challenges facing rice trade in the EAC bloc can be traced to the decision by the Government of Tanzania to allow duty-free importation of 120,000 metric tonnes of Asian rice during the first half of 2013. This created a glut of rice across the EAC region and also caused a significant reduction in prices in all EAC Partner States. The effect of this was that local rice producers and millers in the Partner States were not able to sell as the market had surpluses at below the cost of production. Given that Tanzania did not request a stay of application from the CET from the EAC Council of Ministers for the importation of duty-free rice from Asia in 2013, the Partner States alleged that the rice flooding their domestic markets from Tanzania was not Tanzanian rice, but rice originating from Asia, particularly from Pakistan and Thailand.

Consequently, Certificates of Origin for Tanzanian rice have not been recognised by the two main importers of its rice – Uganda and Rwanda – on allegations that it was blended with cheap imported Asian rice. This means that rice exports from Tanzania to these countries face the full 75% tariff, effectively cutting off its rice producers from lucrative markets in these countries.

Relaxation on the CET for Zanzibar and subsequent smuggling of rice through the Isles

Over 80% of rice consumed in the Isles of Zanzibar is imported from mainland Tanzania and Asia. Given the relatively high costs of production of rice in mainland Tanzania and transport costs to the Isles, the rice produced in here has become too expensive for most Zanzibar residents. This led to the Government of Tanzania negotiating a 12.5% CET on rice imports into Zanzibar, much lower than the 75% imposed on rice imports into mainland Tanzania and other EAC Partner States, in an attempt to reduce food costs on the Isles.

However, Zanzibar is part of Tanzania, and its proximity to the mainland, including its long, porous coastline has provided a loophole for smuggling Asian rice into the mainland from Zanzibar. The smuggled rice feeds into domestic and regional value chains and is blended and marketed as locally-produced rice, creating a glut in the markets and suppressing prices at the expense of producers in all EAC Partner States. While Kenya has also negotiated a 35% CET for its rice imports from Pakistan as part of bilateral trade agreements allowing the country to export tea to Pakistan, the large demand gap in Kenya has meant that imported rice does not significantly leak into other regional markets. The main challenge facing the EAC Partner States on both sides of the debate is the lack of assurance on the country of origin for the rice that is crossing their borders. Aggrieved Partner States still believe that there is a strong possibility of Asian rice entering into their markets duty-free disguised as Tanzanian rice, while Tanzanian rice producers and millers feel that the competitiveness of their rice produce is severely compromised in both local and regional markets.

Lack of accurate and up to date information on production and market dynamics

The decision by Tanzania to allow importation of significant volumes of duty-free rice in 2013 was based on con-
cerns regarding sufficient availability of rice in the country. However, the concerns were ill-founded as illustrated by the drastic depreciation of rice prices at the time—there was significant production of rice to meet domestic demand and for export to regional markets. This highlights an absence of timely and reliable information on production and market dynamics, thus leading to ill-informed policy directives.

Possible solutions

It is clear that the status quo cannot be maintained due to its detrimental impact on the rice value chain and to those who depend on it for their livelihood. Policy changes are necessary to ensure optimal benefits to consumers, producers and the broader EAC economy; particularly changes that are robust and with efficient checks and balances for rice trade in the region.

An obvious recommendation would be to impose the full 75% CET on all imports of rice into the EAC irrespective of other conflicting trade agreements or food security concerns. However, this is politically sensitive and a bit too ambitious. There is also evidence that EAC rice producers will still not be able to compete with their South East Asian counterparts, given the very low production costs achieved in the South East Asian countries (see figures 1 below). In such a case, the 75% CET will not be as effective as envisaged.

Figure 5: Price trends and projections for rice in selected markets in East Africa

![Figure 5: Price trends and projections for rice in selected markets in East Africa](image)

Source: FEWSNET (2015)

It is, therefore, important to look at alternative policy measures that can alleviate the rice trading challenges in the EAC. Such solutions include:

i. Introducing mechanisms to differentiate EAC-produced rice

Given the challenges with recognition of Certificates of Origin of rice exported from Tanzania to other EAC markets, it is evident that a traceability and certification system for EAC rice is necessary to authenticate the true origin of the rice that is traded in the region. This would also guide the proper application of the CET while simultaneously protecting the common interests of all rice producers, traders and millers in the EAC. It requires the establishment of a system to verify and confirm the origin through a set criteria and methodology for analysis and certification, culminating in the branding of rice of East Africa origin.

Technology already exists for testing the origins of rice, which looks at, among others, genetic analysis of East African rice, analysis of soil characteristics residual in the rice, aromatic characteristics, detection of blending with rice produced outside the EAC, and other parameters. Rice consignments meeting set parameters can then receive appropriate branding identifying them as genuine East African rice, and thus be freely traded in the EAC. Consignments that fail to comply with the parameters can then be charged the full CET, or any other duty, at the discretion of individual Partner States.

It is expected that the certification and branding of rice will stimulate free trade of EAC rice among EAC Partner States without being subjected to any barriers of trade as it will be clearly differentiated. The free trade of EAC rice will contribute to economic prosperity of rice producers, traders and millers, and to broader economic growth in the Partner States.

ii. Expand into markets beyond the confines of the EAC

While the EAC is a lucrative market for rice producers in Tanzania, there is need to expand production to meet demand from beyond the bloc. This is particularly important as rice production (and agricultural production in general) continues to grow in the EAC Partner States, gradually reducing their dependence on imports.
iii. Strengthen Public-Private Partnerships for Timely and accurate information for policy decision-making

Governments have been accused of lacking timely and accurate data on which to base their policy decisions. Therefore, there is need for governments and the private sector to strengthen collaboration in collecting timely and accurate information, particularly given the private sector’s presence “on the ground” on a day-to-day basis.

The EAC is already implementing the Regional Food Balance Sheet, which is a public-private collaboration to provide a reliable indication of food availability in the region at any given time. Strengthening this collaboration, and in other Market Information Systems, will improve the quality and timely availability of information for better-informed policy decision-making by governments.
5. FROM THE FARM TO THE FACTORY: THE ROLE OF TECHNOLOGY IN IMPROVING GRAIN TRADE IN AFRICA

By Kim Mhando, Eastern Africa Grain Council

Introduction

Technology plays an increasingly important role in African agriculture, although somewhat belatedly compared to other parts of the world. For several years, the focus of agricultural technology has (rightly) placed significant focus on production, particularly promoting modern farming practices that depend less on rain-fed agronomy. Technology provides an opportunity to reduce production costs, increase productivity and allow farmers to command premium prices. Despite technology adoption being on an upward trajectory, it is still alarmingly low. The high costs of technological innovations have sidelined small-scale farmers on the continent, who have little option but to retain traditional farming practices.

In recent years, technological innovations have expanded to post-production activities further up the value chain. These technologies are critical for improving volume and value of grain trade, and ultimately improving the livelihood of farmers. This article features some of the recent innovations that directly or indirectly support grain trade, ranging from post-harvest handling to market linkage solutions.

Recent developments in grain storage solutions

Post-harvest losses have long been eating away at grain harvests in Africa. In Eastern and Southern Africa, post-harvest losses are estimated at about one-third of total grain production. For farmers, this translates to erosion of their already meagre incomes, while at national and regional levels it leads to persistent food security issues.

Also linked to poor post-harvest handling is contamination of grains with aflatoxin, which has previously claimed the lives of persons who consumed contaminated maize. According to some reports, Tanzania is said to be losing USD 332.5 million from aflatoxin exposure, further highlighting the scale of the problem. Subsequently, gov-

Figure 6: Post-harvest losses occur at all stages between harvest and human consumption. Estimates show that almost one-third of food produce is wasted through poor post-harvest handling
ernments have tightened food safety requirements and there has been a push towards good post-harvest handling practices to reduce the risk of aflatoxin contamination.

Technology is playing a major role in improving post-harvest handling of grains. A number of on-farm storage solutions have been developed, including hermetic storage bags, metal silos and so-called grain cocoons. These technologies are proving highly effective in combating post-harvest losses and contamination caused by pests and fungi, although they do carry some cost implications for farmers.

Hermetic storage bags are a relatively cheap solution that is effective against pests such as the highly destructive Larger Grain Borer (LGB). Hermetic storage technology has gained importance as an alternative to other methods of storage for the protection of various commodities from insects and moulds. These bags restrict the amount of oxygen that the pests rely on for survival, effectively suffocating them and preserving grain for several months. Hermetic bags have proven to be more effective than jute or polypropylene bags in protecting grains against pests and moulds.

Cocoons, a form of hermetic storage that is suitable for larger stocks of grains, provide excellent long-term and ultra-long term storage of commodities. Cocoons reduce the flow of both oxygen and water between the stored grain or seed and the outside atmosphere. When properly sealed, respiration of grain and insects inside the bag reduce oxygen levels from 21% to 5%. This reduction reduces live insects to less than 1 insect/kg of grain without using insecticides, often within 10 days of sealing. According to GrainPro Inc., the main manufacturer of cocoons in the world, cocoons can maintain the quality of grain for up to 12 years, making them ideal for food reserve and relief agencies.

An alternative to hermetic storage bags and cocoons is the metal silo, which are available in various capacities from less than 1 metric tonne to over 20 metric tonnes. They provide a viable storage option for farmers, particularly through their groups which allow group members to pool resources to purchase a silo. The silos can effectively serve as aggregation centres for grains in a community, thus allowing bulk marketing of grain to fetch better prices while providing a convenient collection point for off-takers, in addition to its primary function of preserving grain.

**Affordable mechanised drying technology**

Proper drying of grains is critical for preserving their quality and reducing the risk of aflatoxin infestation. For many years, farmers have relied on the sun to dry their grains before storing and marketing them. However, erratic weather patterns can prove disruptive to sun-drying grains, which can result in improper drying particularly as farmers face pressure to sell their produce at the earliest opportunity. Improper drying of grains can contribute to
lower prices for farmers, as off-takers factor in drying and cleaning costs that they will incur. It also poses a significant food safety risk due to the high probability of aflatoxin infestation in “wet” grains.

For many years, mechanical drying technologies have been out of the reach of many farmers due to their high cost. Recently, ACDI/VOCA under its AFLASTOP project has developed a mechanical drying technology, which promises to be more affordable for farmers to both own and operate. The technology, dubbed the Shallow Bed Batch Dryer, can handle up to 1.5MT per day. The dryer costs approximately $1,200 per set with the actual cost of drying estimated at $2 per 90kg bag. The cost of the dryer is too high for individual farmers, but it should be affordable for farmers in groups who can pool their resources to acquire one. Proper drying of grains by farmers will assist them to store and market grains of higher quality, thus facilitating compliance to food safety requirements and allows farmers to command higher prices.

**Technologies for market linkages**

In recent years, the continent has seen greater focus on technology for market linkages, with a number of technologies being developed offering to connect farmers with value chain actors higher up the chain in a more efficient and transparent manner. These technologies have manifested themselves in various iterations of trading platforms and agricultural commodity exchanges.

In East Africa, EAGC and Virtual City, a technology firm based in Nairobi, Kenya, have partnered to create the G-Soko System, a multipurpose platform that connects producers, traders, processors, financial institutions, input suppliers and other value chain actors through one electronic platform.

At the core of the G-Soko is a network of automated grain bulking centres and certified warehouses, linked to a virtual trading platform and participating banks for settlement of transactions and trading houses, all regulated by EAGC and operating under a defined set of protocols, procedures, rules and regulations. The system, launched in July 2015, was developed with support from the DFID-funded Food Trade East and Southern Africa project and promises to offer efficient...
market linkages, access to finance and inputs for grain value chain actors.[add G-Soko stats and projections].

Inspired by the relative success of the Ethiopian Commodity Exchange (ECX) and the Agricultural Commodity Exchange for Africa (ACE) in Malawi, East Africa is also experiencing a growing movement towards commodity exchanges as a means of facilitating structured trade. Tanzania, Kenya and Uganda are either launching their commodity exchanges or revamping existing ones to facilitate grain trade. One commodity exchange that is already operational is the East Africa Exchange (EAX) based in Kigali, Rwanda, which was launched in 2013. The EAX is a regional wide commodity exchange that makes use of state-of-the-art Nasdaq trading platform. Like G-Soko, EAX also uses electronic warehouse receipts, and already several banks have signed up to provide financial services to transactions and actors on the Exchange.

A salient point to note is that trading platforms such as G-Soko and commodity exchanges actually complement each other; therefore, there is significant opportunity to take advantage of synergies between trading platforms and exchanges to further enhance grain trade and benefits thereof to value chain actors and the broader regional economy.

Challenges with technological innovations

Innovations do not come cheap; a combination of development costs and taxation make a lot of innovations too expensive for the average African farmer. This has meant that adoption of technologies is still widely supported by donors, which makes such technologies unsustainable in the long run if they do not have in-built mechanisms to sustain themselves.

Many farmers also operate outside organized farmer groups or cooperatives, making technological adoption far more challenging and costly for individual farmers. This is exacerbated by the fact that there is still limited awareness of technological innovations among value chain actors, especially farmers.

Two major obstacles that may limit the effectiveness of commodity exchanges: (1) they require huge volumes of commodities to be transacted to make the exchange viable for traders and sustainable as an institution; and (2) the tendency of governments to intervene in grain markets in an ad-hoc manner without clear and predictable rules for such intervention or participation.

Conclusions

It is evident that technology is part and parcel of improving grain trade in Africa. It not only plays a key role in stimulating production at farm level, but is also highly essential for reducing post-harvest losses, aggregating commodities into economically viable quantities, and for efficient market linkages, to name but a few. Making effective use of technology allows optimisation of benefits accrued to all levels of the grain value chain and further contributes to broader socioeconomic objectives.

To effectively harness the power of technology;

- Governments should design policies that encourage the adoption of appropriate technologies. This includes, among others, reducing or removing some of the taxes imposed on them. This will also help to make technologies more affordable to value chain actors, particularly farmers, who are frequently isolated from technological innovations that could benefit their farming activities.

- Industry stakeholders such as EAGC should identify and promote uptake of effective and affordable technologies in grain trade. The funding of these technologies should use a PPP approach to make them more affordable and facilitate uptake.

- Industry stakeholders should also increase awareness and enhance the capacity of value chain actors, particularly farmers, to take advantage of the various innovations available. Continuous efforts should also be made to mobilise farmers into cooperatives, which would allow them to pool resources and collectively to take advantage of existing innovations to improve their productivity and eventually secure better prices for their commodities.

- Governments should exercise restraint in participating directly in grain markets. Their participation, if and when required, should be guided by clear and predictable sets of rules to avoid disruptions to the markets, which would eventually compromise the objectives of trading platforms and commodity exchanges.
6. USING ICT TO CREATE AN ENABLING ENVIRONMENT FOR GRAIN TRADE: THE ROLE OF THE EAC REGIONAL FOOD BALANCE SHEET

By Roy Gitonga, East African Community

Current trends and dynamics worldwide demonstrate that Information and Communication Technologies (ICTs) are immensely contributing towards transformation of agricultural sectors (2013, World Bank). The Regional Food Balance Sheet (RFBS) is an ICT based tool that allows for online data submission from the public sector, represented by the ministries responsible for agriculture in the EAC Partner States, Food Relief Agencies represented by World Food Programme (WFP) and over 200 private sector institutions coordinated by the East Africa Grain Council (EAGC). The system is managed by the East Africa Community secretariat in Arusha on behalf of the Partners States of Burundi, Kenya, Rwanda, Uganda and United Republic of Tanzania.

RFBS has been developed by the EAC Secretariat with support from USAID in collaboration with EAC Partner States (relevant public and private sector organisations). Development and implementation of RFBS is one of the key provisions in the EAC Food Security Action Plan (EAC, 2011).

The background behind its development is the recognition of its importance as a tool for the regions’ efforts in managing the food security situation. In principle, the RFBS is designed to give accurate and reliable information about food availability in the current period. It is a departure from the known traditional food balance sheet, which gave historical information (EAC, 2013).

The objective of the RFBS project is to provide evidence-based data to inform policy decisions on movement of food from regions of surplus to deficit, taking advantage of the East Africa Community Common Market Protocol (EAC, 2010).

Through the system, data on national production estimates, strategic reserve stocks, stocks held at house hold or farm retention, consumption and estimated monthly utilisation is provided from the responsible government ministries. This data is analysed together with private sector stocks and projected imports and exports to provide monthly estimates of surplus or deficit for 12 selected commodities that include maize, rice, wheat, millet, sorghum, barley, beans, peas, chickpeas, cowpeas, pigeon peas and green grams.

The registered government and private sector focal points with assistance of the EAGC staff populate the data directly to the portal or through an automated email system. The central system managed by the EAC Secretariat aggregates the data and produces national and regional food balance sheets and other reports.

The institutional arrangement for pooling and reporting of RFBS data is as adopted in the EAC Regional RFBS meeting. At National level, the National Food Balance Sheet Committee, which is co-chaired by the Ministry of Agriculture and Private Sector (EAGC in the case of Cereals and Pulses), oversees the process of RFBS data pooling and reporting.

The responsibility of pooling RFBS data for cereals and pulses lies in three institutions in every country as follows:

- Ministry of Agriculture
- Private Sector – Coordinated by EAGC
- Food Relief Agencies – Coordinated by WFP

Government

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Food Relief

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The success of the EAC RFBS (Cereals and Pulses) depends on timely collection and uploading of the data by these institutions in each country. The RFBS portal helps to ease the work of these institutions by providing for each institution to upload the data that they are responsible for to the RFBS Portal in the comfort of their offices for review by all parties before the upload of the RFBS to the EAC RFBS Data Pooling. (2011, Kagira and Talaam)

National Food Balance Sheet Committees (NFBSC) are meant to be convened on a monthly basis to validate the National data submission before forwarding the data to the EAC secretariat.

The East Africa Community Partner’s states have agreed on the template and methodology for data collection for Cereals and Pulses. To this end there is a published manual for the Regional Food Balance Sheet – Cereals and Pulses component.

The project has also put in place an elaborate plan for continuous data submission from over 200 Private Sector institutions coordinated by the EAGC in all 5 Partner States of the East Africa Community

The Regional Food Balance Sheet is an innovative mechanism aimed at production of timely Food Balance Sheets that are forward looking. This is significantly different from existing annual food balance sheets that are historical and contain largely statistical information. The RFBS information is a mix of both statistical and estimates or projections to help decision makers make informed decisions.

In analysing the impacts of RFBS, the link between regional and national food balance sheets information and impacts is built on a number of assumptions. With information available (on production estimates, demand, available stock for each of the 12 commodities), the beneficiaries (policy makers, private sector and relief agencies) will make informed decisions on the most cost-effective way to source for commodities and the most beneficial policies to implement to avoid hurting the business community, producers or consumers (Mtambo, 2012). Knowledge of surplus or deficit and possible locations will also allow the private sector to plan and make market linkage across partner states ahead of time and use the existing common market protocol to facilitate the movement of commodities from surplus to deficit areas.

The targets and impacts of the initiative are as follows:

(i) Reduction in number of export bans

The target set for this indicator is that the project would contribute to the reduction of export bans in the East Africa Community. The EAGC was approached by the Kenya government on several occasions to advise on food security and possible policy action to address the shortage of some of the commodities captured in the RFBS. EAGC was able to advise the government based on information available on the Regional Food Balance Sheet. (2013, EAGC)

(ii) Increase in intra-regional trade of staple food

The target for this indicator was to contribute to increased trade of regional traders by taking advantage of information on the RFBS. Intra-regional trade in agricultural commodities has been increasing in the EAC for the past 10 years. Though the growth may not be wholly attributed to the RFBS, contributors to the RFBS have indicated that they make reference to it to get indications on availability of stocks.

Expansion of RFBS

Efforts to expand the scope of RFBS beyond cereals and include other components on livestock, fisheries, horticulture and industrial crops are underway. The products expected to be included in the RFBS are sugar and sugar products, oil crops and vegetable oils.

Conclusions

The role of RFBS in creating an enabling grain trade environment and providing evidence-based tools for decision-making has been demonstrated by the implementation of the Staple Foods Component. However, for the benefits of RFBS to be fully harnessed, institutionalisation and sustainability of the system is crucial. The private sector and public sector need to appreciate that data collection and submission is a necessary and critical process that must be sustained on a monthly basis, to reap the benefits of a free and open regional market without the risk of adverse export bans and national policies that are detrimental to private sector business operators and producers of staple foods.

The RFBS inception and implementation was made pos-
sible by funding from the US government through the USAID COMPETE project and its predecessor the EATH. This project came to a conclusion. One of the main challenges at hand is the ability of the secretariat and national governments to sustain the initiative beyond the support from the donor.

The Sectoral Council on Agriculture and Food Security has since urged EAC Partner States to provide budgetary allocations to support the continuity and sustainability of national food balance sheets as from FY 2015/2016 (EAC, 2014). It is anticipated that Partner States will be able to fund national activities that include monthly national food balance sheet meetings, data collection and timely monthly data submission.

About the author: Roy Gitonga is the Trade and Agriculture Systems Development Advisor, East Africa Community Secretariat.
7. MAIZE LETHAL NECROSIS (MLN) DISEASE AND ITS PRESENT AND POTENTIAL IMPACT ON MAIZE VALUE CHAIN IN AFRICA

By Dr.B.M. Prasanna, CIMMYT, Nairobi, Kenya

Introduction

The Maize Lethal Necrosis (MLN) disease has emerged as a major threat to food security in eastern Africa, since 2011. This devastating disease was first reported in the South Rift Valley of Kenya (Bomet and Naivasha districts) in September 2011 and consequently in several other provinces in Kenya. In the last two years, it has been reported in Uganda, Tanzania, Rwanda, D.R. Congo and Ethiopia.

MLN results from infection of a maize plant by the Maize Chlorotic Mottle Virus (MCMV) and any of the cereal viruses in the Potyviridae group, especially Sugarcane Mosaic Virus (SCMV). Between 2011 and 2014, MLN was reported by most countries in east Africa including Kenya, Tanzania, Uganda, Rwanda, D.R. Congo, and Ethiopia. Kenya and Uganda have both registered MLN as a threat to food security in their country reports as per the International Plant Protection Convention (FAO, 1997). The impact of the disease is becoming massive, especially at household level for smallholder farmers who can experience total loss (100 per cent of grain yield). Although MLN is caused by co-infection of maize by MCMV and SCMV, severe crop damage does not occur without MCMV. SCMV has been endemic in Africa for more than three decades.

MLN-infected maize plants show chlorotic mottling on the leaves, usually starting from the base of the young leaves in the whorl and extending upward towards the leaf tips. Advanced stages of the disease are reflected by necrosis (drying-up) of the leaf margins and progressing to the midrib, stunting of the plant, and eventual necrosis of the leaves and whole plant. Plants that are affected at the later stages of growth show chlorotic mottling on the leaves and dry leaves starting from the top. They are also either barren (with no ear formation) or have poor seed set. Fungal infections were also often observed on the MLN-affected plants. Severely affected plants often resulted in diseased ears and poor quality of grains that are unfit for consumption (Prasanna, 2015).

Impact of MLN on the maize value chain

Although MLN is not a new disease to the maize scientific community in the USA and some other countries outside Africa, it is now a serious regional problem in Africa. Within a short period, the disease had hugely impacted several countries, including Kenya, Tanzania, Uganda, and Rwanda, besides recent reports in D.R. Congo and Ethiopia.

MLN has devastating effects not only on the maize grain yield and the livelihoods of the resource-poor farmers in the affected region, but also on other actors in the seed value chain, especially seed companies and maize processors. Demand for seed of commercial maize varieties has reportedly decreased in the MLN-affected countries in Africa, with consequent losses to the seed companies, due to a reduction in seed sales and carry-over of significant quantities of seed. Thus, in addition to the farmers, small- and medium-enterprise seed companies are highly affected by the intensity and spread of MLN.

A recent study by the CIMMYT Socio-economics’ team in Kenya showed that the distribution and severity of MLN were highest in the tropical mid-altitude and moist transitional zones, where by 2013 all communities were affected. This happened also in the lower dry and coastal areas. Western Kenya was the hardest hit (more than half of the farmers), followed by Central and Eastern Kenya (up to a third of farmers). Yield losses were highest in Western Kenya, followed by the highlands and the coast, but low in the dry lands. Kenya’s loss was estimated at 0.3 million tonnes per year, or 23% of the average annual production before MLN, estimated at US$ 110 million (US$ 365/ton).

The situation is particularly critical as more than 95 per cent of the commercial maize varieties in eastern African seed market are vulnerable to MLN. This means that Kenya and the neighbouring countries where the disease has been reported are on the verge of serious food insecurity, unless urgent and intensive actions are taken. The USDA Foreign Agricultural Service estimates yield losses to be as high as 10% for the 2014/2015 marketing season, amounting to more than US$ 50 million (USDA, 2014).
Tackling the MLN challenge on multiple fronts

To effectively counter the incidence, spread and adverse impacts of MLN in sub-Saharan Africa, there is need for strong, coordinated and synergistic efforts from multiple institutions since the challenge is complex and multi-faceted. Developing and deploying MLN-tolerant maize varieties is one of the most important and cost-effective approaches that can provide immense relief to farmers and seed producers. Since 2012, the CIMMYT team, in partnership with Kenya Agriculture and Livestock Research Organisation (KALRO) and advanced research institutions in the USA, has intensively undertaken research-for-development on various fronts. A few are highlighted below:

Identifying/developing MLN-tolerant/resistant improved maize varieties

With generous support from the Bill & Melinda Gates Foundation, Syngenta Foundation for Sustainable Agriculture, and CGIAR Research Program MAIZE, an MLN Screening Facility was jointly established by CIMMYT and KALRO in 2013 at the KALRO Dairy Research Center at Naivasha.

This quarantine facility is serving as a platform to screen a large array of maize germplasm from diverse institutions based in SSA (including CIMMYT, NARS and the private sector) for identifying sources of tolerance and resistance to MLN. Intensive evaluation over the last three years has led to the identification of a set of promising MLN-tolerant inbred lines and pre-commercial hybrids. Information on this promising germplasm was shared with both public and private sector institutions in Africa through CIMMYT updates. Also, seed material requests for MLN-tolerant inbred lines from interested public and private institutions are also attended to by CIMMYT-Kenya and CIMMYT-Zimbabwe maize seed systems teams.

Figure 11: trials of MLN-resistant maize hybrids have been promising. The left hand rows are conventional maize hybrids while the right-hand rows are MLN-resistant hybrids. Photo by CIMMYT

Release and commercialisation of first generation of MLN tolerant maize hybrids in East Africa

Five MLN-tolerant maize hybrids, developed by CIMMYT, have already been approved for commercial release in Kenya, Uganda and Tanzania during 2013/2014. These are UH5354 and UH5358 in Uganda, H12ML and H13ML in Kenya, and HB607 in Tanzania. UH5354, released in Uganda in 2013 by NARO, is now being commercialized by NASECO. UH5558 entered farmers’ assessment and national performance trials (NPT) in Uganda in 2014, and was recommended for release in 2015. H12ML (CKH10769), a MLN tolerant hybrid, completed a DUS testing process in 2015 and white label has already been delivered for the breeder seeds of the parents by KEPHIS in Kenya. Descriptor data was delivered to Kenya Seed Co. (KSC) to fast track the official release of the hybrid. The hybrid is expected to be commercialised by 2016 in Kenya. HB607, another MLN tolerant hybrid, was recommended for release in Tanzania in 2014. Descriptor data was delivered to Meru Agro to fast track the official release of the hybrid. In addition, a total of nine MLN tolerant hybrids (three in Kenya, four in Tanzania, and two in Uganda) are currently in NPT and/or farmers assessment.
Understanding and preventing seed transmission of MLN-causing viruses

MLN-causing viruses are transmitted individually in the field from infected maize plants or other co-hosts of MCMV and SCMV by insect-vectors. MCMV was also shown to survive in maize crop residues. MCMV and SCMV can also be either seed-borne (seed produced from an infected plant can be carrying the virus) or seed-transmitted (virus can pass on from infected seed to a new generated plant).

It is becoming clear that seed transmission of MCMV is playing a role in the rapid emergence of MLN across eastern Africa. Circumstantial evidence also suggests recent introduction of MCMV to Africa, probably through contaminated maize seed. Although MCMV was previously shown to be transmitted through seed at very low frequencies (0–0.33 per cent; Jensen et al. 1991), preliminary results from recent studies suggest much higher rates of seed infection by MCMV in Kenya (Mahuku et al. 2015). Though quantitative assessment of seed transmission of MLN-causing viruses has not been published recently, evidence in eastern Africa so far indicates that these viruses can be carried through seed, especially when the seed production fields have high incidence of MLN.

Even a low rate of seed transmission is epidemiologically significant, as the virus may be introduced into new areas through seed. Also, in conjunction with secondary spreading by insect-vectors, a low rate seed transmission can translate into high numbers of infected plants, resulting in epiphytotic conditions. Considerable efforts are needed to further understand the factors – at the genotypic, developmental, and environmental levels – influencing seed transmission of MLN-causing viruses, especially MCMV.

Thus, it is very important to recognize the seed transmission risk of MCMV, and implement necessary phytosanitary measures to negate or minimize the risk. All the institutions, public or private, involved in maize seed production in MLN-affected countries in eastern Africa must take rigorous measures to ensure that the seed produced is free from MLN-causing viruses, and that only such seed is commercialised.

Efforts to ensure MLN-free seed production and exchange in SSA

Without robust sanitary and phytosanitary (SPS) systems, there is a huge risk of extensive production losses happening in the maize value chains in SSA, due to the spread of MLN. Linking the NPPOs in SSA into a “community of practice” (COP) for implementing harmonised protocols on one hand, and assisting the COP with linkages to commercial companies that can effectively provide reliable diagnostic kits/reagents are both critical for preventing the spread of MLN/MCMV from the MLN-endemic to non-endemic areas.

Besides phytosanitary agencies, the COP should include members of appropriate regional organisations, especially EAC, COMESA, ASARECA and national, regional seed and grain trade organisations. This will enable dynamic feedback loops within the COP.

Figure 12: Stakeholders at an inception workshop for a USAID-funded project combating MLN in Eastern Africa. Among other initiatives, the project will establish a Community of Practice amongst key stakeholders as a coordinating mechanism and knowledge sharing platform for combating MLN.
As a general rule, planting of healthy, certified and treated seed is the first step for the production of a healthy crop that can result in healthy seed. If MLN-causing viruses, especially MCMV, enter into a new area through seed, and the infected plants are not diagnosed and rogued out immediately, control of the disease could become difficult. This is due to the possible presence of insect-vectors in the field that can transmit the viruses into neighbouring fields.

From the phytosanitary perspective, it is important to evaluate the presence of MLN-causing viruses, especially MCMV, in commercial seed lots meant for exportation to countries where MLN/MCMV is reportedly absent. In principle, the level of tolerance should be zero for acceptance or rejection of a seed lot where one of the two viruses causing MLN is detected. Ideally, seed produced from a plot that showed MLN-infected plants must NOT be transferred to a known MLN-free location. Keeping a commercial seed production field completely free from the MLN-causing viruses in endemic areas requires significant efforts. In all cases, any additional conditions (additional clauses) for phytosanitary testing etc., proposed in the import permit from the receiving country, will need to be met in full. In May 2015, CIMMYT published a brochure on ‘MLN Pathogen Diagnosis, MLN-free Seed Production and Safe Exchange to Non-Endemic Countries.’ (Mezzalama et al., 2015).

**A new initiative on MLN diagnostics and MLN-free seed production**

With funding support from USAID, CIMMYT has recently initiated a project titled “Controlling the spread and impact of MLN in Sub-Saharan Africa through improved diagnostic capacity and MCMV-free commercial seed production.” The project will focus on launching intensive inter-institutional efforts for:

a) Establishing an effective MLN surveillance and monitoring system in SSA, including web-based information exchange between relevant institutions;

b) Setting-up a COP among the seed companies, on one hand, for implementing standard operational procedures (SOPs) for MCMV-free seed production and deployment, and among the national plant protection organisations (NPPOs) along with national/regional seed and grain trade organisations in SSA;

c) Supporting the commercial seed sector in MLN-endemic countries in producing MCMV-free commercial seed, and promoting the use of clean seed by farmers, in partnership with AGRA and AATF;

d) Implementing harmonised protocols for detecting MLN-causing viruses, especially MCMV, in commercial seed lots;

and e) designing and implementing a model for voluntary, private sector-driven MCMV/MLN containment including access to cost effective laboratory diagnostics.

**Policies to promote sustainable intensification of maize-legume cropping systems and curbing the spread of MLN in Africa**

At a recent high-level policy forum (October 27-28, 2015), organised jointly by ASARECA and CIMMYT at Entebbe, a joint communiqué was released by the ministers of Agriculture from Kenya, Mozambique, Rwanda, Tanzania and Uganda on sustainable intensification of maize-legume cropping systems in eastern and southern Africa. The Communiqué included an array of important policy recommendations on promoting sustainable intensification through enhanced input access, building on social capital for collective action, removing barriers to cross-border trade, and curbing the spread of MLN. To prevent the spread of MLN in Africa, the following recommendations were made:

1. **Governments** should:
   - Mandate and enforce synchronised maize planting and maize-free windows in severely affected areas to break the virus cycle and encourage intercropping with legumes.
   - Mobilize a dynamic extension system to create adequate awareness among the farming communities on appropriate MLN diagnosis and management measures.
   - Strengthen national phytosanitary capacities and establish a community of practice for effective surveillance and monitoring in the region, by linking national plant protection organisations (NPPOs) in the sub-region to implement harmonised MLN diagnostic protocols using brief and simple survey forms that are standardised for the region.
   - Establish a dynamic, open-access MLN portal that provides latest updates on disease status in different countries, promising MLN tolerant varieties, MLN management recommendation domains.
   - Fast track the release of maize tolerant and resistant varieties.
   - Strengthen private and public sector seed testing laboratory capacity for MLN diagnosis.
   - Promote maize-legume crop rotations in MLN affected areas for both prevention of virus spread and soil improvement.
2. National plant protection organisations (NP-POs) should:
   - Not allow the movement of commercial seed between MLN-endemic to non-endemic countries without MLN-free seed certification, to prevent the spread of MLN through contaminated commercial seed.
   - Establish MLN quarantine sites in non-endemic countries for free movement of germplasm for research.
   - Use accredited laboratories with harmonised testing protocols to issue certificates of testing for MLN.

3. Seed companies should implement standard operating procedures (SOPs) to produce MLN-free seed along the seed development value chain. All public and private institutions involved in maize seed production, especially in MLN-endemic countries, must take rigorous measures to ensure that the seed produced is free from MLN-causing viruses, and only such seed is commercialised. Every step in the seed value chain should be planned and implemented through SOPs to minimise the risk of MLN pathogen transmission through seed. The responsibility for MLN-free seed production should rest with the seed companies.

4. Extension service providers should:
   - Provide well-informed, science-based, clear instructions to the farmers as to what actions to take for diagnosis and management of MLN. Farmers need to be trained on all aspects of MLN detection, plant rouging, residue management, tillage practices and the need to report suspected incidences to agricultural authorities.
   - Create awareness and encourage use of integrated MLN control practices including crop rotations with non-cereals especially legumes.
   - Encourage farmers to use pesticides to control insect vectors that transmit MLN causing viruses.

5. Farmers should be encouraged to:
   - Adopt and use the proven practices for diagnosis and integrated MLN management
   - Share their indigenous knowledge and technologies related to MLN management to enhance generation of more lasting solutions to the MLN epidemic.

6. Researchers should analyse and recommend economically viable options in terms of crop diversification, crop rotations and alternative agro-enterprises in MLN affected areas and countries to ascertain market potential and returns on investment to farmers.

Conclusions

MLN is complex and effectively addressing it has to be through several simultaneously-implemented strategies, including development and deployment of MLN tolerant and resistant germplasm, agronomic mitigation practices, crop rotations (especially with legumes), and preventing further spread of MCMV from endemic to non-endemic areas. In the long run, controlling MLN through use of resistant hybrids and cultivars, in combination with improved agronomic practices, is likely the best solution.

CIMMYT has been at the forefront in screening a large array of maize germplasm against MLN under artificial inoculation (since 2012), developing and deploying MLN-tolerant germplasm adapted to Africa, optimising MLN diagnostic protocol, and training personnel from regulatory agencies and seed companies on MLN diagnosis and management.

Efforts to tackle MLN in Africa, and providing much-needed relief and hope to African smallholders, who depend on maize for their income and livelihoods, must be intensified. This requires strong support from policy makers and governments, coordinated and synergistic efforts of various institutions engaged in maize R&D, and greater commitment from all the players involved in the maize value chains in Africa.

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8. A HETEROGENEOUS MIX OF WAREHOUSE RECEIPT SYSTEMS IN THE EASTERN AFRICA REGION

By: Samwel Rutto, Eastern Africa Grain Council

The importance of warehouse receipt systems (WRS) and collateral management arrangements cannot be underestimated as key components for the development of grain markets, producer finance and commodity risk management, which are critical for structured trading in the Eastern Africa countries.

On recognising the importance of WRS, there have been attempts to reach consensus on the need for regional harmonisation on national WRS and formation of a regional commodity exchange in the EAC countries. The argument behind these thoughts is that the systems would increase regional trade flows. But one would ask: Is there room for such harmonisation? Would this harmonisation encourage national WRS and exchanges to continue their operations? To what extent has the national WRS been effectively used and what are the obstacles to their full and effective utilisation? How will the regional WRS be regulated?

This article tries to counter thoughts of WRS harmonisation in the region, bearing in mind the heterogeneous mix of WRS and Commodity Exchanges in the eastern Africa region, due to different forms of WRS regulatory frameworks and the disconnect between the national market institutions with the regional markets.

1. Different forms of WRS regulatory frameworks in the region

WRS regulatory frameworks allow licensing or certification of warehouse operators to independently operate the business of storing grain commodities and not storing their own grains, to avoid conflict of interest. The regulation also provided rules by which warehouse operators receive grains for storage and their rights and obligations when accepting grains for storage. It also allows use of a warehouse receipt, which is the legal title for goods being stored and which is issued by the certified warehouse operator, to be pledged or mortgaged to a bank, or transferred to another in a sale or purchase (negotiated).

This means that if you own the warehouse receipt, you own the goods and if you sell the warehouse receipt, you are selling the underlying goods themselves in the warehouse. Finally, creating a warehouse receipts regulatory structure provides opportunities for traders and financiers. These opportunities bring working capital into the marketplace for grain commodities, which in turn benefits producers and rural traders by bringing greater financial liquidity into the grain supply chain.

In the Eastern Africa region, there are two categories of WRS regulations as described below:

a) WRS regulated by the State

In this case, the regulatory service is a State-controlled technical service where a regulatory body is mandated through a WRS Act to license warehouses and to ensure that they perform accordingly to a set of clearly understood rules and regulations. This may involve suspension or revocation of licenses, or taking over of the management of failing warehouses.

b) WRS regulated by a trade body

This is an industry self-regulation model where a trade association may carry out regulation of WRS on a purely contractual basis, or under delegation of State powers.

2. Diverse Forms of Warehouse Receipts and Trading Components

Presently, national WRSs issue paper receipts. This confines the systems to domestic markets and hinders trading on electronic platforms. The East African Exchange (EAX) has been issuing electronic warehouse receipts for trading on the NASDAQ platform, though the system is only operational in Rwanda. However, there are efforts to roll it out in other East African countries. The integration of national WRS with regional trading platforms is of great importance.

Review of different forms of WRS and their regulatory frameworks in some countries.

1. Tanzania


In 2014, the WRS Act 2005 was amended to introduce the WRS regulatory board and to allow the use of both physical and electronic receipts. On regulatory systems, the Act was amended to establish regional and district supervisory authorities and committees chaired by district or regional commissioners. The committees were designed to perform the following functions:

a) Ensure that depositors are paid according to the quality and quantity of the goods sold competitively;

b) Ensure that key actors comply with Tanzania laws;

c) To promote the warehouse receipt system in their administrative areas;
d) To clarify on different issues on the implementation of warehouse receipt systems arising in their areas of jurisdiction

e) Report to the board through laid down government procedures;

f) Advice central government, on matters related to warehouse receipt systems, based on their administration areas.

2. Uganda

Ugandans founded the Ugandan Commodity Exchange (UCE) in 1998 from the EU funding support. The Government of Uganda designated UCE as its WRS regulator under the WRS Act of 2006 and Regulations of 2007. UCE implemented the system of electronic warehouse receipts (eWRs) for maize and beans until 2013, when it stopped operating due to WRS challenges in Uganda. In January 2015, Uganda Warehouse Receipt System Authority (UWRSA) under Ministry of Trade & Industry was instituted to replace UCE. The UWRSA was mandated to license warehouses, warehouse keepers and inspectors as well as issuance of negotiable and non-negotiable receipts.

3. Rwanda

Championed by different organisations including Research In Use (RIU), FAO among others, the warrantage system has since been introduced in Rwanda. “Warrantage”, a French word commonly used in West Africa, describes the inventory credit system (normally called the warehouse receipt system, or WRS, in English). The warrantage under self-regulation system in Rwanda allows farmers to use their harvests as collateral to obtain credit from a bank rather than selling their harvest at once.

East Africa Exchange (EAX) was established in Rwanda in early 2013 and it is powered by the NASDAQ OMX trading platform. EAX, which operates under Rwanda Capital Markets Authority (CMA), has been certifying warehouses under its own rules and regulation. However, a WRS Bill to establish and regulate the warehouse receipt system in Rwanda has been developed and tabled in Parliament. Once the Bill is enacted, the Ministry of Agriculture shall be the licensing and regulating authority.

4. Kenya

Eastern Africa Grain Council (EAGC) introduced the WRS in Kenya in 2008 after a feasibility study commissioned by Financial Sector Deepening (FSD) Kenya. EAGC takes the responsibility of overall leadership and co-ordination of the system and also acts as the regulator. This involves certifying warehouses that receive grain deposits and issuing tradable and transferable warehouse receipts.

The EAGC WRS model is under self-regulation and it is pegged on Contract Law where WRS protocols, commodity care rules and a conventional set of certification criteria covering capital adequacy, insurance cover, and general warehouse management are embedded in the regulatory framework. Certification is provided on the basis of documentary information and the due diligence of inspection companies. In 2009, the Ministry of Agriculture in partnership EAGC developed a WRS Bill that is yet to be enacted. The Bill focuses on the establishment of the WRS Council to regulate WRS in future.

In 2014, EAGC redesigned its WRS model into the G-Soko system – an electronic system comprising of a network of automated grain aggregation centres and certified warehouses, linked to a virtual regional trading platform. The G-Soko system, which is a hybrid of electronic warehouse receiving (for Kenya) and trade facilitation models (for Tanzania & Uganda), is self-regulated through Council’s Code of Practice.

Conclusion

WRS regulated systems can only be harmonised and work in the region, if countries are prepared to establish regulatory frameworks that build confidence in the agricultural sector. Such systems will assure standardised documentation across countries, particularly electronic documentation, and can establish uniform performance that guarantees depositors that their commodities would access both domestic and regional markets.

East African countries should opt for a regulatory institution that is less susceptible to political interference and where possible, pursue regulation by an industry body. One advantage of EAGC is that it is able to certify grain warehouses in countries within the region, reducing the need for each country to establish its own system for grain commodities.

About the Author: Samwel Rutto is the Regional Manager, Structured Trading Systems at the Eastern Africa Grain Council and a leading expert on Warehouse Receipts Systems in East Africa.
9. Warehouse Receipt System and Access to Agricultural Credit: Lessons from the East African Community Region

Stella Massawe, Silas Ongudi, Joseph Karugia and Paul Guthiga

1. Introduction

Agricultural enterprises require affordable credit and other financial services to invest in inputs (such as: labour, quality seeds and fertilizers) for increased yields or working capital to scale up business operations. In the East African Community (EAC) region, only a few farmers and agricultural traders access bank loans for their activities despite growth and expansion of the finance sector. This is a major constraint to agricultural productivity and agribusiness growth in the region (World Bank, 2013). Some of the reasons for limited access to bank loans by smallholder farmers and traders are: lack of credit history and proper records, limited education and lack of collateral (movable or immovable) to pledge for the repayment of the loans (Ernst and Young, 2011).

In addition, many financial institutions are reluctant to serve the agriculture sector given its seasonality and the inherent risks. Furthermore, few formal financial institutions have good knowledge and understanding of the agriculture sector, hence the limited number of agriculture-credit related products. Savings and Credit Cooperative Societies (SACCOS) could have filled the needed gap. However, their capacity to do so is limited by constraints such as: limited financial resource base, limited institutional capacity (e.g., human resource and technical), weak regulations and supervisions, inefficient internal control systems and governance problems (Mudibo, 2005).

The warehouse receipt system (WRS) offers an alternative way of accessing agricultural finance from the banks. The system allows commodities to be deposited in a designated and reliable warehouse that enables farmers to access credit, using stored commodities as collateral. WRS has been implemented in various parts of the EAC region. It is important to understand what has been the experience so far. This issue brief presents part of the findings of a study conducted in the EAC region (focusing on: Kenya, Rwanda, Tanzania and Uganda). The objectives of the study were to review WRS implementation in EAC to generate information to guide design and implementation of future WRS interventions in the region.

The role of WRS financing in enhancing access to agricultural financing was one of the issues addressed by the study. This brief focuses on this issue.

2. Methodology

Data for this study were sourced from existing knowledge products (including journals, theses, book chapters, technical reports, presentations, media reports and newsletters) and key informant interviews. First, secondary information was obtained through a desk review and visits to relevant organizations. In this regard, the study benefited from various country specific empirical studies conducted in the recent past, which allowed summarizing of lessons and experiences emerging from the region. Secondly, face-to-face key informant interviews were conducted. Purposive sampling was used to select key informants based on their prior knowledge about the operation of WRS in the region. The interviews were guided by a checklist covering: the experience in implementation of WRS, targeted commodities, challenges and opportunities, critical success and failure factors, lessons and recommendations for improvement. Finally, an online survey using a ‘survey monkey’ based on the checklist was sent out to key respondents.

Both qualitative and quantitative data were collected. Qualitative data covered: stakeholders’ involvement in WRS, WRS projects implemented, activities carried out by the WRS interventions, benefits from participating in WRS, challenges, and opportunities. Quantitative data collection, however, involved: the level of funding for WRS interventions, amount of credit loaned, number of financial institutions supporting WRS and benefits resulting from WRS. We used content analysis to systematically describe and categorize written or spoken communication to generate quantitative (numerical) description. Key findings and lessons arising from study research questions were established. Descriptive statistics were used to summarize numeric data gathered during the study.

3. Results and Discussion

3.1 WRS financing in EAC

WRS is being implemented in all the three study countries in the EAC region and for various crops: maize, beans, cashew nuts, coffee, cotton, pigeon peas, rice and sesame seeds. Introduction of the system has encouraged banks to design a new loan product (on WRS). More than 25 financial institutions are involved in WRS financing in the region. The financiers are local, regional and international banks (see Table 1). Loans are issued...
to depositors who could be individual farmers or traders, farmer groups, cooperatives and traders’ associations. Under WRS financing the stored commodities serve as collateral and depositors are able to access loans equivalent to 70% of the value of their commodity. However, we could not access comprehensive data on disbursements due to credit data confidentiality. Table 2 presents illustrative figures of the level of lending.

Table 1: Financial institutions supporting WRS in EAC

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<td>Kenya Commercial Bank (KCB)</td>
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<td>Mbinga Commercial Bank</td>
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<td>KREP managed financial associations</td>
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<td>National Microfinance Bank (NMB)</td>
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<td>Urwengo Opportunity Bank (UOB)</td>
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<td>Rabo Development Bank</td>
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<td>Stanbic Bank</td>
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<td>Uchumi Commercial Bank</td>
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<td>Total</td>
<td>5</td>
<td>5</td>
<td>9</td>
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Table 2 indicates that at least US$ 115 million have been issued as WRS loans to traders and farmers both at individual and producer/trader group levels across the region. There are mixed results regarding the performance of WRS financing in the EAC region. Data on the cumulative value of WRS loans over time suggest growth in WRS financing. In Kenya, for example, the value of lending through WRS grew by about 420% from 2010 to 2014 (EAGC, 2015). However, concerns exist about the extent to which the smallholder farmers and traders at the grassroots level have benefited from WRS financing. Recent studies and experience indicate that the potential for WRS financing has been exploited by only a few small-scale farmers and traders. Most key informants contacted indicated that they only use WRS to store their goods. We also established from the review of recent ‘WRS interventions’ in the EAC region, that most focused on storage of commodities while the credit component was either minimal or not included. As such, some respondents felt that the term WRS is being misused because by definition it should include the financing, yet this aspect is mostly absent in many cases in the region.

3.2 Benefits of WRS financing in the EAC region

The potential for enhancing access to finance though WRS ought to be further exploited as available evidence shows that it can be beneficial. Some beneficiaries of WRS have been able to access bank loans using their stored commodities as collateral (Pascal, 2010; KENFAP, 2011; IFAD, 2011; Towo and Kimaro, 2013). The loans have enabled them finance their household needs (e.g., paying school fees, covering family health costs, paying labour and construction of residential houses), purchase other assets and obtain working capital (IFAD, 2011; Towo and Kimaro, 2013). Credit access through WRS has also stimulated the use of improved agriculture inputs by enabling farmers to enter into forward contracts with suppliers for timely delivery of farm inputs (Pascal, 2010; KENFAP, 2011; Towo and Kimaro, 2013). This has resulted in increased productivity (IFAD, 2011). Unfortunately, these benefits have only been enjoyed by a few as access to credit for agriculture is still a challenge in the rural areas. Although WRS was designed to address this problem, its potential to do so has not been fully explored due to several constraints, discussed further in the next section.

Table 2: Crops covered, areas of implementation and credit provided through WRS in the EAC region

<table>
<thead>
<tr>
<th>Country</th>
<th>Crops</th>
<th>Location of WRS implementation**</th>
<th>Participating banks and loan disbursed*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>Wheat, maize and rice</td>
<td>Eldoret, Makeni Nakuru, Narok, Transnzoia</td>
<td>Chase Bank (US$ 5 million) by February 2015, Equity Bank over US$ 130,000</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Beans, maize, rice and soybeans</td>
<td>Nyagatare, Musanze, Koyonza, Nyanza, Korongi</td>
<td>Eco-Bank (US$ 7,000), KCB ($252,000), Root Capital (US$ 415,000), UOB (US$ 1.7 million)</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Coffee, cotton, cashews nuts, rice, maize, sesame seeds, sun flower and pigeon peas</td>
<td>Coast, Dodoma, Kagera, Kilimanjaro, Lindi, Mara, Manyara, Mbeya, Morogoro, Mewara, Mwanza, Singida and Tanga,</td>
<td>NMB (US$ 90 million), CRDB (US$ 17.1 million)</td>
</tr>
<tr>
<td>Uganda</td>
<td>Coffee, cotton, maize, beans</td>
<td>Kasese, Jinja, Gulu, Lira, Kapchorwa, Masindi, Mbarara and Tororo</td>
<td>HFL (US$ 844,000), ABI (US$ 5,000)</td>
</tr>
</tbody>
</table>

Notes: ** Main areas where WRS has been implemented through certified WRS; it might not include area where operations started recently. For sources see main report.
3.3 Constraints to WRS in the EAC region

Several factors constrain effective performance of WRS in the EAC region, as illustrated in Figure 1. Some of the constraints affect the system in general, while others are specific to lending through WRS. We start with a discussion on the general constraints to WRS and then delve into constraints to agricultural lending.

3.3.2 General constraints to WRS in EAC

Figure 1 illustrates that many challenges affect WRS in the EAC region. The key ones include: disabling policies, monopoly by a few dominant buyers, weak institutional frameworks for implementing WRS, lack of legal frameworks and/or inadequate enforcement of rules and regulation, inadequate awareness of WRS by the penitential beneficiaries (smallholder farmers, traders and millers) and other stakeholders, limited involvement by the target beneficiaries, inadequate infrastructure (transport, warehouses and communication) and high costs of storage.

We discuss here selected constraints with direct implication on access to WRS financing, especially among smallholder farmers, millers and traders.

#### Limited uptake/participation by small-scale farmers and traders

The uptake of WRS by small-scale farmers remains low in the EAC region (KENFAP, 2011; Rwengo, 2014; Kidango, 2014). The following factors partly explain this observation. The first factor is the high minimum stock requirement (at least 10 metric tonnes or 110 bags) for participation in WRS. Most smallholder farmers produce small volumes, hence it is hard to meet the required minimum volumes. Collective action through producer and trader organizations is being used to address this challenge. However, these organizations face several challenges that affect their effectiveness such as limited organizational capacity and governance challenges. The second is the need for cash to meet immediate cash needs which compels smallholder farmers to sell their produce immediately after harvesting. Third, is the issue of late payments to the depositors of WRS. Reports show several cases of late payment of the farmers involved in WRS that has discouraged other farmers from participating and has also caused several farmers to withdraw their participation. For example, delayed payments in Uganda forced some farmers to drop out of WRS. Similar concerns have been raised among cashew nut farmers in southern Tanzania. Other factors limiting the participation of smallholder farmers in WRS include low productivity and limited access to storage facilities.

![Figure 1: Challenges affecting WRS in the study countries.](image)

Notes: Other factors include limited access to banking facilities.
Institutional and legal framework

Lack of legal and institutional frameworks and weak enforcement of the regulations where they exist are major challenges facing implementation of WRS. The development of a WRS institutional and legal framework to guide its operation has been slow, especially in Rwanda and Kenya. In Kenya a WRS Bill has been developed and submitted to the national assembly for debate, but a Warehouse Receipt Act is yet to be enacted. Rwanda has no law governing the establishment and regulation of WRS.

Tanzania and Uganda have the relevant legal frameworks in place, but there are capacity challenges with the institutional framework for WRS implementation. There are concerns that the regulatory agencies have not been effective in enforcing the laws. Such concerns have undermined confidence in the regulatory framework and uptake of financing opportunities created by WRS. These challenges have also discouraged financial institutions from lending against stored grains.

Zoom to why access to accredit—most smallholder farmers

Although these constraints affect the WRS in general, some are specific to certain commodities. For instance, the last three challenges mostly affect the grain industry discouraging many financial institutions from prioritizing grains among the commodities. Specific constraints to agriculture financing

Access to banking facilities in the EAC region remains low compared to other parts of the World. For instance, Tanzania has less than 2 bank branches compared to South Africa’s 10 bank branches per 100,000 adult populations (IMF 2010). In Kenya and Uganda, only 15-21 percent of rural households had bank accounts between 2009-2011 periods. In the rural areas where agriculture is the main economic activity, the density of bank branches is even lower thus compelling depositors to travel long distances in search of bank loans.

Policy constraints

Policy constraints have profound effects on the functioning and profitability of WRS. On several occasions governments have applied ad hoc policy measures on crop marketing; the justification has been to enhance national food security. Examples of these policies include: the imposition of export bans, waiver of import duties on cereals and setting of minimum grain prices. Most of these policies have not only failed to attain their intended objectives, but have resulted in hurting WRS chain actors. In addition, they have negatively promoted WRS in the region due to the costly stand-off with buyers and WRS operation. Indeed, the governments now need to rethink whether it is appropriate to continue with price fixing while promoting WRS at the same time since any form of price fixing goes against an effective WRS operation.

Inadequate knowledge on the operation of a WRS

Inadequate knowledge on the operation of WRS by various WRS stakeholders is also a major problem in the region. There is limited knowledge among smallholder farmers, traders, bankers, insurers and policy makers. Some studies have shown that women’s WRS knowledge and participation in the system is low (Towo and Kimaro, 2013; Kidando, 2014; Rwengo, 2014; Sanas, 2014). In Kilimanjaro, Tanzania, for example, Towo and Kimaro (2013) found that participation of males was 62.7% while that of females was 37.5%. These findings suggest the need for gender sensitization and capacity building efforts to enhance women’s participation and benefit accruals.

Lack of market information and absence of structured trading system

Availability of market information is a problem in the EAC region, especially for staple commodities (Pascal, 2010; Rwengo, 2010). This is because structured commodity trade is not well developed for staple crops. Trade in staple commodities is largely implemented through speculations and buyers are unpredictable. This situation has affected loan operations for staple commodities. Most banks prioritize loan products for cash crops such as: coffee, cotton and cashew nuts that are traded through structured trading systems. They also find it easy to support grain commodities in a few cases where there is a known reliable buyer for the commodities (e.g., through the purchase for progress programme). Also, farmers face several market related risks which are a disincentive to participation. For example, farmers have to look for better prices on their own. However, as a result of their rural location with minimal network coverage, they are unable to easily access buyers thereby forcing them to sell the product at low prices.

3.3.2 Specific constraints to WRS financing

Access to banks

Effective operations of WRS and WRS financing requires supportive financial institutions with good delivery channels and easier accessibility not only in cities but also in remote rural areas. Although the banking industry has recorded growth, access to appropriate banking infrastructure is still limited in rural areas, including in some food surplus area. Access to banking facilities in the EAC region remains low compared to that in other parts of the world. For example, data shows that Tanzania has fewer than 2 bank branches per 100,000 adults while in South Africa, there are 10 bank branches providing services to the same number of people (World Bank, 2012). In rural areas, the density of bank branches is even lower, compelling depositors to travel long distances in search for bank loans; this increases their logistics and transaction costs.

High interest rates on loans and high costs on processing WRS loans

Although WRS is a new way of accessing credit, smallholder farmers have not fully adopted the system due to the high interest rates charged on loans. Interest rates range from 18% to 24% per annum in the EAC region which is considered high for
smallholder farmers. Such high rates can only be met if prices also increase over time, as anticipated by farmers. However, in most cases, this does not happen partly due to government intervention in the cereal marketing business. In addition, several other charges are associated with processing loans under WRS financing. Examples include: payments to collateral management companies, insurance charges and loan processing fees. These charges are transferred to the loan applicants (farmers or traders) which in turn increases the cost of loans.

**Duration of loan processing**

In some cases loans take a long time to process WRS loans, especially when dealing with staple commodities such as maize and rice. Loan processing for cash crops like coffee, cashew nuts and sunflower tends to be faster than for staple crops. Banks argue that the cash crops are less risky therefore they need less application time. Commonly for staple crops in EAC, banks require additional application scrutiny on a case by case basis to establish possible buyers, prices etc. This lengthy process has discouraged smallholder farmers, traders and millers from participating in the system.

### 4.0 Critical Success Factors for effective WRS

To promote effective operations of WRS in this region, governments must invest in having in place critical factors for effective WRS. The factors are outlined below.

#### 4.1 Effective institutions for implementing and monitoring WRS operations

To ensure successful WRS operation, several institutions need to be in incorporated into the system. Key amongst them are: i) financial institutions (such as: banks, microfinance institutions and SACCOS); ii) insurance firms; iii) licensing/regulatory bodies; iv) warehousing companies; v) viable producer trade groups/cooperatives; and vi) collateral management companies. Effective implementation of WRS requires overcoming institutional difficulties and challenges in: governance, and human resource, technical capacity and financial management.

#### 4.2 Storage and other infrastructure

For effective operations of WRS different types of infrastructure are required including: warehouses/storage facilities, transport and communication. A huge potential exists in addressing infrastructure and storage challenges through public–private partnerships between governments, non-state actors (NSAs) and development partners. Governments should provide incentives to promote private sector investment in warehouse receipts infrastructure, especially in rural areas. To ensure proper targeting of investments and strategic planning, it will be necessary to undertake periodic stocktaking of the number, quality and capacity of warehouses.

### 4.3 Enabling policy environment

An enabling policy environment must be in place to stimulate a strong and transparent market environment required for effective WRS operations. National governments need to have policies that are clear, consistent, transparent and predictable. They should also ensure their implementation and enforcement. Creating an enabling environment entails several policy interventions such as: avoiding ad hoc policy interventions, addressing institutional constraints on policy implementation, establishing institutions in support of WRS governance and provision of political support to the operations of WRS.

#### 4.4 Appropriate legal environment

An enabling legal framework (including presence of WRS legislation, government licensing, inspection and regulation) is a prerequisite for a well-functioning WRS. Although warehouse receipt finance is possible even in very poor or virtually non-existent legal environments, in such conditions transaction costs will be higher and bank credit committees will be more unlikely to approve transactions. It is also necessary to have in place a robust regulatory system and a trusted regulatory agency that transparently enforces all regulations and standards.

### 4.5 Capacity strengthening

Capacity enhancement for all actors involved in WRS is an ingredient for the success of the system. Different actors (smallholder farmers, large-scale farmers, collateral managers, financial institutions, micro-finance institutions, farmers groups etc.) have different capacity needs to facilitate their effective involvement in the system. These needs should be met. Capacity strengthening efforts need to be gender based to reach different groups (e.g. women, men and youth).

#### 4.6 Reliable market information

Access to reliable market information is necessary to enable market players make informed decisions regarding depositing and sale of collateralized stocks. The benefits of using warehouse receipts can be achieved to their highest extent only if the participants in the system are well informed about the domestic and international markets situation and price trends. It will be important to develop market information systems to inform farmers and traders about available market opportuni-
ties at country and regional level. This is critical to stimulate production in food surplus areas of the region that might otherwise lack incentives for using WRS if they cannot access external markets. For investment in the development of market information systems to yield their intended results they have to be accompanied by capacity building of intended beneficiaries to enable them to make effective use of such systems.

4.7 Manageable cost in establishing and running warehouses

Minimization of costs of establishment or operating WRS is an important point to consider. If costs are not well managed WRS can be a very expensive undertaking. The high charges are mainly incurred during establishment and running of a warehouse. They could also arise out of certification processes or collateral management. To manage the cost, it is useful to operate WRS on a large scale to benefit from economies of scale. This requires having in place measures to stimulate full utilization of storage capacity for the warehouses.

4.8 Presence of structured trading system

The essence of WRS is to enable farmers or traders store their crops when prices are low and sell when prices are higher. This concept works well in the presence of assured markets such that sellers can easily sell their products at a certain agreed price. The system has been ineffective (in some cases failed) where market is not assured and prices are volatile. This partly explains why WRS has done well in cases where structured trading systems are in place. A structured trading system is one where farmers, traders, processors, millers, banks and others enter organized, regulated trading and financing arrangements (CTA, 2013). It entails clear rules that buyers and sellers follow. The rules are enshrined in trade contracts and require a clear agreement on quality grades. Within Africa (and in EAC) such systems are commonly used for export commodities such as coffee and cashew nut, but they are seldom used for staple grains. This has contributed to the better WRS performance in such cash crops. This calls for the need to continue promoting and supporting structured a trading system in the grain industry through WRS and commodity exchange at country and regional levels. There is already some promising effort towards that direction with the launch of the Eastern Africa Commodity Exchange (EAX). EAX is a regional commodity exchange established to link smallholder farmers to agricultural and financial markets, secure competitive prices for their products and facilitate access to financing opportunities.

4.9 Beneficiary participation and enthusiasm

Just as is the case for any other agriculture and rural development programme, the success of WRS is highly dependent on the level of involvement of the beneficiaries (e.g., farmers/trader groups, local government authorities etc.) in all stages of implementation (conception, design and implementation). Most importantly, efforts to work with the beneficiaries to design measures to sustain WRS activities after completion of donor funded projects through having in place effective exist strategies. Adequate beneficiary involvement will increase chances of stakeholder buy-in and sustainability of the WRS interventions. Inadequate stakeholder participation creates dissatisfaction among some stakeholders and in some cases resistance which could affect WRS interventions. In Tanzania, for example, there are some concerns smallholder farmers participation is limited in the cross border trade which controls production and marketing of cashew nuts and this has resulted in disagreements, particularly related to price setting.

5.0 Summary and Conclusions

WRS is a potentially growing opportunity for smallholder farmers and traders in the EAC region. Strengthening of WRS can play a pivotal role in addressing the challenges of agricultural marketing and financing. So far, the performance of WRS in the EAC region is characterized by mixed results. Whereas some progress has been made in construction and rehabilitation of warehouses, there is limited borrowing through warehouse receipt financing. Farmers and traders are sceptical of borrowing through the system due to doubts over benefits. With regard to the operations of WRS in general, some crops have performed better than others (IFC, 2013). Relatively better performance has been achieved in the cash crop sector governed by the structured trading system (e.g., coffee and cashew nuts) and poor performance in the grain industry (especially maize). This suggests that structured trading system is useful.

The encouraging perspective is many opportunities exist for promoting WRS. Examples include: high interest and political will by governments, presence many funding agencies willing to support the system, presence of financial institutions with an interest in WRS, presence of non-governmental organizations with knowledge and experience in supporting WRS and presence of the Eastern Africa Grain Council that is playing a great role in supporting the system across the region.

Furthermore, experiences from recent WRS activities offer opportunities for learning how best to design and implement future WRS interventions in the EAC region. WRS chain actors are advised to draw lessons on what worked or did not in recent interventions. An adaptive management approach ought to be used for ongoing WRS interventions. It is imperative for designers, funders and implementers of WRS interventions to continue learning new ideas on how best to implement the system, considering the identified challenges, to enhance the likelihood of achieving their intended development outcomes. This calls for high quality monitoring and evaluation (M&E) in all WRS interventions. Using M&E findings in planning and decision making will be critical.
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Photo credit: IFAD

This brief is a summary from a technical report titled: “Implementing Warehouse Receipt Systems in the East African Community Region: Experience, Opportunities and Lessons for Improvements”

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About ReSAKSS
Established in 2006, the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) supports evidence and outcome-based planning and implementation of agriculture sector policies and strategies in Africa. In particular, ReSAKSS offers high quality analyses and knowledge products to improve policy making, track progress, and facilitate policy dialogue, benchmarking, review and mutual learning processes of the Comprehensive Africa Agriculture Development Programme (CAADP) implementation agenda. The International Food Policy Research Institute (IFPRI) facilitates the overall work of ReSAKSS working in partnership with the African Union Commission (AUC), the New Partnership for Africa’s Development (NEPAD) Planning and Coordinating Agency (NPCA), and leading regional economic communities (RECs). At the regional level, ReSAKSS is supported by Africa-based CGIAR centres: the International Livestock Research Institute (ILRI) in Kenya, the International Water Management Institute (IWMI) in South Africa and International Institute of Tropical Agriculture (IITA) in Nigeria. www.resakss.org.
10. INVESTMENT FACILITATION: A PANACEA TO CLOSING THE CAPITAL GAP IN EAST AFRICA

By: Kanini Mutooni, Investment Director, East Africa Trade and Investment Hub

The capital gap for small and medium-sized businesses (SMEs) in East Africa continues to grow. Capital gap refers to the difference between the capital required by the SME and what they are receiving from private investment. This gap is one of the key constraints facing SME growth in the region. It also has a larger stifling effect on regional economic growth and job creation.

The World Bank estimated that the capital gap in East Africa at the end of 2014 was $8 billion. Yet, there is capital available. Within the last five years, a total of $3 billion has been raised by funds in the region; but, only 50% has been directly invested into SMEs. This raises the question of why a funding gap remains, yet there seems to be funds in the region and SMEs that need them to grow and expand their business models. The reasons put forward for the increasing size of the gap, is that SMEs that are classified as investment-ready are constrained in terms of being able to meet and identify potential investors, who could provide the much-needed capital directly to them. This is referred to as the information gap, while on the other hand; the capital providers say that there are not sufficient numbers of investment-ready SMEs able to absorb this capital.

The concept and design of neutral investment facilitation has come about to solve this problem. Neutral investment facilitation is defined as the process of bringing together both private investment capital and SMEs that require capital through the provision of no-cost transaction support to both the SME and the investor. Transaction support to SMEs could include help with financial modelling, preparing cash flow projections and investment documentation that few SMEs are able to complete themselves. Transaction support to capital providers includes deal structuring, deal sourcing and origination, as well as deal evaluation to determine the viability of a potential investment.

This two-pronged approach ensures that the investor is able to mobilise its capital to investment-ready SMEs and also ensures that the SMEs are able to get front seat access to the investor that they would normally not have had. Investment facilitation must be neutral to ensure complete objectivity from the principals involved in providing the service.
The objective of the principals must be to mobilise private capital from where capital sits to where it is required, i.e. the capital-starved SME.

The East Africa Trade and Investment Hub, in partnership with Cross Boundary Inc, a Nairobi-based US Transaction advisory firm, have pioneered and launched the region’s first donor-funded investment facilitation program. The East Africa Trade and Investment Hub is a USAID-funded $65m flagship program of the Trade Africa initiative, a President Obama program launched in 2013, to boost trade and investment in the East African region. With a mandate to attract and mobilise $100m of new private capital to the region, the design of a neutral investment facilitation approach makes the most sense to maximise impact and create new jobs as a result. The approach is sector driven with a focus on large-sized deals of $1 million and above. The team chose their sectors by determining which had the least access to private capital and the most potential for impact. Our focus sectors are ICT, Financial Services and Agro-business and the geographical mandate is the entire East African Community region, including Ethiopia, Madagascar and Mauritius.

Since the launch of our initiative in November 2014, we have successfully mobilized over 13 million in private capital from investors to SMEs in Ethiopia, Kenya and Uganda in the poultry, dairy and mobile sectors. This investment has resulted in the creation of over 500 jobs in the region and made a significant impact on supporting the growth of business. Our phenomenal success in such a short period is a testament to the need for neutral investment facilitation services in the region and we look forward to mobilising new capital in the coming year 2016. Our private capital investor reach and number of SMEs requiring capital continues to grow. We invite any firms that are interested in our service to contact the teams on the email address and website invest@eatradehub.org www.eatradehub.org.

About the Author: Kanini Mutooni is the Investment Director at the USAID East Africa Trade and Investment Hub.

Contributors’ Pool (Sponsors, editors and contributors)
In the next issue,

ATPAF-ESA Volume VI carries the title, “Addressing Food Safety and Food Quality Challenges in Eastern and Southern Africa”. This bulletin will share insights into perspectives on food safety and food quality challenges in the ESA region and remedial policy measures. The Bulletin will also highlight the role the private sector can play in efficiently attaining food safety and food quality.

ATPAF-ESA IN 2016

2016 promises to be another busy year for ATPAF-ESA as the Forum continues to advocate for an enabling environment to support agricultural trade in the region. The line-up of initiatives includes:

• Identification of areas of priorities for Research for Evidence Based Policy Advocacy in ESA
• Collaboration with United Nation’s Food and Agriculture Organisation (FAO) to conduct studies and policy dialogues on food security in Eastern and Southern Africa in the context of the Tripartite Free Trade Area agreement.
• Launching of a study on contribution of pulses to trade and food security in ESA
• Conducting post-budget synopsis forums in EAC Partner States
• Supporting country-level working groups and action groups anchored under ATPAF-ESA in their policy dialogue initiatives
• Develop and conduct training courses on agricultural trade policy to industry stakeholders in the region

Call for Contributions for the ATPAF-ESA Bulletin

We invite industry practitioners and agricultural trade experts to contribute to the ATPAF-ESA Bulletin series with articles relevant to agricultural trade and trade policy in Eastern and Southern Africa. Contributors will benefit from wide exposure of their work and publications through the ATPAF-ESA readership which extends across Eastern and Southern Africa. Address your articles or enquiries to:

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Email: kmhando@eagc.org

In Africa: Technology, Investment, Information, Policy and Services (T.I.I.P.S.)
Core Member Organisations of ATPAF-ESA

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Ministries of Agriculture and Trade Universities and Agricultural Research Institutions Farmers / National Organisations