Final report

International Growth Centre

Regional value chains in East Africa:

Summary report

Jack Daly
Ajmal Abdulsam
Gary Gereffi

October 2016

When citing this paper, please use the title and the following reference number:
F-38202-RWA-1

DIRECTED BY

FUNDED BY

Introduction

Since the mid-1990s, many East African nations have enjoyed relatively high economic growth rates and made substantial progress in poverty reduction. Nevertheless, firm productivity remains low across sectors, and the region remains highly dependent upon foreign aid as a source of foreign exchange. Therefore, in spite of current optimism, it is not certain that East Africa will continue to grow without substantial transformations in regional networks of production and trade. Within this context, academics and decision-makers in the public and private sectors have considered the potential for regional integration to drive growth. However, even as organizations such as the East African Community (EAC) and TradeMark East Africa have sought to promote greater integration, a number of obstacles remain in the realms of policy, infrastructure, and productive capacity.

This project used the Global Value Chain (GVC) framework in order to systematically identify these opportunities and barriers, as well as policy responses which will maximize the benefits of regional integration, through a focus on firms operating in national, regional and global value chains. Over the course of the last decade, scholars and practitioners of economic development have grown increasingly attuned to the importance of GVCs—production networks that span multiple countries and are characterized by complex inter-firm governance—in structuring the productive economy and driving international trade at the global and regional levels. GVC analysis involves identifying the input-output structure, geographic scope, and lead-firm dynamics (i.e., “governance”) of a particular chain in order to understand how materials, financial resources, and information flow between firms and other stakeholders in the chain. Once a value chain is mapped in terms of the activities and firm location, comparative benchmarking is undertaken in order to assess the position of a specific firm, cluster or country relative to competitors. This also helps identify potential trajectories for expanding exports and moving into higher-value-added positions in the chain (i.e., “upgrading”).

In partnership with the International Growth Centre (IGC), this project identified three priority sectors for study: dairy processing, maize, and tourism. Based on guidance from the IGC, Duke CGGC concentrated its analysis on Rwanda and Uganda. Together, the stakeholders identified four clusters of research questions to guide its analysis. This paper provides a summary of each and a brief description of relevant findings. Further detail can be found in the individual reports.

► **Research Question #1:** How do the value chains differ in each country? What are the different products? How do end markets differ?

While comparisons between baseline data for Rwanda and Uganda reveal similar economic profiles (see Table 1), there are important differences in the size and institutions in each country that influence some of the discrepancies detected across the selected value chains.

- Rwanda is a small country of almost 12 million people. Its government has taken an active approach to orchestrating responses to challenges within the three value chains studied. At the firm level, this has often taken the form of Public-Private Partnerships (PPPs) to bolster the capabilities of local businesses and drive process and functional upgrading. At a policy level, the government has focused on supply-side measures to drive product upgrades, with the *Crop Intensification Program* being one of the more prominent examples.

- Uganda is a much larger country of 38 million people. Its government has been less likely to enter into partnerships with the private sector to address bottlenecks in each value chain, instead relying on the private sector or NGOs in many cases. The weak nature of its institutions has afforded elite actors a degree of power that in some cases constrains development across the sectors. In tourism, this has manifested itself through the influence actors such as the Madhvani Group has over the concession process. In maize, potential reforms to the seed market can be blocked by stakeholders who benefit from the current system.

Table 1: Key Economic Indicators for Rwanda and Uganda

Variable	2011	2012	2013	2014	2015
GDP Per Capita (Current US$)					
Rwanda	606.9	667.4	678.9	697.6	697.3
Uganda	591.4	656.3	674.3	714.5	675.5
GDP Growth Rates					
Rwanda	7.8	8.7	4.6	7.0	6.9
Uganda	9.6	4.4	3.2	4.8	5.0
Exports as % of GDP					
Rwanda	13.8	12.8	14.4	14.7	14.4
Uganda	18.9	20.1	20.2	18.3	17.4

Source: World Bank database.

If these structural factors—the differences in geographic and population size as well as government approaches to development and the strength of institutions—help explain some of the variance observed, the characteristics of the value chain themselves lead to other discrepancies (see Table 2). The dairy processing sector is primarily oriented to domestic consumers in each market, with less than 1% of regional milk production traded regionally. Maize has more significant regional trade flows, with Kenya serving as a large source of demand. European and North American consumers are primary drivers of demand for tourism, which gives the chain a global scope.

These orientations shape the individual country profiles. In both dairy processing and maize, Ugandan outputs in the production and collection or aggregation segments of the chain are used by Kenyan processors, although dairy processing in Uganda has recently attracted extra-regional investment from India-based Amos Dairies Ltd. Rwanda represents its own node in these chains, with much of its dairy and maize consumed by one or two local domestic processors. However, Rwandan companies such as Minimex, Blessed Dairy, and Inyange Industries have functionally upgraded and strengthened marketing and distribution linkages, providing new access to domestic and regional consumers (hotels, supermarkets, airlines for yogurt and dairy products; markets in Burundi and the Democratic Republic of Congo for maize flour).

The profiles of the tourism industry within Rwanda and Uganda are nuanced. Kenya and Tanzania are established markets with diverse portfolios of safari products that appeal to clientele in European and North American countries. Historically, Rwanda and Uganda have used their primary attractions—mountain gorillas—to integrate into those safari packages with brief stopovers. However, the situation is evolving. Rwanda has had success establishing itself as a purveyor of high-value, luxury tourism products. Uganda, meanwhile, is somewhere between the poles of Rwanda's luxury gorilla packages, and Kenya and Tanzania's high-volume safari experiences as it attempts to broaden its appeal.

Table 2: Characteristics of Selected Value Chains

Variable	Dairy Processing	Maize	Tourism
Primary Orientation	— Domestic	— Regional	— Global
Individual Country Profiles	— **Kenya:** Major consumer and exporter — **Uganda:** Low-cost producer and exporter — **Rwanda:** Small exporter	— **Kenya:** Major consumer — **Uganda:** Large producer and exporter of maize — **Rwanda:** Small exporter of maize flour	— **Kenya:** Major supplier of safari products to global markets — **Uganda**: Gorilla tourism, ecotourism — **Rwanda:** Luxury gorilla tourism & emerging MICE sector
Significant of Informal Market	— High	— High	— Low
Regional Characteristics	— Domestic oriented industries — Low consumption of dairy products	— High volume of informal trade — Low quality in selected markets	— Reliance on foreign visitors — Prominence of package booking distribution channel

Source: Authors.

► **Research Question #2:** Who are the relevant actors at the national and regional levels? How do lead firms govern the chain? How is production and trade coordinated across EAC countries?

The lead firms in the regional dairy and maize value chains are processors, although traders may fill the role in national settings (see Table 3). Most large processors are based in Kenya, although Brookside Dairy recently expanded its in-market presence to Uganda. In Rwanda, there are predominantly domestic actors (Inyange and Minimex) that serve as large-scale market players. In both chains, lead firms' power is centered on their scale and, in the case of maize, access to consumers, which gives Kenyan processors a preeminent position given the size of its domestic market. Lead firms govern the chain by demanding that traders and other suppliers deliver high-quality maize and milk that adheres to EAC or Kenyan standards.[1]

Production and trade in dairy processing and maize is characterized by high degrees of informal trade in Rwanda and Uganda. This is most often the result of constraints in the production and aggregation or collection segments of the chain. The most common include the failure to communicate market signals about the value of adhering to quality standards as well as general unawareness of agricultural best practices, low levels of farmer liquidity, and consumer sensitivity to the higher prices associated with formal sector dairy or maize products.

[1] Said one grain trader based in Uganda: "Kenya is one of the only countries that has enforced quality standards at the milling level."

In the tourism value chain, local distribution intermediaries—inbound tour operators and Destination Management Companies (DMCs)—must partner with global tour operators and travel agents in order to access consumers and surmount trust deficits. Global tour operators serve as both as manufacturers and wholesalers; together with DMCs, they purchase services from individual providers and assemble them into leisure tourism products. Global tour operators' most significant value addition is their knowledge of the local market, which allows them to make critical decisions about what products to sell and how to sell them while also wielding power over suppliers. While the EAC has taken steps to institute a classification criterion for hotels, the more relevant standards are the internal company policies of global tour operators that reflect the standards of local tourism consumers.

Table 3: Lead Firms and Governance of Selected Value Chains

Variable	Dairy Processing	Maize	Tourism
Lead Firms	— Dairy processors (Brookside Dairy Ltd in Kenya & Uganda; Inyange Industries in Rwanda)	— Kenyan processors (Unga Limited; Mombasa Maize Millers; Nairobi Flour Mills Ltd.; TSS Grain Millers; Pembe Flour Mills; others) — Large traders in Uganda/Rwanda (Aponye, Joseph Initiative, others)	—Global distribution intermediaries (Abercrombie & Kent; Cox & Kings; Thomas Cook; & Beyond; Wilderness Safaris)
Source of Power	— Scale	— Scale — Access to consumers	— Access to consumers
Key Standards	— EAC Protocol on SPS measures and national certifications	— EAC (SPS and maize quality certifications)	— Company
Key Value Chain Segments in Rwanda and Uganda	— Production — Processing	— Production — Aggregation	— Distribution Intermediaries — Service Providers
Recent FDI by Value Chain Segment	— Processing (Kenya and Uganda)	— Inputs (Rwanda) — Production (Uganda) — Aggregation (Uganda)	— Service Providers (Lodging)

Source: Authors.

► **Research Question #3:** What are the most important barriers to upgrading? What are specific strategies the government can implement to help Rwanda and Uganda upgrade the capabilities of actors in the selected GVC?

Productive capacity constraints are especially prominent in all three chains. In dairy processing and maize, farmers lack finance and scale, and traders or collectors fail to communicate market signals and standards. Human capacity is a related challenge, with many producers unaware of EAC standards or the advantages associated with using higher quality inputs and production technologies. In tourism, many actors lack the marketing skills required to link with global lead firms. Outsourcing the activity to public relations specialists is a possibility; however, many businesses do not have the financial wherewithal to take this step.

These constraints impair the competitive position of businesses in all three chains and drive actors in the dairy processing and maize value chains to informal markets. Process upgrades can facilitate product upgrades that improve quality and draw actors into formal networks. In order to encourage this evolution, national and regional stakeholders should prioritize interventions that address the central issues that impair the development of at least two of the value chains studied: (1) Scale; (2) Access to finance; or (3) Human capital (see Table 4).

This project has identified both national and regional efforts to address these constraints through process upgrades. In the maize value chain, initiatives such as the Warehouse Receipt Systems in both Rwanda and Uganda serve two goals: (1) Improving storage conditions to reduce post-harvest loss; and (2) Providing farmers with access to liquidity through a deposit program that is recognized by local financial institutions. Regional actors have also played a role in supply-side interventions by providing assistance in the financing and implementation of extension programs. TradeMark East Africa's outreach in the maize value chain in the Nakaseke District in Uganda is emblematic. In 2015, the local government passed an ordinance that penalized farmers that do not adhere to best practices when growing maize. TradeMark East Africa is helping to provide funding to ensure the implementation of the program, which also includes capacity building and education about EAC maize standards.

Table 4: Upgrading Trajectories and Policy Recommendations

Variable	Dairy Processing	Maize	Tourism
Key Policy Elements for GVC Development	— Supply chain coordination — Distribution networks — Scale economies	— Access to finance — Scale economies — Human capital	— Human capital — Access to finance — Infrastructure
Examples of Upgrading Observed	— **Uganda:** Organization (JESA Farm: reconfiguring farmer-processor relation) — **Rwanda:** Distribution & Marketing (Inyange Industries: establishing *milk zones)*	— **Uganda:** Process (Uganda National Commodity Exchange; TradeMark East Africa in Nakaseke District) — **Rwanda:** Process (Rwanda Grains & Cereal Corporation; *Crop Intensification Program*)	— **Uganda:** Product (diversifying beyond gorilla tourism) — **Rwanda:** Process (management at Akagera National, creation of Rwanda Convention Bureau)
Potential Future Upgrading Trajectories	— Process and organizational upgrading to increase flow of quality milk to underutilized processing plants & MCCs and enhance compliance capability to EAC standards	— Process upgrading to improve quality of maize and increased adherence to EAC standards	— Process upgrading to facilitate stronger links between domestic and global distribution intermediaries
Priority Recommendations	— Target interventions to expand manufacturing of exportable dairy products — Combine regulation and capability building to increase supply of quality milk — Negotiate as a regional 'block' to attract foreign investment in dairy processing industry	— Target interventions addressing seed, scale and aggregation constraints — Increase certification capacity at production and aggregation segments of chain — Evaluate appropriate legal frameworks and engage in conversations with stakeholders	— Tailor promotional content to address key deficiencies — Maintain initiative to implement classification certifications for service providers — Create regional development and infrastructure fund

Source: Authors.

Existing efforts in tourism to drive process upgrading at both the national and regional levels can also be reinforced. One of the most prominent barriers to upgrading for EAC distribution intermediaries is access to consumers and trust deficits in key markets. Together, both the East Africa Tourism Platform—the body within the EAC that promotes regional tourism and works closely with national ministries—and national tourism promotion boards have already worked to create web content that markets the region. Including local distribution intermediaries in each country can facilitate functional upgrading.

While these efforts can be expanded, there are also new policies or approaches that are required to take full advantage of the opportunities presented in each sector. These include the following: 1. Ensuring that appropriate EAC-level commitments are implemented at the national level; 2. Strengthening national institutions and, when possible, encourage collaboration with appropriate regional trade associations; 3. Collecting more accurate production and export data, partially through collaboration between public and private sector actors related to each industry. Aggregated, these recommendations highlight the benefits of adopting an integrated approach across all value chain segments to develop industry-wide strategies. All stakeholders should participate, including the entire universe of firms as well as broader sets of key stakeholders, including educational institutions and government agencies.

► **Research Question #4:** To what extent do regional value chains exist in the selected sectors? And where are the opportunities for further regional integration?

While the scope for development of regional value chains (RVCs) varies across the three sectors, the EAC region is yet to fully leverage this potential despite the steady progress made by national and regional stakeholders. Over the last decade, EAC countries have achieved remarkable milestones in policy and regulatory areas for economic integration. The efforts include operationalizing the EAC Common Market, which has facilitated the free movement of goods, labor, services, and capital to provide benefits for each of the three value chains studied. Individual success include: (1) The harmonization of regional standards for several agricultural and food products such as dairy and maize; (2) Setting up the EAC Customs Union and building capacity of the related trade institutions; (3) Establishing a Common External Tariff in the region; and (4) Instituting a common tourist visa that allows visitors to travel freely between Kenya, Rwanda, and Uganda.

Although these achievements set up the platform for market integration, implementation progress and increased regional trade is hampered by weaknesses in each RVC. In tourism, low domestic and regional demand ultimately impairs the development of local distribution intermediaries. The dairy and maize chains face pervasive capability constraints, particularly of an organizational and "relational" nature that partly relate to national systems of production and trade dominated by "informal" and unregulated smallholder actors. For these stakeholders, compliance with EAC standards that either undermines competitiveness or yields benefits that are not adequately conveyed to both consumers and producers.

Nevertheless, there is potential for the further development of RVCs in each industry. Dairy processing provides a representative example. Regional strategies recently pursued by Brookside Dairy Ltd, the largest regional dairy firm, can set the trajectory for future development by helping to reshape cross-border collaboration and trade linkages in the dairy sector among the EAC countries. A recent investment by Brookside in Uganda integrates the company's processing and marketing capabilities with the lower-cost milk production system in the country. Brookside has a strong downstream distribution network, product range, and innovative capability. In addition to these downstream capabilities, Brookside's regional milk supply base in Kenya and Uganda provide the company with very strong capabilities to lead regional product development and branding while also exploiting market opportunities within and beyond the EAC countries in Africa. The profile of the maize value chain—an extensive production system in Uganda, a developed processing system in Kenya with recent FDI by companies such as Cargill—provides for the possibility of a similar strategic slicing of value chain functions according to the competitive capabilities across the region.

The EAC countries should work together as a "regional block" to further exploit the potential of RVCs, particularly within the current context of global dairy markets. Recent dynamics in the U.S. and EU dairy industries offer opportunities to attract further investment from the leading global dairy firms to the region. Although attracting private investment, whether it involves regional or global firms, is a positive development, the potential concern is the impact on competition in an already consolidated dairy industry in the EAC region. Additionally, investments by foreign firms will have different RVC outcomes depending on whether the region attracts investment from the right type of firms. These concerns could be addressed when the EAC countries pursue joint regional investment promotion strategies. Under certain conditions, which largely depend on the bargaining position of the EAC countries in negotiating the deals, foreign investments could provide very effective vehicles to develop RVC capabilities in the region. A well-targeted regional approach can help more effectively identify and fill RVC capability gaps. These could be specific areas related to innovation and product development, distribution and marketing, and national supply chain constraints in one or multiple countries in the region. Addressing capabilities gaps in the latter is crucial to developing inclusive RVCs in which local producers are linked and adequately compensated through integration in supply chains of the emerging lead regional firms.

The International Growth Centre (IGC) aims to promote sustainable growth in developing countries by providing demand-led policy advice based on frontier research.

Find out more about
our work on our website
www.theigc.org

For media or communications
enquiries, please contact
mail@theigc.org

Subscribe to our newsletter
and topic updates
www.theigc.org/newsletter

Follow us on Twitter
@the_igc

Contact us
International Growth Centre,
London School of Economic
and Political Science,
Houghton Street,
London WC2A 2AE

IGC
International
Growth Centre

DIRECTED BY
LSE
UNIVERSITY OF OXFORD

FUNDED BY
UKaid
from the British people

Designed by soapbox.co.uk