

# ASARECA POLICY NEWSLETTER

15 July 2016 Volume 19 Number 13

# ARE STRUCTURED VALUE CHAINS POSSIBLE OR NECESSARY? SOME HIGHLIGHTS FROM ETHIOPIAN AND KENYAN MAIZE AND LEGUME MARKETS

A core pillar of sustainable agricultural intensification is farm level financial viability. This in turn hinges on well-functioning agricultural markets and value chains. This brief comes to the conclusion that the near absence of key elements of structured value chains in Ethiopian and Kenyan maize and legume markets implies limited profitable business opportunities in these more formalized market activities. It also highlights four important principles for policy and research aimed at facilitating value chain development.

ood markets in sub-Saharan Africa are projected to grow exponentially in the coming decades. Modern value chains with dependable and transparent information systems, quality standards, storage facilities, supportive financial credit and other services are important if expanding food markets brought about by urbanization are to turn into successful agribusiness and development opportunities.

Despite the potential of African agricultural markets to capture the demands of a growing urban consumer class, the evidence base on the performance of these markets is still relatively thin. It is therefore important to document the emerging trends to identify opportunities and impediments to the growth and development of modern value chains in these staple crops markets. Market surveys were hence carried out in 2013 under the Sustainable Intensification of Maize–Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA).

The surveys were undertaken among maize and legume traders in Kenya and Ethiopia. These markets were selected to coincide with the catchment markets for maize and legumes in the zones where the International Maize and Wheat Improvement Centre (CIMMYT) and partners implemented the SIMLESA project. The project focuses on generating information on production options, value chains and policy ideas that can be used by farmers, extension agencies, development organizations, and agribusinesses along the maize—legume value chains in a comprehensive package to achieve sustainable intensification. In total 275 and 106 maize and/or legume traders were interviewed in Ethiopia and Kenya respectively.

#### Characteristics of maize trade enterprises in Ethiopia and Kenya

The evidence of modernization and structured trade in the maize and legume markets in the two countries was summarized in terms of the following parameters: contract-based transactions, service delivery, price information systems, and standardization and quality differentiation. The aim is to show frequency of contract-based transactions compared to spot markets, the availability of auxiliary services from market

intermediaries, the nature of the price dissemination system and the grading and quality assessment system.

# (a) Frequency of contract-based transactions

Limited contract-based transactions are likely to imply the predominance of spot markets. In both Kenya and Ethiopia, the survey found that the majority of traders operated within a limited locality: In Ethiopia, 94% of maize and legume traders operate primarily in local villages and towns while in Kenya, the incidence is 72% and 79% for maize and legume traders respectively. This situation is partly due to the small and micro size of most businesses.

Transactions based on contracts were nearly absent in either trader-supplier or trader-buyer relationships. In Kenya, only 9.4% of traders had a supply contract with farmers while in Ethiopia, only 0.4% of the traders. Buyer contracts were slightly more prevalent; at least 12.3% of the traders in Kenya and 4% of those in Ethiopia reported having a buyer contract. The evidence of few contract-based transactions may be symptomatic of unstructured transactions in many maize and legume markets in both countries. The localized nature of many of businesses suggests that local traders are not be able to exploit markets further afield compared to other intermediaries.

## (b) Service delivery

The second trend revealed by the survey was that the localized nature of grain markets is accompanied by limited market services reaching farmers from traders. This is a significant finding because farmers are the traders' main suppliers followed by wholesalers and rural assemblers or business partners. Only a minority of traders offered any of the services that may support greater and structured participation of farmers in maize and legume markets. There is limited provision of credit or other auxiliary market services. In Kenya, 16% compared to 15% of traders reported availing storage services to farmers; about 2% in both countries also offered agro-advisory/extension services; while only 5% in Kenya and 2% in Ethiopia offered grain pickup and delivery services. Only traders in Kenya (about 15%) reported having risk-sharing arrangements with their suppliers.

## (c) Price information systems

Modern markets rely on equitable information access provided through publicly accessible common outlets. In many places in Kenya and Ethiopia there are limited formal public price information systems. For many traders, conversations with fellow traders, agents and brokers are still the main source of market information. Alternatively, price discovery occurred at the market place in the course of negotiations. The latter is a feature of spot markets. The thrust being that gathering market price information is mainly a private undertaking for traders. A publicly accessible price information system appears exceptional rather than the norm in both countries.

In terms of price discovery and settlement, the results showed the predominant price settlement for the traders (74% in Ethiopia and 44% in Kenya) was through negotiations between traders and their business partners (sellers or buyers). Just about 38% of traders relied on common-knowledge market prices during the transaction to pay farmers in both eastern and western regions of Kenya. In Ethiopia 23% of the traders relied on published prices by trader associations.

## (d) Standardization and quality differentiation

An important issue is that in the absence of standardized quality determination and arbitration, prices in informal market systems are often not based on quality differentials. This is because the various "grades" are not openly known nor are they assessed using standardized procedures. In many markets in Kenya and Ethiopia, grading and standardization are limited to the buyer making visual inspection during the buying process. The result is lack of standardization which means that the prices charged are impossible to compare on the basis of quality differentiation.

16 different attributes were assessed for their level of importance in influencing pricing decisions when purchasing maize or legumes. In each case no attribute was considered by more than 12% of the traders as "very important" in affecting prices in either country. Without a common and widely accepted minimum set of attributes, which set the quality and price of maize, it may be difficult to develop systems like group marketing, warehouse receipt systems and commodity exchanges. For example if farmers are to form marketing groups to bulk and transport to larger markets, their members must bring together grain of fairly uniform and specific quality as demanded by the market. Without a common set of standards the arrangement is likely to collapse.

Note that both countries have formal standards for grain and legumes, however, the issue seems to be lack of enforcement or application of the formal quality and grade assessment methods established by various authorities such as National Cereals and Produce Board, Kenya Plant Health Inspectorate and Kenya National Bureau of Standards or the Ethiopian Commodity Exchange.

# Implication: Is value chains modernization always a good thing?

Will the development of contracting and other forms of formalization always lead to equitable outcomes for smallholder market participation? Where willingness to pay is dictated by consumer preferences, markets will pay the price for higher quality products while producers will decide their willingness to participate in these structured markets based on cost-benefit analysis. It is possible to strike a middle ground with those able to achieve the demands of premium markets and those able to serve the low income market segments. The equity implications of this scenario are not immediately obvious.

## Conclusions and lessons for sustainable intensification research and policy

The fact that the elements of structured grain markets are largely missing in maize and legume markets in Ethiopia and Kenya suggests that there are few viable business opportunities in these formalized systems, otherwise businesses would have developed around them. Moreover, the dynamism of the less structured markets with their low entry barriers, offer a more level playing field for many small traders and farmers to participate in these markets. The flexibility of less structured markets is also critical in meeting diverse consumers' needs and preferences. On balance, the advantages of more structured markets are neither straightforward nor a foregone conclusion.

This survey highlights four important issues for policy on value chain development and for further research: First, price information systems based on widely accepted quality definitions are needed in maize–legume value chains to support quality based pricing. Second, agricultural market development policy should focus on improving infrastructure for auxiliary services such as, forward sales, transportation, post-harvest handling and grading. Third, options for reducing the length of value chains or enabling farmers to be more fully integrated into wider markets should be explored. Fourth, future research should focus on determining

the business case and development gains from such measures as standardized grades and quality, contracting and vertical integration.

This issues is derived from a policy brief was prepared by Paswel Marenya of the International Maize and Wheat Improvement Centre (CIMMYT) with support from Adam Bekele of the Ethiopian Institute of Agricultural research, Melkassa Research Station, Adama, Ethiopia and Martins Odendo of the Kenya Agricultural and Livestock Research Organization (KALRO), Kakamega, Kenya. For further information contact Paswel P.marenya@cgiar.org

#### COMMUNICATION

### **Quick Reads**

# **ASARECA Annual Report 2015: Consolidating Achievements**

We are pleased to share with you highlights of the year 2015 at ASARECA. The Annual report provides insights into what was achieved. Read about how farmers in Burundi are enhancing the productivity of water for use in integrated fish, poultry and crop production. Highlights from Kenya include the use of climate smart weather advisories to enhance the resilience of farming in Machakos. The region has made progress in addressing maize lethal necrosis; farmers in Rwanda and Burundi have reported yield improvements in wheat while the first phase of the EAAPP project closed with major leaps in technology generation and policy improvements. To read more in the full report see <a href="www.asareca.org">www.asareca.org</a>. You can also access the report by clicking the icon below.



### 5 trends transforming Africa

This infographic by Liquid telecom gives a brief snapshot of the 5 trends that are underway across Africa, as the continent leapfrogs ahead or plays catch-up with the rest of the world in adopting the latest business trends. The trends include mobile money, digital advertising, enterprise cloud computing, e-commerce and internet of things. Read more at:

https://www.liquidtelecom.com/infographic?utm\_source=infographic&utm\_medium=email&utm\_campaign=5-trends-africa&dm\_i=2BTT,TXAM,6BTF67,26NFC,1

### **Scholarships and Fellowships**

## Research Fellowships in Spain: Women for Africa Foundation

The Women for Africa Foundation has launched the 2nd edition of its program "Science by Women" to promote African women's leadership in scientific research and technology transfer. Each of seven research centers in Spain will host one woman researcher for a six-month fellowship. Subject areas include agriculture, energy, environment, and several others. The program is open to women of African nationalities with a PhD and at least three years of post-doctoral professional experience. The application deadline is 20th July 2016. For more information visit <a href="http://www.mujeresporafrica.es/senior-research-fellowships-2016/index.html">http://www.mujeresporafrica.es/senior-research-fellowships-2016/index.html</a>

ASARECA obtained this information from the TerraViva grants database http://www.terravivagrants.info/

#### **Grants**

## Bill & Melinda Gates Foundation: Advancing Geospatial Data in Africa

The Bill & Melinda Gates Foundation seeks to invest in an organization that will advance the quality, completeness, and sustainability of geospatial data in Africa. This organization will serve as a strategic grant maker, capacity builder, and effectively coordinate with others working in mapping and data on the continent. Applicant organizations should be ideally based in Africa. If headquartered elsewhere, the applying organization must have a strong presence and/or offices in Africa. The deadline for sending qualifications statements is 5<sup>th</sup> August 2016.

ASARECA obtained this information from the TerraViva grants database <a href="http://www.terravivagrants.info/">http://www.terravivagrants.info/</a>

## African Union: Research Grants in Food and Agriculture

In collaboration with the European Union, Phase 2 of the African Union's research grants will focus on research for food, nutritional security, and sustainable agriculture in Africa. Applications are invited from national and regional organizations, research institutions, universities, government ministries, and public institutions in Africa and EU member states. Eligibility for funding also extends to science and technology networks if all network members are registered in the eligible countries. Grants will range from US\$ 500 thousand to US\$ 1 million, varying with cost shares. The deadline for proposals is 17 August 2016. For more information please visit <a href="http://au.int/aurg">http://au.int/aurg</a>

ASARECA obtained this information from the TerraViva grants database <a href="http://www.terravivagrants.info/">http://www.terravivagrants.info/</a>

# MacArthur Foundation: 100&Change

The Foundation is seeking competitive proposals for an award of \$ 100 million grant to a single proposal designed to help solve a critical problem affecting people, places, or the planet. The Foundation's competition, called 100&Change, is open to organizations working in any field of endeavor anywhere. Applicants must identify both the problem they are trying to solve, as well as their proposed solution. Competitive proposals will be meaningful, verifiable, durable, and feasible. Deadline for registration is 2<sup>nd</sup> September 2016. For more information visit <a href="https://www.100andchange.org/">https://www.100andchange.org/</a>

#### Conferences

### **Africa Fertilizer Agribusiness Conference**

The Africa Fertilizer Agribusiness Conference will be held 10 – 12 October 2016 in Dar es Salaam, Tanzania. Participants at the conference will gain first-hand knowledge of fertilizer trading requirements, trends shaping the industry and will understand how technical innovation in the production and application of fertilizers inputs will impact African agribusiness.

PAAP received this information from Sandra Pires of the African Fertilizer and Agribusiness Partnership (AFAP) who is gratefully acknowledged.

This newsletter is an attempt to use e-communications to provide to a broad audience within and outside Eastern and Central Africa a mechanism for distribution and exchange of information relevant to agricultural policy issues. This newsletter is being sent to you as PAAP's stakeholder. We want to respect your privacy and desire not to have your

e-mail inbox filled with unwanted correspondence. If you do not want to receive this newsletter please send us a note at paap@asareca.org, and we will remove your name from the distribution list.