LETTER FROM THE BOARD CHAIRPERSON
Prof. Joseph Mukiibi

Kilimo Trust remains committed to our vision of broad-based wealth creation in East Africa through agriculture and agribusiness development. We have and will continue to pursue this vision by catalyzing the growth and competitiveness of strategic agricultural sectors for the benefit of a large number of people in East Africa. In the year under review, KT interventions were rooted in brokering private and public-sector partnerships that took advantage of available market opportunities and empowered agricultural value chain actors to work together, take calculated risks and solve own critical problems.

The results of the past year and indeed since the establishment of Kilimo Trust in 2005 demonstrates that the foundation has been firmly established to transform the commercial orientation of smallholder farmers and SMEs. I am happy to note that the number of smallholder farmers that have been transformed directly by KT intervention is about to hit the 200,000 mark. This is quite remarkable and in line with our new Strategy that targets to transform up to 500,000 smallholder farmers in the EAC by the year 2023.

The annual results presented in this report is the collaborative efforts of our partners and collaborators and our dedicated staff. On behalf of the Board of Trustees, I want to sincerely thank all of you for your commitment and dedication to transforming the lives of our farmers through the establishment of sustainable, inclusive and competitive agricultural value chains.

Going forward, and as we unveil the new Kilimo Trust strategy we will use the results of the past year as building blocks in guiding investment decisions towards building partnerships, that leverage and unlock resources for the development of strong agribusinesses along the agricultural value chains that respond to market opportunities.

Prof. Joseph Mukiibi
CHAIR, BOARD OF TRUSTEES
Our esteemed stakeholders, funders, clients, and implementation partners; we are proud to share a report of the technical results of Kilimo Trust for the one year period of July 2017 to June 2018. We invite you to go through this report which captures some exciting results from our work in the EAC Region over the two financial years, with respect to our mission to “catalyze the growth and competitiveness of strategic agricultural sectors for the benefit of a large number of people in East Africa”.

We have results from REACTS-I, BEST-EAC, CARI, CHIPS, SIKIA projects and the MPA unit all of which are exiting from the work we did towards structuring and strengthening of staples value chains. The results have been achieved through strategic partnerships that we initiated, developed and sealed during the period under review. We achieved tremendous results in enhancing our partnerships with the EAC secretariat, governments of the EAC Partner States, key private sector players in the agricultural value chains in the EAC, some key international development funders, and a good number of consortia partners for implementation of projects to whom we are forever greatful.

I am continually encouraged by the commitment and quality of our staff, who demonstrate tremendous dedication and potential in developing and strengthening a strong and sound organizational culture, as we continue to refine and implement our strategic plans in the EAC.

Dr. Mary Christine Shetto
CEO
Kilimo Trust (KT) is an East Africa-based not for profit organization, headquartered in the Republic of Uganda as a fully-fledged Trust. Kilimo Trust also has affiliated subsidiaries in Kenya, Rwanda and Tanzania. KT works on agriculture for development across the East Africa Community: Uganda, Tanzania, Kenya, Rwanda and Burundi. The Trust is “an Implementing Partner of Choice” on market-led Agricultural Value Chain Development Programs and Projects for governments, private sector; regional and international development partners.

KT began in 2005 as a not-for-profit grant managing organization. In 2011, KT transitioned from being a grant manager to a direct implementer to adapt to changing realities. Our mission is “to catalyze the growth and competitiveness of strategic agricultural sectors for the benefit of a large number of people in East Africa that include Men, Women and Youth.” We are an evidence-based organization with competent and committed staff. Rooted in private and public sector based partnerships, KT empowers farm families and other value chain actors to take calculated risks, solve critical problems and act when they see market opportunities. We are also committed to partnerships that seek to make a socially responsible impact.

KT has implemented over 65 projects since 2005 using private sector-led and value chain development approach within the agricultural sector. Kilimo Trust empowers agricultural value-chains actors to work together to solve their problems, and act cohesively to improve competitiveness in food markets. Over this period, KT has:

- Fostered inclusive and sustainable private-private partnerships using the Kilimo Trust Consortium Approach to Value Chain Development (KT-CA2VCD)
- Built capacity of actors to trade along the value chain
- Led and supported development of policies and strategies for agriculture development at the national and regional level
- Undertaken high level analysis & mapping of food value chains across the EAC, and
- Managed grants.
What we do and drives us

Our core business is to transform food and nutrition security in the EAC region from high risk subsistence farming into lower risk trade-based systems.

We see the EAC Market and COMESA, as key opportunities for achieving higher security in food, nutrition and incomes.

We work on expansion of trade, in food commodities and their value added products, across borders and agro-eco-regions.

Because we believe that:

- **From incomes point of view** - food trade within a common market provides deeper and large market opportunities that supports higher profitability for the producers;

- **From agricultural transformation point of view** - disposable income for the SHFs is the main driver for them to invest in modern and better technologies & practices;

- **From nutrition point of view** - For effective utilization of differences in production seasons and agro-ecologies across the entire region to supply consumers with balanced diets throughout the year.
Kilimo Trust Project Intervention Areas

Value Chains in **UGANDA**
- Sunflower
- Passion Fruits
- Rice
- Honey
- Beans
- Soybean
- Maize
- Cassava

Value Chains in **KENYA**
- Dairy
- Green Grams
- Beans

Value Chains in **RWANDA**
- Beans
- Maize

Value Chains in **BURUNDI**
- Beans
- Maize
- Cassava

Value Chains in **TANZANIA**
- Potatoes
- Maize
- Rice
- Onions
- Beans

**Key**
- Key intervention area
HOW WE WORK- Building Sustainable Business Consortia

In Building Sustainable Business Consortia, KT team:

Identifies, profiles, assesses and engage bulk handlers (traders) and/processors that can aggregate, market and trade targeted commodities to end markets. These will be the lead firms for the consortia.

Then, Identifies, profiles, assesses and engage we will identify, profile, assess and engage smallholder farmers that are ready, willing to collaborate with, or are already working with a lead firm to deliver specific produce/products to the target markets.

Once the backbone (that is the lead firm and farmers) of each potential consortium is in place, we assist them in documenting the critical constraints to capturing and competing in the identified market, and then to determine which type of value chain actors (from inputs and services sub-sectors) they should invite to their consortium.

Work with the backbone of each potential consortium to identify, profile, assess, select and invite the most suitable suppliers of inputs and other services, to join their Consortium.

Finally, we support the expanded private sector partnership to identify the necessary and sufficient public good services they need to deliver on their undertaking. The relevant public-sector institutions will then be engaged to complete the Public-Private partnerships within the consortium.
Kilimo Trust Consortium Approach to Value Chain Development (KTCA2VCD)

1. Engage the Primary Pull - a target market that...
   • Supports profitability for SHFs and others in the VC, by...
   • Rewarding: Quality and Food-safety Standards; Economies of scale; and Timeliness of delivery

2. Pull-in Lead with connections to end markets...
   • Processors/Traders
   • National Aggregators

3. Crowd-in SHFs, that are:
   • Business Oriented
   • Experienced & Dedicated to Commercial Farming
   • Organized (or willing to be)
   But with profitability and growth limited by poor access to competitive markets that reward quality and/or provide reliable supplies of quality inputs

4. Rope-in Commercial Suppliers of Inputs & Services, such as:
   • Equipment (by sale, leasing or hire)
   • Finance (credit, equity, etc)
   • Seed, Fertilizer, chemicals & other inputs
   • BDS, ICT & extension services

5. Engage sufficient Providers of Public Good Services, such as:
   • Base market to build EoS
   • Reciprocal trade deals to expand reached markets
   • Enforcement of Standards
   • Foundation seed
   • Large infrastructure especially for irrigation and transport
   • Conductive agro-business environment
   • Multi-sector platforms
Kilimo Trust overall achievements from 2011-2018

- Over **216,000 MT** of food staples valued at over **US$122 Million** sold through structured trade.

- Volumes (MT) of food staples sold through structured Trade:
  - 2011-2017: 170,448
  - 2018: 46,200
  - 2011-2018: 216,648

- Over **US$48 Million** leveraged from agribusiness MSMEs through matching grants and agricultural loans.

- Over **137,000** smallholder farmers and **42** SMEs accessed BDS.

- Number of Small holder farmers who accessed Business Development Services:
  - 2011-2017: 89,904
  - 2018: 47,388
  - 2011-2018: 137,292

- Over **200** business linkages and **31** Business Consortia integrating **160,900** SHF households to national & regional markets established.

- As a grant manager, KT managed **USD 13 million** through 50 projects directly or through other organizations.

- Over **124,000** SHFs and SMEs have benefitted from KT supported trainings.
Kilimo Trust overall Achievements from 2011-2018

High Level Analysis & Mapping of Markets for Staples and Other Food Commodities

- **67** Value Chain Analytics & Policy Briefs developed & published
- **60** GIS Suitability Maps showing supply & demand dynamics for food staples in the EAC developed
- **Over 109,000** VC actors & other partners are accessing KT online knowledge products annually
## Performance of Kilimo Trust on the Key Institutional Indicators for Year 2017/2018

<table>
<thead>
<tr>
<th>Key Result Area</th>
<th>Key Institutional Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing incomes of SHFs or Enterprises targeted by KT projects and/or interventions in the EAC</td>
<td>A Total of 23,605 Smallholder farmers were integrated into structured markets of food staples in the year 2017/2018</td>
</tr>
<tr>
<td></td>
<td>11,030 additional smallholder farmers have increased incomes because of KT interventions: CARI benefitting farmers have 27% more incomes than non-benefitting farmers in the same neighbourhood; CHIPS Project beneficiaries have increased their incomes by 44% from $70.6/MT to $102/MT of round potatoes</td>
</tr>
<tr>
<td>KT being recognized as a world class brand in delivering value for money results and solutions, by consistently delivering technical and financial results efficiently beyond expectation of clients</td>
<td>Our work was uploaded in the websites of 3 key partners: DAI, WLE and IFAD</td>
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<td>We submitted a total of 15 timely quality reports (financial and narrative reports) to our funders</td>
</tr>
<tr>
<td>High quality and continuous learning, internally at KT and by KT Stakeholders, from the results and lessons of KT’s work</td>
<td>14 Study reports were developed, published and disseminated by KT under the Market, Policy Analysis Unit. These included Commodity scoping, Value chain reports, Market Characterization, Farmer Gross Margin analysis, Potato Demand and value chain analysis, AGRA/IDH Coffee Study and Revised Rice EAC report</td>
</tr>
<tr>
<td></td>
<td>6 policy documents developed, published and disseminated. These included 1 policy report and 5 policy briefs in addition to 1 policy advocacy tool kit for use by and Heifer International staff and other East Africa Youth Inclusion Program (EAYIP) partners</td>
</tr>
<tr>
<td></td>
<td>7 learning events were undertaken</td>
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<tr>
<td></td>
<td>2 Evaluations undertaken, and findings used to generate knowledge products</td>
</tr>
<tr>
<td>KT is financially viable and sustainable organization</td>
<td>Kilimo Trust won new projects/assignments valued at US$ 1,938,500 within the year because of quality work delivery and deepened partnerships</td>
</tr>
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Introduction

Competitive African Rice Initiative (CARI) was a 4 year pan African programme commissioned in 2014 and was covering Tanzania, Nigeria, Ghana, and Burkina Faso. In Tanzania, CARI was implemented by Kilimo Trust whose goal was to double incomes of at least 30,000 rice smallholder farmers. The project was supporting actors in the rice value chain, using the millers as anchors to link farmers, consumers, and service providers for mutual benefit as equal agribusiness partners.

CARI high level results were:

1. Increased productivity and quality of paddy rice based on the development of sustainable and competitive rice production systems

2. Increased efficiency of local rice sourcing, processing and marketing through structured value chain linkages, improved technology and process management.

3. Improved access to financial services for all value chain actors served

4. Improved policy framework for rice sector development

CARI project established 8 Consortia led by the following private sector companies: Biosustain Company, G2L Company, Kilombero Plantation Ltd, Kimolo Super Rice Company, Mamboleo Farm Ltd, Musoma Food Company, Raphael Group Company Ltd, ZANRICE-Faki Enterprises Ltd
Overall achievements by CARI Project so far

Over 177,000MT of paddy rice was sourced by millers from CARI participating farmers

Over USD 4.4Million accessed by 14,847 farmers and 6 off-takers from financial institutions

Over 53,000 farmers accessed improved inputs and mechanization services i.e. 11,356 farmers accessed improved seed, 1,513 accessed pesticides, 14,694 accessed fertilizers, 15,497 accessed tractor services, 6,255 accessed power tiller services and 4,007 accessed combined harvester services.

RCT supported to develop position paper on rice smuggling in East Africa

EAC rice sector report adopted by EAC secretariat

Over 44,000 farmers (41% females) received CARI supported trainings i.e. 31,642 farmers trained on Farmer Business School, 42,475 trained on Good Agricultural Practices, 40,523 trained on Post Harvest Handling

Yield and income increased by 110% and 216% respectively

Semi-Irrigated:
- From $86 to $338

Rainfed:
- From $-55 to $108

Baseline/Endline

Yield increase per ha

Income increase (in US $)
Beans Enterprises and Structured Trade in East African Community (BEST-EAC)

Commercializing beans from Kenya, Rwanda, Tanzania and Uganda through upgrading and deepening of value chains

Introduction

Beans Enterprises and Structured Trade in East African Community (BEST-EAC) was a 3 year project sub granted by The UKAID funded programme ‘Food Trade East and Southern Africa (ESA) with a focus on establishing trading systems that can build the confidence of large buyers such as exporters, processors and large institutions, who hesitate to depend on local smallholders for supplies.

The main objective of the project was to expand structured trade of 30,000 MT/year of beans produced by between 10,000 - 15,000 SMSFs the EAC, to Operate commercial production enterprises that are profitable and become consistent, reliable and competitive suppliers of raw and/or semi-processed beans to medium and large scale/bulk buyers and/or processors serving national, regional and international markets.

The project’s main outputs were:

1. 10 to 15 commercially viable and sustainable business clusters/consortia each connecting 1,000 – 1,500 farmers to specific end-markets of beans, as well as the necessary and sufficient business partners to adequately respond to the market opportunities

2. Increased supply, efficiency and cost-effectiveness of the necessary and sufficient business support services (such as market information, business skills, financial services) to support needs of different actors along the bean value chain to deliver their part in the business partnerships for structured trade

BEST-EAC project established 13 consortia led by the following private sector partners

In Kenya: Yash Commodities Ltd, Cheptarit Star Limited, Zero Two Heroes Ltd, Mwailu Enterprises Ltd
In Tanzania: Raphael Group Ltd, Kaderes Peasants Development (KPD) PLC, Tamagrasai Ltd
In Rwanda: Harvest Plus, SARURA Commodities Ltd
In Uganda: Ayella Pe Agro Services Ltd, Equator Seeds Ltd, Farmers’ Center Uganda (FACE)
Overall Achievements by BEST-EAC Project

Over **20,000MT** volumes of produce traded i.e. **19,883MT** of beans, Sorghum – **550MT**, Cowpeas – **80MT**, Soy beans – **15MT** and Groundnuts - **7MT**

Over **USD70,000** worth of loans was accessed directly by the farmers

13 consortia were formed integrating **11,299** farmers, **12** off-takers, **14** seed companies, **7** Commercial Banks, **10** extension service providers and **9** Local government offices

Over **11,000** farmers (5,383 males and 5,916 females) and **135** Farmer Business Organizations, **13** lead firms and **14** seed companies accessed improved market information

Over **5,700** farmers (3,850 males and 1,831 females) accessed improved storage facilities, including warehouse receipt and supplier credit services

Over **1,600MT** of improved inputs accessed by farmers i.e. **488 MT** Seeds of seed, **115 MT** of fertilizer, **741 MT** of manure and **284 MT** of soil lime. These were accessed by **8,097** SHFs (4,216 males and 3,881 females)

Over **300** in-depth farmer specific soil analysis reports produced and disseminated to SHFs i.e. **64** in Kenya, **52** in Rwanda, **148** in Tanzania and **79** in Uganda

Over **8,000** farmers (3,881 females and 4,216 males) received BEST-EAC supported trainings on Farmer Business School, Good Agricultural Practices, Post Harvest Handling, Integrated Soil fertility management and Integrated Pest Management
Introduction

Regional East African Community Trade in Staples (REACTS) Project was designed to support IFAD Funded Projects across EAC region to align their interventions, re-tool/skill project teams and service providers, and work with relevant trade facilitating agencies (non-traditional partners) in enabling business enterprises of at least 10,000 smallholder farmers that they work with, to respond effectively to regional food markets. This was to be achieved through supporting projects to:

1. attain a robust understanding of opportunities in the regional markets
2. use such understanding to improve small-scale producers’ and traders’ competitiveness in the national and regional markets

REACTS was a 3-year grant project to Kilimo Trust (KT) from IFAD, implemented from November 2014 to December 2017. The total project cost was US$ 1,217,772 of which the IFAD grant was US$ 920,000, while Kilimo Trust was to finance US$ 85,000 in cash, US$ 60,000 in-kind contribution and US$ 152,772 come from the private sector and IFAD Funded Projects supported by REACTS.

IFAD projects that benefited from the grant included:

- c. Upper Tana Catchment Natural Resources Management Project (Kenya)
- d. Smallholder Dairy Commercialization Programme (Kenya)
- e. Climate Resilient Post-Harvest and Agribusiness Support Project - PASP (Rwanda)
- g. Rural Micro, Small and Medium Enterprise Support Programme – MUVI (Tanzania)
- h. Vegetable Oil Development Project (VODP) - Phase 2 (Uganda)

The project was successfully completed and as a result of this AGRA is funding a second phase.
Overall Achievements by REACTS Project

13,953MT of produce valued at US$ 4,287,968 traded through structured trade arrangements or business linkages. Of the total volumes traded, 2,803MT of produce, valued at US$828,607 was traded across borders.

At least 5 projects are brokering establishment of new or enhanced business linkages. Nine (9) business consortia/ linkages (1 regional and 8 national) have been established integrating 33,982 SHFs (of which 9,578 SHFs are women).

All the 5 collaborating IFAD funded projects (IFPs) are carrying out on-ward capacity building for their beneficiaries to respond to regional market opportunities. The trainers from IFPs (trained by REACTS), in turn trained 20,553 SHFs (of which over 6,000 SHFs are women).

Established a web-based knowledge management portal for sharing experiences on business linkages- http://reacts.kilimotrust.org/. Between February 2017 to January 2018, a total of 12,413 visits and 74,151 hits were registered.

5 Projects have re-oriented their interventions by adopting REACTS innovations such as consortia approach, farmer business school, involved in cross learning events and embraced GIS technology.

6 market information packages produced and shared with IFPs to increase their understanding of regional market opportunities.

US$ 430,751 was leveraged from; Public sector (IFAD funded projects and Kilimo Trust) and private sector (agribusinesses).

22 | Transforming Lives Through Agribusiness
CHIPS is an ongoing four year project (ends December 2019), aimed at improving the livelihoods of 20,000 smallholder potato farmers and 15,000 small scale potato retailers and food vendors in Tanzania. This will be achieved through increasing productivity, efficiency, profitability and volumes of businesses involved in the potato value chains in response to market demand.

The GOAL of the project is to double the incomes of Small-scale Farmers. Project outcomes are:

1. Effective collective marketing/procurement of outputs and inputs by strengthened formal and financially viable small and medium scale enterprises (SMEs), trading associations and/or cooperatives of Smallholder Farmers (SHFs), and Small scale Retailers and Vendors (SRVs)
2. Increased supply of market preferred potato and potato products by Smallholder Farmers, Small scale Retailers and Vendors
3. Increased competitiveness and efficiency of trading in potato and potato products through sustainable business consortia
4. Increased equitable involvement of women and youth in decision making and access to resources and benefits of potato value chain
5. Improved capacity of KT and its partners in the development of SRVs business and trade associations for trade-based food security in EAC

To date, CHIPS has engaged 9 Matching Grant partners namely Beula Seed Co & Const. Ltd, Njombe Agricultural Development Organization (NADO), Lusitu Agribusiness Group, Usambara Lishe Trust (ULT), VIBINDO Society, Actions for Development Programmes-Mbozi (ADP-Mbozi), Acla Honey Enterprises,
Project Achievements so far

61,961 MT of potatoes valued at US$ 13.5 million traded

9 consortia formed and operationalized integrating 8,806 small holder farmers (44% females and 44% youth) and 4,000 potatoes small retailers and vendors (55% women and 45% youth) engaged

Over USD30,000 worth of internal savings accessed directly by the farmers and SRVs

Close to 2,000 MT of fertilizers collectively procured by farmers

379,300 minitubers (pre-basic seed potatoes) produced by ARI Uyole and Beula Seeds Co. LTD

Over 15,000 farmers (44% females and 44% males) have received CHIPS supported trainings i.e. 6,659 on Farmer Business School, 5,279 on Good Agricultural Practices and 3702 on Good Post Harvest Handling Practices.

76 MT of clean seed potatoes supplied to small holder farmers for QDS production by ARI-Uyole, ULT and Mtanga Foods

Over 5,000 Small scale Retailers and Vendors (55% women and 45% youth) have been trained i.e. 2,265 on Business skills, 1,622 on measurement standards.

Over 5,000 Small scale Retailers and Vendors (55% women and 45% youth) have been trained i.e. 2,265 on Business skills, 1,622 on measurement standards.
5 SAGCOT Integrated Knowledge and Information for Agriculture - SIKIA

Introduction

SAGCOT Integrated Knowledge and Information for Agriculture (SIKIA) project started on 1st October 2016 and will run for 3 years. The project employs the latest technology to provide reliable information to rice farmers in Tanzania (SAGCOT area) to increase their production and productivity.

The goal of this project is to realize the delivery of actionable information services, acquired from satellite geodata (e.g. environmental, crop status via Synthetic Aperture Radar (SAR) and plot boundaries information), augmented by more detailed data acquisition under the clouds (multispectral agronomic information) and web-based information.

The project is implemented in partnership with TechForce Innovations B.V, Netherlands; Milan Innovincy B.V., Netherlands; Kadaster International, Netherlands and Alliance for a Green Revolution in Africa (AGRA), Kenya

Expected project results include:
1. 125,000 farmers and 400 other Value Chain Stakeholders using actionable information services
2. 15% increase in food production (Yield)
3. 45% increase in farmers income
4. Increase in value chain efficiency

SIKIA Information services
1. Weather forecast
2. Agri business support
3. Plot specific crop advice
4. SAGCOT database
1. Weather forecast
2. Agri-business support
3. Plot specific crop advice

Integrated Approach

From active to core user
Large area data improvement

1 2 3

SAGCOT database

Region

SAGCOT

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Region

SAGCOT
SIKIA Project Achievements so far

3,468 plots mapped and 3,199 uploaded to Spatiotemporal Agri-business Framework (SAF)

16 cropping calendars prepared, printed and distributed to District, wards, villages and Irrigators Organizations offices

53 ToTs trained on Good Agricultural Practices and Good Post Harvest Handling practices these in turn trained 1,968 SHFs

11 Agribusiness registered to date and awaiting the SAF credentials to access the system

MoU with TMA has been signed that will facilitate dissemination of weather information to SHFs.

Drone flying conducted and Demonstration plots harvested

- Drone flying
  - Drone operations to 300Ha
  - Growth monitoring to 50 sampled rice field plots

- Demonstration plots
  - 6 Demonstration plots planted
  - 2 plots harvested; average yield of 8.1 MT

10 radio programs aired so far teaching farmers on GAP while SMS services on plots specifics delivered to 550 SHFs

Drone being flown while monitoring rice growth performance in Mbarali - Mbuyuni scheme

Demo plots being monitored in Makwale Scheme
Implication of Limited Input Access and Quality on Youth Participation in Agriculture

Key Message

Limited access to high-quality inputs represents a major barrier in agriculture. Simple fixes by government through legislation and training initiatives are ineffective. Some of the policies that have been enacted to address this issue include the National Seeds Policy, 2009; National Insecticides Policy, 2009; National Veterinary Drug Policy, 2002; The Animal Breeding Act, 2009; National Bureau of Standards Act, 1993 (amended in 2013) and National Agriculture Policy, 2015.

This lacuna due to weak implementation and enforcement linked to inadequate institutional capacity, weak institutional coordination and inadequate policy to the policy process, limited public awareness and existing policies having no specific advance institutional capacity to improve access among youth. The 2016 draft National Seed Policy has not yet been enacted thus constraining the strengthening the seed quality control system.

What needs to be done to improve access to inputs by youth and quality of inputs?

<table>
<thead>
<tr>
<th>Input</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>Seed</td>
<td>Enact the National Seed Policy.</td>
</tr>
<tr>
<td>Public awareness on legislations on inputs, their use and ongoing initiatives</td>
<td>Sensitization and awareness campaigns.</td>
</tr>
<tr>
<td>Inadequate institutional capacity</td>
<td>Increase staffing and hiring financial and technical staff to the relevant institutions in advising and implementation in the input sector.</td>
</tr>
<tr>
<td>Visual enforcement of input legislations</td>
<td>Reduction of minimum input requirements for its compliance.</td>
</tr>
<tr>
<td>A gap in implementation of government programmes targeting high-quality inputs</td>
<td>Appropriate and timely delivery of inputs.</td>
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Background

Uganda has one of the fastest growing and youngest populations in the world. With about 70% of the population below the age of 35 (Aliab motion at, 2010) and 20% between 15 and 24 years (2006), the sector faces a major challenge of unemployment estimated at 64% to 70% with about 140,000 youths released annually into the labor market (Othow, 2004). The agriculture sector is a potential sector to combat this challenge since it employs approximately 50% of the youth. (World Bank, 2016). This is one of the factors expected to catalyse youth engagement in agriculture and help to reduce the unemployment rate in Uganda. The issue of limited access and quality inputs is not an isolated problem, especially in the agriculture sector, and is experienced in other sectors as well. The challenge is not only about ensuring that young people have access to quality inputs, but also that they understand how to use them effectively.

Kilimo Trust

Regional solutions to local problems

Transforming Lives Through Agribusiness
KT established a long-term program on analysis, diagnostics and advocacy. The aim is to build a single comprehensive database of value chain analytics, to facilitate the design and implementation of agricultural projects. In addition, under this program, the Trust conducts specialized trainings through the Kilimo Biashara Training Program (KBTP) to equip value chain actors and practitioners with skills and knowledge to establish robust business linkages that effectively connect small holder farmers to profitable markets.

The vision of the program is: **Development of food value chains in the EAC is driven by superior understanding of regional food markets.**

The program’s specific objectives are to:

1. Generate timely and accurate evidence based information to influence strategies and programs of governments, the private sector, relevant institutions in the EAC partner states and development funders – in relation to expanding food trade in the EAC region.

2. Support other programs/ projects of Kilimo Trust in undertaking analytical work and provide evidence based recommendations on the design and execution of interventions.
During this financial year, the unit has delivered the following

1. Under Kilimo Biashara Training Program (KBTP)
   - 180 Extension officers and non state actors were trained on Value Chain development approach with funding from USAID FtF EEA

2. Under the East Africa Youth Inclusion Programe (EAYIP)
   - 2 Commodity scoping study reports – Tanzania and Uganda
   - 5 Value chain reports published and disseminated to 540 stakeholders
     - Tanzania: Maize, potatoes and poultry value chains
     - Uganda: Maize and poultry value chains
   - 1 policy report and 3 policy briefs published and disseminated to 200 stakeholders in Uganda
   - 15 Heifer Staff trained on advocacy
   - 1 policy advocacy tool kit developed

3. Under Regional East Africa Community Trade in Staples (REACTS)project
   - 2 End Market Characterization reports published i.e. for Green grams and Onions
4. Under the Beans Enterprises and Structured Trade in the East African Community (BEST-EAC) project
   ▸ 1 Beans farmer gross margin report in the EAC published

5. Under Calories and Household Incomes from Potatoes Sub-sector (CHIPS) project
   ▸ 1 Value chain analysis report for potatoes produced

6. Consultancy for AGRA/IDH Coffee Study.
   ▸ 1 Farmer resilience concept note report developed

7. Under the Farm Income Enhancement Forestry Conservation (FIEFOC-2) program.
   ▸ 1 Capacity needs assessment report produced for Aquaculture, Apiculture and Rice value chains in the 5 targeted water sheds

8. Under Competitive African Rice Initiative (CARI) project.
   ▸ 1 Rice EAC report published and disseminated to stakeholders during the 2 workshops i.e. CARI close out meeting in Dodoma on 29th May 2018 where over 30 CARI partners and stakeholders attended and the Regional forum on the Rice value Chain in the EAC workshop in Nairobi on 5th April 2018 where over 30 EAC stakeholders attended

   ▸ 1 Agri-SME report developed and produced for agri-business value chains in Uganda (rice, maize, sunflower, soybeans, dairy, beef, pineapples, passion fruits and fish)
Christine Opio, aged 43 years and married with five children, is a sunflower farmer from Barjobi village, Amoyai parish, Okwang Sub-County in Otuke District. She is among the 550 active members of Okwang Farmers’ Cooperative Society. For over two years, Christine was growing sunflower on 0.4 hectare. Christine and her colleagues were growing a local sunflower variety that took 4 months to mature, yielding 297kg per hectare. She used to spend US$ 8.3 on 1.5kg of seed (0.5kg more than recommended for the 0.4 hectares), which she would broadcast, thus plants would compete for sunlight and other nutrients leading to reduced yields. A few times she would try to access imported seed varieties, they would be delivered in the middle of the season or when planted on time would fail to germinate.

Given the small volumes she produced, she never had a clearly defined market and middlemen would exploit her at the time of harvest (paying her US$ 0.2 per kilogram of sunflower grain). Expansion of land under production was not something she would venture in because it was risky investing in more production without clearly defined market, and had to deal with cultural barriers (in Langi culture) that barred women from using hoes to cultivate. The only option available then was to use ox ploughs, which were expensive if she was to expand and earn decent income from sunflower production.

To address the challenges that the group members especially women members such as Christine were facing, the leadership of Okwang farmers’ cooperative working closely with REACTS secured a supply contract from Ngetta Tropical holding Ltd (off-taker), a sunflower processor in Lira to supply 2,000MT, Valued at US$ 555,556 per annum. The off-taker who also doubles as a sunflower seed importer advanced improved seed (Agun 8251 variety) to farmers on credit. Christine then made a down payment of US$ 11.1 to access 3kg of improved sunflower seed (valued at US$ 33.3).

Using her personal savings, Christine decided to expand land under sunflower production to 1.2 hectares by hiring ox-plough (hoe was not an option for her) because she was guaranteed of premium price (US$ 0.28 per kg, compared to US$ 0.21 per kg that was offered by middlemen and other processors).

REACTS working closely with Service Providers from VODP-2 projects then built the capacity of Christine and her colleague to deliver the supply contract commitments her cooperative had signed with Ngetta Tropical Holdings Limited. Christine was trained on basic concepts of farming as a business such as costing, keeping records; having good relationships with buyers and other partners; maximizing profits; sunflower good agronomic practices such as use of fertilizer (DAP), planting in lines against broadcasting, spacing (75cm between the lines and 30cm between the crops), and use of high quality certified seed that has a high viability and yields per unit area; and collective action.

As a result of REACTS support, Christine now uses 2.5kg of improved seed per hectare (recommended) as opposed to 3.8kg per hectare she used to broadcast. With adoption of Agsun 8251 variety (which weighs more per unit volume of harvested grains), and other GAPs and GPHHPs, her production has increased from 0.28MT (from 0.4 hectares) to 1.89MT (from 1.2 hectares). Ngetta Tropical Holdings bought her sunflower grains at US$ 0.28 per kg against a spot price of US$ 0.21 per kg. Her net income increased from a loss of US$ 18 to a profit of US$ 225 (representing 1,350% increase).

Today, Christine can afford to buy cooking oil processed from the sunflower grains she grows, she has purchased her own ox plough which saves her time to do family chores, uses the proceeds to buy food (e.g rice and meat) which she does not produce, and the pressure to pay school fees for her 5 children has reduced since she can now afford to pay on time.

Christine summed it up all by saying that she “didn’t know that less seed could yield more harvest.”
Lake Eyasi Commercial Farmers Network (LECOFANET) Creates cross border market linkages for Onion Farmers in Mang’ola, Karatu District in Tanzania.

Farmers commonly produced low yielding varieties of bulb onions such as Red Creole, whose seed was recycled season after season; and the framers couldn’t recall how long the seed of the local onion varieties had been recycled. One middle aged farmer from Mbuga Nyekundu village recalls inheriting the seed from his father 10 years ago! In summary, the situation in Mang’ola can be described as unpredictable buyers and un-reliable farmers.

There was no single market, or collection center for red onions in the entire Lake Eyasi basin, yet the area is probably the leading producer of onions in East Africa. It is estimated that during the harvest season, about 200 lorries queued daily in Lake Eyasi basin to ferry tones of harvested onions to different parts of EAC region. All sales transactions took place in the farms and brokered by middlemen, who moved from one farm to another and hid information about markets from the farmers. A story is commonly told of Kenyan traders /truck drivers who hand over their trucks to middle men as they spend a whole day in a guest house until they are alerted in the evening that the truck has been loaded with onions and what was required of him was to honor payments at a price determined by the middlemen. The buyers and the farmers never met in Mang’ola. In an attempt to support onion storage, a few grass-thatched village stores which are not well conditioned existed, so quality and market value could not be guaranteed.

Realizing the challenges that the onion farmers were facing, REACTS undertook a rapid onions market assessment in the EAC region which resulted in identification of potential big onion traders/importers in Uganda, Kenya and Tanzania. This was followed by an Allium Trade Networking Meeting (TNM) held in March 2016, in Mbulu district in Tanzania’s Manyara region to further explore market opportunities for onions and garlic. The TNM brought together different stakeholders, including national and regional traders, producers of red onions and garlic from Karatu and Mbulu District, representatives of Tanzania Ministry of Industry and Trade, Tanzania Revenue Authority, Tanzania Bureau Standards, Tanzania Trade Development Authority (TanzTrade), District officials, as well as REACTS and MIVARF (IFAD funded loan project) project teams.

The newly constructed 2,000 MT ware-house by MIVARF that was handed over to LECOFANET

The Mang’ola valley is famous in East Africa for onion production. The valley is part of Lake Eyasi basin located in Karatu district, Arusha region, in Northern Tanzania. Before LECOFANET formation (an umbrella organization that brings together onion farmer groups in the basin), farmers operated at 30% of their productivity potential because of limited incentives (mainly limited access to inputs and output markets) to increase their farm investments.

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environment for increased regional trade. Furthermore, the meeting was used by the farmers and traders to identify key bottlenecks to taking advantage of available market opportunities. One of the key bottlenecks identified by the traders was the fact that farmers were working individually and scattered with few small groups (20–30 members) that existed (especially for onion farmers for Karatu district). This meant that it would be costly and time consuming for traders to aggregate volumes that make economic sense.

The farmers representative with support from MIVARF and REACTS then embarked on mobilization of small farmer groups and individual farmers to form a bigger group (cooperative) that can afford to bulk sufficient volumes as required by regional off-takers. One month later (April 2016), Lake Eyasi Commercial Farmers Network (LECOFANET), a member-owned business limited with share capital was formed, with initial membership of about 320 red onions farmers (from 10 small groups) operating in Lake Eyasi basin. To build confidence and increased understanding of farmers, REACTS with support from MIVARF then organized a learning route/visit for founding members of LECOFANET to visit major regional markets in Kenya, Uganda and Tanzania. Farmers carried samples of their onion varieties to wholesale markets in Kenya (Nairobi’s Wakulima and Malkiti markets, and Wakulima market in Nakuru), Uganda (Nakasero, Kalerwe and Owino), and Kariakoo market in Dar-es-Salaam.

During the visits to regional markets, LECOFANET members realized that all the markets had different requirements. For instance, although Kenyan onion market preferred packaging in nets, different Kenyan markets required different types of nets (the net used in Nairobi is different from that used in Nakuru), and in Uganda, buyers required bags. By the end of the learning route, LECOFANET had signed 3 major supply agreements worth 100 MT of bulb onions valued at about US$27,000 per week (US$1,296,000 annually). It is during this visit that the farmers met with Managing Director (MD) of Sparkle Food Exporters (SFE), a horticultural products exporter based in Nairobi. The company had secured forward contracts to supply European and Asian markets but always failed to meet the contract targets. At one point, the company decided to venture into onions business or grow onions on a block farm but this still did not work. Enthusiastic about the alternative option that LECOFANET provided, the MD of SFE with guidance of REACTS team later visited LECOFANET in Karatu district to ascertain the availability of red onions and farmers capacity & readiness to supply required quantity and quality. Following this trip, a business consortium/linkage was formed with support from REACTS and MIVARF which later attracted other business players such as Hygrotech International Ltd (for seed), Trichem (for agrochemicals), Yara Tanzania (for fertilizers) and NMB (for agricultural credit), and later Uchumi Commercial Bank (UCB) because of the potential business opportunities the arrangement presented. REACTS and MIVARF then supported consortium partners to undertake due diligence on each other, organized consortium meetings which later resulted in adoption of a new onion variety (red wave variety), which is high yielding (up to 20 MT/acre compared to about 8 MT/acre for local varieties), requires low inputs (reduces fertilizer requirement by almost half), early maturing (65–75 days compared to about 120 days for local varieties), low water requirements, high germination rate (95 to 100%), low seed requirement (2kg compared to about 15kg required for local varieties), and the most important is that it was highly preferred by the target off-taker/market (SFE). Furthermore, REACTS built capacity of MIVARF service providers and LECOFANET members in principles of farming as a business using Farmer Business School Model, and organized another learning visit for members of LECOFANET to understand why onion farmers in other areas such as Moshi, Same (Kilimanjaro) and Singida were becoming more competitive and attractive to traders. From this learning visit, the important lesson was the power of organized produce marketing. Unlike in Karatu where buying of onions takes place in farms (making aggregation by traders costly and time consuming), while onion business in Singida take place in the wholesale market. Aggregation in Karatu was still a challenge because the group lacked a bulking facility. However, with formation and legal registration of LECOFANET, proper leadership and institutional bank account in place and a bankable business plan (to show how the facility would be run and the business model), MIVARF got confidence (with REACTS lobbying) to construct a 2,000MT warehouse (valued at US$728,000) and it was officially handed over to LECOFANET (with a handover certificate) by the Government of Tanzania through Karatu District Council.

Currently, LECOFANET is registered as a company limited by share capital whose membership has increased from 320 to 1,500 farmers - already 28 groups have paid TSH 110,000 (US$50) each for membership and share capital. The price received from target off-taker (SFE) by LECOFANET members because of aggregation is about 30% higher than the farm gate price offered by other traders (i.e. US$0.52/Kg compared to US$0.4/Kg). More partners such as World Vision (Mangola branch), MIVIWATA and RECODA have started partnering with and integrating their supported groups into LECOFANET, to take advantage of the warehouse and access to regional markets. Some partners in LECOFANET consortium are negotiating to make LECOFANET sole distributor of their products in Lake Eyasi basin (e.g. Onion seed from Hygrotech, fertilizers from Yara, Mobile cash van from NMB bank). Government has increased their support and participation through regional and district officials and ward agricultural officers who are participating in LECOFANET activities. For the off-taker (SFE) who was at the verge of closing business because of lack of supply, the average volumes of red onions traded per month has increased from zero to 160 MT, valued at US$58,182 (or 1,920 MT annually valued at US$698,184). The cost of aggregation to fill a 10MT truck has reduced by 30% (from US$1,951 to US$1,374), and the aggregation time has reduced from 7days to a maximum 3 days. SFE has also opened-up four (4) onion outlets in Mombasa and has diversified to new sourcing areas such as Kilimanjaro (Same district), Moshi and Singida when the supply is low from Karatu.
Women farmers make up a large share of Africa’s farming population, yet they face higher levels of inequality in comparison to their male counterparts; this is especially evident as you move up the various value chains. They tend to be locked out of land ownership, access to credit and farm inputs like fertilizers and other agro-inputs, support from extension services, and access to markets and other factors essential to enhance productivity.

The Nandi County-based Cheptarit Star Women’s Group-turned a company limited by guarantee known as Cheptarit Star Ltd has a targeted gender approach, aiming to improve the socio-economic status of female farmers and their dependents and make a sustainable change in the lives of other residents in the area. Established in 2006, the group owns a certified aggregation centre located in Mosoriot.

In 2015, they became part of a cross-border trading consortium supported by Kilimo Trust under the FoodTrade ESA programme. The group is in the process of relocating to a newly acquired piece of land bought from the profits they have realised, where they plan to set up a warehouse. Led by Irene Samoei, the group’s Chairperson, members are now able to participate in cross-border trade and enjoy the benefits of direct and competitive access to maize and beans supplies from Uganda. The project also supported them to extend their tentacles to Tanzania particularly Kagera in northwestern region where they signed beans supply agreement with a local aggregator.

Kilimo Trust (KT) has provided the group with training in business skills, good agricultural practices (including production of quality certified seeds in partnership with Egerton university) and good post-harvest handling practices. KT has also given them access to market information that has enabled them to participate in trade negotiations. The consortium model allows them to have a guaranteed supply of beans, allowing them to supply schools and other learning institutions throughout the year. The cross-border sourcing also helps them bridge the gap between local production and their market demands due to the varied harvesting calendars in the production regions. In the last 2 months alone, the group traded over 800 bags of beans from Uganda.

The Group Secretary Josephine Bungei notes that the lives of members are improving due to the benefits of the partnership with KT; with additional income the women are able to afford basic household items and support their children through school, easing their reliance on expensive loans to survive. “We are able to sell quality produce at higher margins and to an already guaranteed market. We therefore fetch better incomes and are able to support our families.”

Although quality of grain remains a challenge, there has been a notable improvement from previous harvests because of awareness created on the need to use the right inputs such as certified seeds and fertilizers. Winnie Cherono, the Manager of the group’s aggregation centre added, “We are now able to demand specific qualities of grains because we guarantee farmers a ready market for their produce. We have seen them invest their energy and skills in producing quality grains because they know that this will also be beneficial to them.” Lack of capital remains a major challenge to the expansion of the group’s business. However with time, they aim to expand their capital base and grow their market presence in the region. For instance, they are now becoming attractive to the financial institutions as a result of the supply contracts they have signed with the end markets and the backward linkages with the suppliers both within and without the Kenyan borders.
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