ZIMBABWE ECONOMIC POLICY ANALYSIS AND RESEARCH UNIT

ZEPARU

BUILDING

Agricultural Competitiveness in Zimbabwe:

Lessons From the International Perspective

C. Martin Webber
Gibson Chigumira
Jecob Nyamadzawo

ZIMBABWE ECONOMIC
POLICY ANALYSIS AND
RESEARCH UNIT

BUILDING AGRICULTURAL COMPETITIVENESS IN ZIMBABWE:

LESSONS FROM THE INTERNATIONAL PERSPECTIVE

C. Martin Webber
Executive Vice President
J.E. Austin Associates, Inc.

Gibson Chigumira
Executive Director
ZEPARU

Jecob Nyamadzawo
Research Fellow
ZEPARU

ABSTRACT

This paper attempts to assess Zimbabwe's agricultural competitiveness, in terms of the sector's performance, and challenges to expanding the sector and improving competitiveness. The paper also discusses key drivers of competitiveness, describes several indicators of agricultural competitiveness, and introduces approaches to competitiveness benchmarking. It advocates for private sector driven, market based agricultural competitiveness, and presents approaches to addressing these challenges, drawing on numerous international experiences. The paper notes that key to improving competitiveness is the need for Zimbabwe to, among other imperatives: reduce losses and costs by improving storage, logistics and transport; improve economies of scale; improve business-business linkages; understand and serve market needs; upgrade and deepen value chains; understand and use standards and certification; lower investment risk; and position products and value chains for greater value and competitiveness. It also notes the need for Government intervention in addressing the policy environment to pave the way for the successful implementation of the several approaches that have been used in other countries to enhance agricultural competitive. The paper thus underscores the need for collaboration between the public and private sectors, and willingness of the public sector to assume responsibility for ensuring a strong platform for competitiveness and an enabling environment that encourages and supports the private sector.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

ADAR	Assistance à la Dynamisation de Agro-business au Rwanda
BCPA	Botswana Cattle Producers Association
BDS	Business development services
BMC	Botswana Meat Commission
BMOS	Business membership organizations
BMU	Beach Level Management Unit
CIGs	Commodity Industry Groups
CLA	Community Level Agent
DFR	Department of Fisheries (Uganda)
EU	European Union
FAO	Food and Agricultural Organization
FDI	Foreign Direct Investment
GAP	Good Agricultural Practices
GoB	Government of Botswana
GoR	Government of Rwanda
GoU	Government of Uganda
GMB	Grain Marketing Board
Ha	Hectare
HACCP	Hazard Analysis & Critical Control Points (HACCP)
MCI	Mongolian Competitiveness Initiative
MD2	a pineapple variety introduced by Costa Rica
MoA	Ministry of Agriculture
SPEG	Sea Freight Pineapple Exporters of Ghana
SWOG	Strategic Working Group
UBA/Dole	Union Bananière Africaine
UFPE	Uganda Fish Processors and Exports Association
UNBS	Uganda National Bureau of Standards
ZEGA	Zambian Export Growers Association
ZIM-ACP	Zimbabwe Agricultural Competitiveness Program

ACKNOWLEDGMENTS

This paper was prepared by the Zimbabwe Economic Policy Analysis and Research Unit, (ZEPARU), with financial and technical support from the USAID Strategic Economic Research and Analysis (SERA) Program under Contract No. USAID-613-C-11-00001. Much of the information on international experiences was sourced from "Building Competitiveness in Africa's Agriculture – a Guide to Value Chain Concepts and Application" written by C. Martin Webber of J.E Austin Associates, Inc. and Patrick Labaste (2010), published by the World Bank, and earlier work prepared by J.E. Austin Associates. The Authors are also grateful to all participants at the Agricultural Competitiveness Conference held from 11 – 12 July 2012, in Harare, which provided useful information and statistics used herein.

1.0 INTRODUCTION

Agriculture is one of the most important sectors to many African economies, as the majority of people depend on farming activities for their livelihoods. For Zimbabwe, agriculture is the backbone of the economy, underpining economic growth, food security and poverty reduction programs. Farming activities are undertaken at both communal (smallholder) levels and on large-scale commercial farms. Statistics from the Ministry of Agriculture[1] (MoA) show that an estimated 70 percent of the country's population lives in the rural areas and is therefore directly or indirectly dependent on agriculture for employment and food security. In addition, agriculture is an important source of incomes, given that agriculture-related employment is estimated to support a third of the formal labour force (MoA 2012).

Agricultural activities are also important in enhancing food security in Zimbabwe's urban areas. It is estimated that about 56 percent of urban households grew Zimbabwe's staple, maize, during the 2008/9 agricultural season (Doran 2009). Beyond food security, agriculture provides key linkages with other sectors of the economy, particularly manufacturing. The agricultural sector supplies 60 percent[2] of the raw materials required by the country's industry and contributes about 40 percent[3] of total export earnings. Agriculture is estimated to contribute 15-18 percent[4] of the country's gross domestic product (GDP).

The country is endowed with good agro-climatic conditions and vast arable lands, which provides a rich basis for enhanced agriculture productivity. The major food crops being produced include maize, small grains, wheat, groundnuts and beans. Tobacco, cotton, sugar cane, soya bean and horticulture are the main cash crops. The livestock sector mainly consists of beef and dairy cattle, goats, sheep, pigs and poultry. However, Zimbabwe's agricultural performance has over the years declined and has not been meeting its national requirements, particularly in maize and wheat. Ndlela and Robinson (2007) noted that from 2000 the dramatic deterioration in productivity in the agricultural sector was a result of the fast track land reform program, coupled with the effects of macroeconomic mismanagement (including shortages of imported inputs such as fuel, seed and fertilizer) and the disruption of research and extension services, input supplies and marketing systems.

On the back of low productivity, the country has, therefore, been increasingly relying on imports to supplement domestic production. Total maize production has declined from a peak of over 2 million tonnes in 1996 to 1.3 million tonnes in 2010, against national requirements of 1.8 million tonnes. Wheat production also declined from a peak of 263,000 tonnes in1996 to 41,000 tonnes in 2010, (Figure 1).

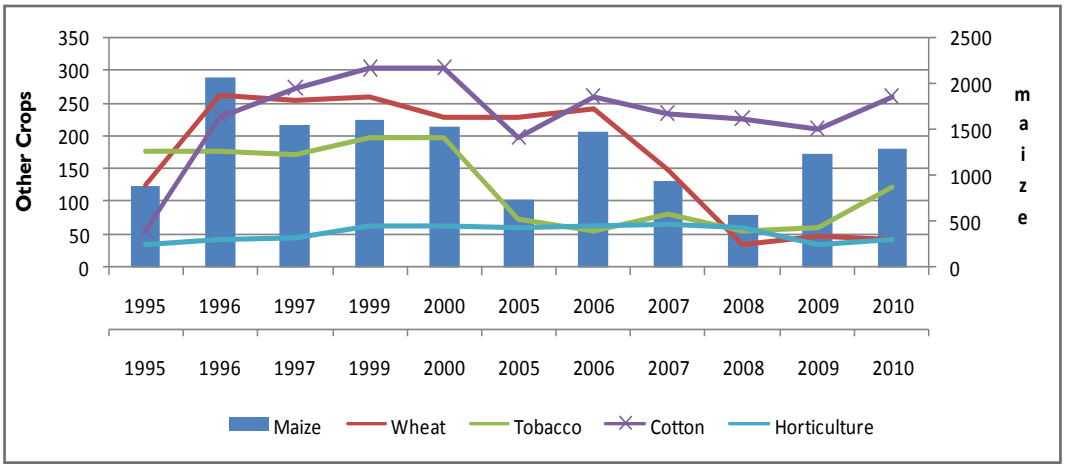
[1]Statistics on the importance and contribution of Agriculture to the Zimbabwean economy were taken from a presentation by the Secretary for Agriculture, Mr. N. Masoka at the Agriculture Competitive Conference held on 11-12 July 2012 in Harare

[2]Ibid

[3]Ibid

[4]Ibid

Figure 1: Production levels for key crops in Zimbabwe in "000" tonnes from 1995 – 2010



Source: MTP 2011-2015

Zimbabwe's production of major cash crops has also been declining. Tobacco production dropped from 226,000 tonnes in 1998 to 56,000 tonnes in 2008, before improving to 122,000 tonnes in 2010. Cotton production has been fluctuating downwards, whilst horticulture declined from a peak of 82,000 tonnes in 2002 to 35,000 tonnes in 2009 (Figure 1).

Similarly, all the livestock production statistics have, on average, trended downwards since 2000, (Table 1). Cattle production (beef and Diary) recorded significant declines from the peak of 6,418,166 in 2001 to 5,241,192 by 2011 for beef and 57,488 to 12,392 for diary and also experienced a shift in ownership from former large scale commercial farmers to new and smaller commercial farms and the family sector (World Bank 2012). The decline in cattle production can be attributed to declining numbers of commercial breeders from about 230 breeders holding 20,000 stock each to about 63 breeders now holding about 500 stock, (World Bank 2012).

Table 1: Livestock Production Statistics 2001 - 2011

Sector	2001	2003	2005	2006	2009	2010	2011
Cattle	6,418,116	5,296,865	5,187,613	4,986,318	5,221,720	5,156,753	5,241,192
Diary	57,488	42,609	44,000	29,920	25,000	22,000	12,392
Sheep	340,000	515,306	415,901	332,721	470,000	502,205	532,337
Pigs	270,000	183,241	167,775	218,108	280,000	259,091	-
Poultry*	25,400,000	28,200,000	33,400,000	29,079,117	12,883,344	37,523,124	51,600,000

*Source: World Bank 2012 * Day old chicks*

The pig industry witnessed a decline in production from 270,000 sows in 2001 to 167,775 in 2005 before recovering from 2006 - 2008, (Table1), suggesting a broad range of investments in the piggery infrastructure by the industry players (World Bank 2012). However, the poultry sector remained buoyant, with production doubling from 25,400,000 in 2001 to over 51,000,000 in 2011,

(Table 1) a factor attributable to changes in meat consumption patterns in the country, hence increased demand for poultry.

With this in mind, Zimbabwe faces a twin challenge of expanding agricultural production and improving the sector's overall competitiveness. Competitiveness objectives can be described in terms of outcomes such as productivity, marketability and price received. It is fundamental that increased agricultural production and productivity can significantly spur economic growth and development in Zimbabwe, if Zimbabwe produces products that the market is willing to purchase. It is important to enhance agriculture competitiveness if the sector is to play its key role of anchoring economic development, food security and employment. Enhancing agriculture competitiveness is also important in restoring Zimbabwe's "bread basket" status in Africa and reducing the country's food import bill and possibly imported food inflation. Zimbabwean farmers' ability to achieve this and reclaim markets lost over the years will depends on the collective efforts of stakeholders to learn from the success stories of competitive agriculture from the international perspective.

A more productive and competitive agricultural sector will strengthen household and national food security. It will ensure enough production for domestic processing and consumption and hence, increased savings from food imports would create additional fiscal space for priority spending in social sectors, infrastructure and other development programmes. It will also enhance export earnings and improve the country's foreign reserves. In addition, more competitive agriculture will boost employment, improve incomes and reduce poverty.

Competitiveness herein is defined as the ability of agricultural, agribusiness and agro-industrial concerns to produce and offer products that meet the quality standards of the local and world markets at prices that are competitive and provide adequate returns on the resources employed or consumed in producing them. At one level, competitiveness is the ability to compete or sell in the competitive marketplace. Increasing competitiveness, also implies a growing ability to achieve a better price result in these globally competitive markets. Whether measured by amount of output or better level of inputs (and hence sales prices), increased competitiveness requires increased productivity. Productivity of labour and other inputs is thus key to competitiveness and Zimbabwe can increase its competitiveness in agriculture by increasing its productivity.

This paper seeks to present an international (best practice) experience on improving agricultural competitiveness, which will be used to draw lessons for Zimbabwe. Zimbabwe's agriculture performance is judged by benchmarking it against high-performing comparator countries, with a view to develop long-term sustainable strategies to improve the sector's competitiveness. The paper focuses on market, post-harvest, business environment themes and value chain relationships, rather than on the technologies and processes of agricultural research or cultivation. It is however important to highlight the importance of factors such as farming systems, research and inputs, which are beyond the scope of this paper.

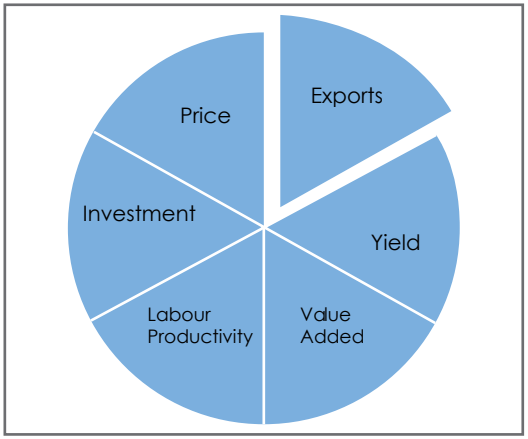
2.0 UNDERSTANDING AGRICULTURAL COMPETITIVENESS

2.1 Measuring Agricultural Competitiveness

A variety of measures can be used to describe a country's agricultural competitiveness - for example: unit prices; levels of exports; levels of market-based products; private investment in the agricultural sector; yield levels; levels of value addition; labour (and other factor) productivity (see Figure 2).

If a country can fetch high prices for its agricultural commodities, and is able to maintain or increase its market share of that particular commodity in the world market, it is generally understood to be competitive in that particular commodity or industry. Similarly, high levels of investment (both domestic and foreign) high or rising yields coupled with sustained high productivity of factors are indications of competitiveness

Figure 2: Important Indicators of Agricultural Competitiveness



It is important to use several indicators rather than make policy strategy/investments decisions on the basis of a single indicator. For any concerned country it is important to honestly find answers to their own probing questions. For instance:

- Why is the price received for Chilean grapes twice that of Uzbek grapes? (US$1,358 versus US$668 per tonne respectively) (FAO Stat, 2009)
- Why is the price that Burkina Faso receives for its sesame 21 percent higher than that earned by Senegal (US$960 per tonne, US$ 793 per tonne respectively)? How does Ethiopia earn 35 percent more than Burkina Faso (US$1,294 compared to US$960 per tonne)? And why do the Japanese pay US$ 0.4 per kilogram(kg) for Ethiopian sesame and US$$0.75 per kg from Burkina Faso, while purchasing no sesame from Senegal (2010)?[5]
- Why did Sri Lanka receive only in US$135 million for rubber exports in 1995 and $337 million for rubber exports in 2004, but US$ 736 million in 2010?[6]
- How did Ethiopia manage to grow its flower exports from 1 tonne in 2004 to 50 tonnes worth US$146 million in 2010?[7]
- Why did Tanzania process only 40 percent of its cashews in 2007, while the rest were exported to India?[8]

[5]United Nations Commodity Trade Statistics Database (Comtrade)
[6]Comtrade, Sri Lanka Rubber Cluster, (2002) "A Competitiveness Strategy for Sri Lanka's Rubber Industry"
[7]Rikken, Milco, (2011) "The Global Competitiveness of the Kenyan Flower Industry" Prepared for the Fifth Video Conference on the Global Competitiveness of the Flower Industry in Eastern Africa
[8] "Tanzania's Cashew Value Chain: A Diagnostic" Prepared by Peter Masawe, Frank Hartwich, Margaret Ikongwe, Fredrick Romani, and Juliet Kabege for the African Agribusiness and Agro-Industries Development Initiative pg. 9.

- How did Rwanda's Black Apron" coffee retail through Starbucks at US$53/kgs in 2008 when in 2001 Rwandan exporters received just US$0.88/kgs?[9]

Most of these examples are expressed in terms that benchmark comparators. This benchmarking can also be carried out at the industry level, as was done for the Dominican cigar industry, seeking to match Cuban quality, reputation and price (See Table 2).

Table 2: Analysis of the Dominican Cigar Industry vs. Cuban Cigars

Critical Success Factors	Dominican Cigars	Cuban Cigars	Follow-on Questions
Sales Volume	120 million sold	80 million sold	At what price? What are industry profits?
Flavour	#2 in blind taste tests	#1 in blind taste tests	What are the key determinants of flavour
Packaging	Imported wrapper	Local wrapper	How important is the wrapper to consumer choice? How does the wrapper affect production costs?
Research and Development Capacity	Weak (but improving)	Strong	What institutions are needed to develop R & D capacity
Distribution Channels	Mostly sells to Davidoff etc	Controls European distribution channels	What kinds of distribution channels are most in line with the business and growth model? How can these be developed?
Final Market	Over-reliance on U.S embargo of Cuba	Strong European penetration	Where are current customers, future/potential consumer bases?
Industry Management	Dynamic enterprises	State-owned enterprises	What are managerial weaknesses? How can they be improved?
Marketing	Rising image as a "cigar country"	Strong "cigar country"	How to develop an effective and differentiated branding strategy?

Source: J. E. Austin Associates, Inc, Adapted from Webber and Labaste (2010)

Similarly, Senegal in 2011 undertook an assessment of its agricultural competitiveness in its National Competitiveness Report. The Report provided some new insights on the linkages and benchmarking agriculture with other industries. Benchmarking can both shed light on the causes of weak competitiveness performance, as well as provide inspiration, as replicable business models and lessons learned can be drawn from the experience of competitors. Some of the findings of Senegal's competitiveness report include:

- 53 percent of the workforce is employed in agriculture, yet it accounts for only 16 percent of GDP;

[9]USAID (2007) The Ties that Bind: Case Studies in Making Buyer-Supplier Relationships Last

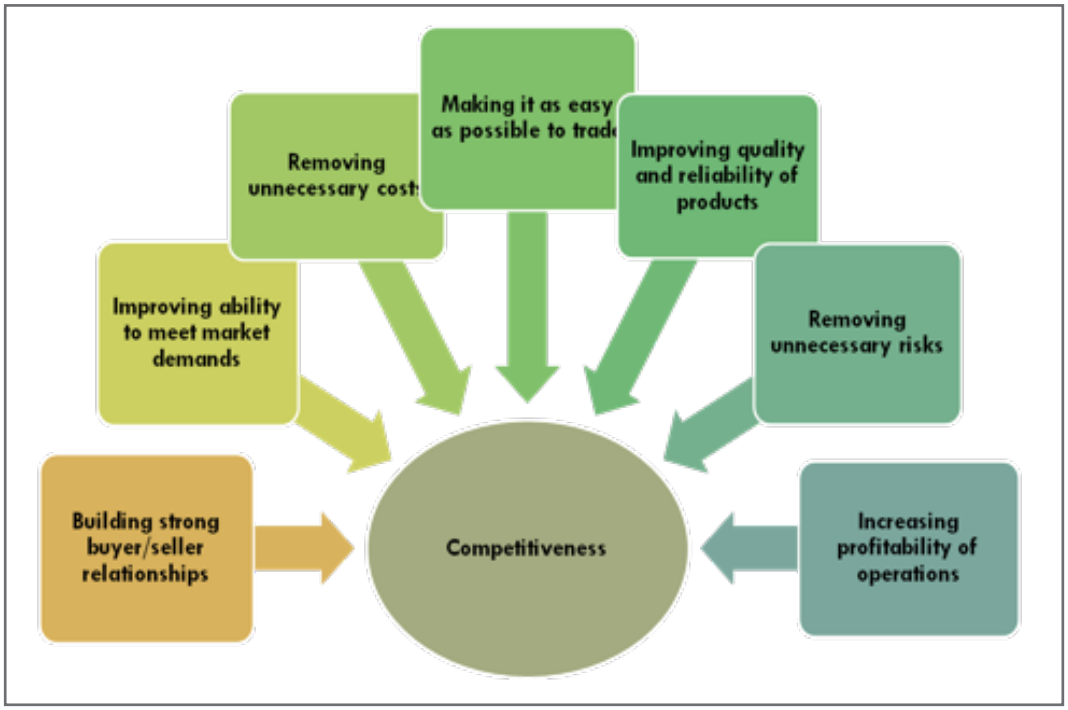
- Productivity in agriculture is about one-fifth that of other sectors. This is largely due to the high level of informality (98 percent). Also, despite recent efforts in mechanization, Senegal's agricultural production still relies heavily on outdated techniques and features a prevalence of smallholder family farms;
- From 2000 - 2009 the labour productivity of the formal agriculture sector grew more than 10 times faster than that of the informal agriculture sector. Senegal's labour productivity is 70 percent lower than the LMI-SSA's median. Its growth rate declined consistently from 2003 to 2008;
- Senegal has taken important steps to improve its business enabling environment. However, Senegal still only ranks 152nd out of 183 countries in the World Banks' 2011 Doing Business Report. The poor business environment has discouraged investment, entrepreneurship and new business formation;
- Productivity of new investment is very low. The lack of productivity growth may in part be a result of an enabling environment and supporting industries not sufficiently well developed to allow the investments in productive infrastructure to have an impact on economic growth and productivity;
- The size and depth of Senegal's banking and financial system improved considerably during the past decade, but the sector is still characterized by its relative lack of sophistication, limited access to credit information, and high levels of non-performing loans. Its unattractive policy framework has resulted in limited availability and high cost of credit to the private sector, particularly to small and medium-sized enterprises. Lack of access to credit information, weak legal rights and high rates of non-performing loans make lending risky and borrowing expensive; and
- The inability of smaller firms to access credit is explained partly by collateral requirements and high interest rates. In 2009 the interest rate spread (the difference between the interest rates on loans and deposits) was 11 percent, nearly four times higher than Tunisia and South Africa. This differential is an indicator of low levels of efficiency in the banking sector which reflects high levels of non-performing loans, which are in turn a likely function of the lack of access the banking system has to good credit information.

2.2 Recognizing Agricultural Competitiveness

An economy's focus is on seeking ways to responsibly harness the impact of true drivers of competitiveness and private sector investment and entrepreneurship, minimising compromises that reduce their impact by, for example, adding costs or increasing risk (see Figure 3).These drivers include factors such as: commitment to meeting market requirements; improving ability of producers and value chains to meet market demand; removing unnecessary costs; creating open trade regimes; improving quality and reliability of products; removing unnecessary risks; and increasing profitability of operations. Profitability is of course the key to sustainable agriculture, as it is to every economic pursuit. In a value chain, the activities of each actor and the overall value chain operations have to be profitable.

Elements such as a sound macroeconomic environment, availability of quality infrastructure and, at reasonable price, good quality services based on that infrastructure, serve as enablers. They will not drive competitiveness by themselves, but serve as a platform for competitiveness, and for

Figure 3: Drivers of Competitiveness



Source: J.E. Austin Associates

the business activities that generate competitiveness. Availability of skills, research facilities and effective institutions are, similarly, enablers and part of the competitiveness platform.

Finance is rarely a driver in itself[10], but it is certainly a crucial enabler. All agricultural actors need working capital, and any farmer, middleman and downstream processor, distributor or exporter that finds the agricultural sector sufficiently interesting to warrant investment, requires access to credit or other forms of investment finance. In Zimbabwe, the financial system suffers from liquidity constraints; the cost of lending is very high (interest rates of 20-25 percent or more); agriculture is seen by the financial sector as risky given the nature of land tenure that does not provide the needed collateral and there is little information about individual or company credit risk.

[10]In cases where the issue is one of liquidity or availability, finance or equity capital may indeed be seen to be a driver.

3.0 INTERNATIONAL EXPERIENCES ON IMPROVING AGRICULTURAL COMPETITIVENESS

Having identified some of the main measures of competitiveness, this section examines some of the approaches that players in agricultural sectors around the world have used to improve their performance. These approaches can provide important lessons for Zimbabwe to improve the competitiveness of its agricultural sector. Although there are many approaches, we focus on nine approaches that, in the authors' opinion, are some of the major opportunities that need to be targeted to build competitiveness. They are all challenges that are repeatedly addressed around the world. And they are all issues that directly involve private sector solutions, or at least a strong private sector voice. This paper deliberately gives prominence to the role of private sector participation, drawing on lessons from the international perspectives. The private sector is generally best equipped to monitor market trends and requirements, and to work with the value chain to rapidly and efficiently respond to them.

The nine challenges, or opportunities to improve agricultural competitiveness, are:

i) reduce losses and costs by improving storage, logistics and transport;
ii) improve economies of scale;
iii) improve business-business linkages;
iv) understand and serve market needs;
v) upgrade and deepen value chains;
vi) understand and use standards and certifications;
vii) lower investment risk;
viii) position products and value chains for greater value and competitiveness; and
ix) improve the enabling environment.

3.1 Reduce Losses and Costs by Improving Storage, Logistics and Transport

Reducing losses is often the easiest way to improve profitability and competitiveness. It is not uncommon to see 40 percent or more of a harvest lost between farm and market between on-farm wastage, and spoilage caused by poor handling, logistics, and storage en route to market. Improved storage also allows farmers or traders to extend their selling season; because produce doesn't have to be sold when harvested, farmers can receive higher prices by selling during off-peak periods.

Reducing Post Harvest Loss - Bihar, India[11]

In Bihar, a large state in India implemented a program to assess and improve the competitiveness of the maize sector. Annually, 20 percent to 25 percent of the crop is lost because of old and obsolete post-harvest machinery and processes, including open drying on floors, inadequate storage facilities, poor packing practices, and lack of collective transport facilities. Given a total maize crop value of around Rs25 billion (US $265 million), this loss amounts to more than Rs2 billion (US $53 million) annually.

[11]Source: "Recommendations for the Sugar and Maize Value Chains in Bihar "- a background internal analysis/document prepared by J.E. Austin Associates for the IFC. October 2008.

There is severe lack of maize storage facilities in virtually every market place in Bihar. The facilities of the Bihar State Warehousing Corporation are practically negligible in the maize producing areas. As a result 80 percent of the maize in Bihar is exported at harvest to other states while local processors, later in the season, have to import maize from other states.

To address these issues a task force was created by public and private sector stakeholders in the maize sector to prioritize and champion initiatives, leading to private and collaborative investments. In 2009, the task force hosted an Investors' Forum in which corporate investors from other Indian states presented business and investment plans that addressed storage and related priorities.

Getting the product to market in a timely manner, without damage, with minimal transaction cost, and ideally in a form that the end-market can use immediately and value, is central to agricultural competitiveness. To achieve good practice in post-harvest handling, a country needs to consider its transport and logistics, and related procedures, including customs arrangements.

The quality of transport infrastructure and services directly impacts these elements of competitiveness; a country that does not do its best to develop and maintain sound roads, rail, ports, infrastructure, cold chain, wholesale facilities and so on, is restricting or damaging the competitiveness of its agriculture. Countries that make use of this infrastructure sub optimally, or that otherwise restricts or adds costs to the physical movement of goods, also restricts or damages the competitiveness of their agriculture.

Logistic Constraints: The Ugandan Coffee Industry

The majority of Ugandan coffee grown throughout the country is transported to Kampala and sent to Mombasa Port for shipment overseas. Amidst a national decentralization initiative, coffee growers and processors were faced with increasing numbers of procedures as individual districts imposed levies on investments and shipments within and between the districts. Procedures were not combined or streamlined, the increasing fragmentation led to the need to devote substantial time to petty transactions and, reportedly, fostered an increase in the incidence of "facilitation payments."

Reports and interviews indicated that, once a shipment reached Kampala, it was not uncommon for the container to take 20 days to reach Mombasa - but only two or fewer days are required for actual transport time. What accounted for the remaining 18 days? Lengthy border procedures accounted for some of the time, but most was taken up with multiple inspections. Reports also implied that numerous informal taxes were being levied. The impact on the industry in terms of product quality, losses, and missed deliveries was significant.

Ugandan stakeholders benchmarked this situation against those in other countries to determine whether these delays and costs were normal. Information from coffee exporters in Colombia, Costa Rica, and Vietnam indicated that the standard for delivery to port were between one and seven days!

This information helped the industry and government to recognize the impact of a poor system of regulation and implementation and to focus attention on putting a streamlined system in place.

Source: J.E. Austin Associates, Inc. Interviews

3.2 Improve Economies of Scale

Small farmers' landholdings are often too small to permit effective use of mechanization, commercial agriculture and irrigation. Being small-scale and resource constrained, smallholders also face huge barriers in being able to afford every service and input – technical and market information, and extension information, are hard to obtain, or too expensive. Small-scale purchases of pesticides and fertilizers are expensive on a unit basis. Buyers offer the lowest prices because the collection from and negotiation with thousands of individuals is time consuming and expensive. Transporters withhold their services, because it is not worthwhile for them to send a truck or a plane or a ship to collect produce.

Because agriculture carried out by many individual smallholders suffers from these inherent disadvantages except in special situations, the world is paying great attention to means of collaboration and aggregation to create scale economies.

Cooperatives, associations, and other vehicles for aggregation offer substantial opportunities for increasing scale that enables smaller agriculturalists and agribusinesses to obtain important inputs at reasonable prices. Combining resources and sharing information allows participating companies and producers to: improve quality, service, and savings through increased access to inputs, gain leverage, in sales negotiations, and increase ability to design initiatives that emphasize upgrading the value chain. Furthermore, collaboration among enterprises creates a platform that could later allow the chain to move toward forward or backward integration, or to achieve improved quality. As an example, joint marketing and logistics can lead to the creation of a collection centre, which could result in an increase in product volume sales and thus better prices and a reduction in transport costs.

Creating and Taking Advantage of Economies of Scale, Ghana Pineapple Experience[12] [13]

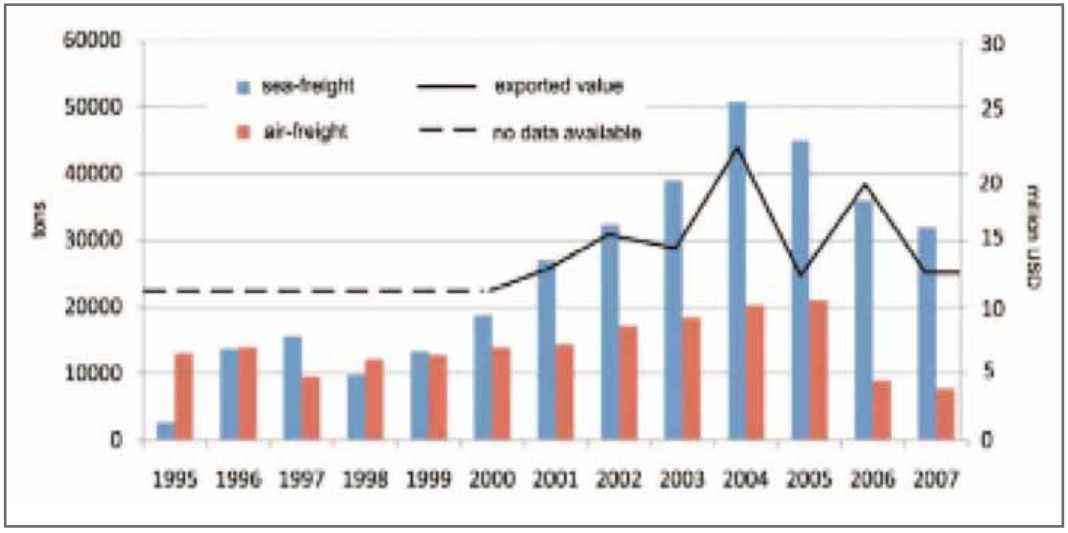
Achieving economies of scale is important when the minimum units required to access desired inputs, services, technologies, or other capacities are quite large. Such minimums are required to dissipate the high usage or acquisition costs of a service or facility over a larger number of inputs in order to increase efficiency. In Ghana, where individual actors lacked scale, pineapple exporters were required to reach substantial volumes (scale) before they were able to access sea-freight transportation.

[12]Pineapple exports declined after 2005, in the face of competition from the MD2 variety introduced by Costa Rica. The sector began to rebound in 2009.

[13]Adapted from Building Competitiveness in Africa's Agriculture – a Guide to Value Chain Concepts and Applications by Webber and Labaste (2010)

The Sea Freight Pineapple Exporters of Ghana (SPEG) Association was formed in 1995 by Integral Ghana Ltd., Jei River Farms and John Lawrence Farms to develop sea-freight shipments of fresh pineapples from Ghana. SPEG identified Union Bananière Africaine (UBA/Dole) of France that same year to provide freight services to the Ghanaian industry. The UBA boats are refrigerated vessels transporting bananas from Cameroon, and operators allocate space for Ghana's pineapples based on available free space after the banana loads.

Figure 4: Ghanian Whole Fresh Pineapple Export in Tonnes, 1995 – 2007, and in Millions of US Dollars, 2000-2007.



Source: Ouma et al. (2012).Note: Volumes of export are based on SPEG 2008 data and value on GEPC 2008 data. The volumes reported by GEPC and SPEC do not match for the years 2000-2007

3.3 Improve Business-Business Linkages

A lead firm is typically the main marketer, exporter, or processor that links the value chain with the market, and that exerts an element of governance on the value chain. Lead firms interpret the market for the value chain, and establish the ultimate buyer-seller relationship with the market. The supply chain may use a variety of tactics to capture more value within the value chain. For example, going around the lead firm to obtain information directly, "ganging up" (more neutrally: associating) to reduce transaction costs or to negotiate higher-priced bulk sales, or adding value at the upstream levels of the value chain. That typically works out if all parties follow agreed rules of the game, respecting contracts, for instance, since the objective is to share the benefits of greater competitiveness.

Win-win situations occur when actors in the value chain find ways to make their value chains more competitive, in ways that benefit all categories of actors. Many of the remaining examples in this paper describe ways on which such positive outcomes have been achieved.

The value chain itself is in many respects a collaborative partnership. The actors in a competitive value chain will have access to the services that they need to implement sound business strategies. These include infrastructure-based services such as transport, communications, technical and informational services, laboratories, and finance. Many governments have tried to provide extension services but, many of those models have failed to stay current, provide the budgets to reach the populations, or to understand and respect the market focus of agriculture and its value chains.

In some countries, such as Uganda and Zambia, village agents or community level agents (CLAs) are employed to deliver expertise and other services at the local level. These agents are typically identified and engaged either by private companies interested in purchasing from the location, or as a collaborative effort between the private sector and farmer groups. They may provide a range of services, including extension services, market linkages, trading and equipment rental.

3.4 Understand and Serve Market Needs

Competitive agriculture serves sophisticated, highly demanding markets, and therefore must respond to market needs better than other suppliers. Stakeholders in agriculture must learn and understand market entry requirements, market trends, market channels, and product use and be able to adapt value chains to respond to changing market needs and conditions. If the value chain only serves basic market needs, it will be the weakest, lowest quality provider in the destination market, and may be excluded from some more sophisticated markets.

There are many examples of exporters, producers and value chains struggling to learn about markets, and then working to figure out how to respond to them. Some examples includes:

- In Senegal, millers and farmers established farmer networks in order to modify their farming methods and varieties to generate products that meet evolving urban consumer preferences. Fragrant rice has captured 60 percent of the Dakar market. Local partners launched an extensive seed replication program of recently registered AfricaRice aromatic rice varieties that has proven extremely successful by 2012.

- Colombian flower exporters mapped the value chain in the United States in great detail, and recognized that most of the value accrued to operations such as cutting, creating bouquet, packaging and labelling. They figured out how this could be done in Colombia rather than in the United Sates. With a courier company, they developed packaging that enabled them to ship shelf-ready flowers directly to individual stores, rather than through wholesalers. The additional value added, and the increased freshness of the flowers due to improved logistics, enabled the flower growers to dramatically increase the unit value of their product.

- In the early 2000s, with the introduction of EurepGAP (now GlobalGap) standards and procedures, the Thai horticultural export industry was faced with a potential decline

in export market opportunity and price in Europe. They also feared being locked out of the Chinese markets, as China adopted more rigid standards. Faced with these market challenges, exporters tried to work with their suppliers to implement value chain reforms and improvements, including quality management, standards and certifications, traceability, packaging and labeling. Their suppliers were unresponsive, they didn't trust the exporters. It took the involvement of a respected third party, Kaesetsart University, to implement a program of training and demonstration that producers had confidence in.

- In the 1990s and early 2000s, the Sri Lanka rubber faced reducing unit prices, competing against synthetic rubbers. Intensive market research and product development redirected the industry away from unprocessed rubber to value added products for which pure rubber was an important ingredient. As a result, the value of exports of processed rubber products increased from US$166.22 million in 1999 to US$394.96 million in 2005, while during the same period, unprocessed rubber exports decreased from US$61.3 million to US$47.2 million.

3.5 Upgrade and Deepen Value Chains

Upgrading can increase the competitiveness of the value chain by moving it in a new direction, such as towards a new market, market segment, or customer; increasing efficiency; or adding operations. [14]In deepening the value chain, firms address gaps including unmet market demand and value, opportunities for vertical or horizontal integration, greater specialization, and the expansion of services to other value chain members.

Opportunities for specialization rest on the size of the market for the specialized operation or service, and on the confidence that the customers of the specialized business or operation have that the work will be carried out to an appropriate quality with needed degrees of customer service, requisite confidentiality, and on a sustained basis (i.e. so the specialized business will not fail and disappear). The implication is that the value chain actors have to act in concert to achieve a substantial result. For example, in Rwanda in 2004-2005, a horticultural exporter received a large order, 1500 boxes per week, to deliver passion fruit to Belgium. Rwandans at the time grew enormous quantities of passion fruit, but the quality was insufficient for the market requirements, and the exporter's value chain was not organized to provide sufficient quantities of appropriate quality. As a result, the exporter, and the actors in the supply chain, lost the standing order.

Specialization may offer the value chain the opportunity to accomplish otherwise unattainable goals. Risk and investment costs may be shared and offset by the cost savings that result from cooperation and information sharing. Specialized firms invest in more sophisticated processes, technologies and skills. Thus, when growing conditions are appropriate, uncertain supply or uncertain quality of supply often leads to vertical integration to assure supply. Vertical integration, in which a single entity (company, cooperative) directly manages large elements of the value chain, can be effective and can generate jobs, but can also exclude small producers, entrepreneurship, and innovation (see Table 3).

[14]"AMAP BDS Knowledge and Practice Task Order Lexicon," USAID.

Table 3: Some Reasons to Consider Vertical Integration[15]

Why Integrate?	Considerations
Control Reasons	• Insufficient, inadequate supply • Need for highly specialized inputs • Cost savings
Lack of Intermediation	• Ineffective communication or information flow between members • Nonexistent technical/embedded services
Establishment and Expansion	• Solidify position in value chain • Lower costs through economies of scale • Alter competitive landscape
Capture More Value	• Opportunities to increase revenues without overstretching resources • Opportunities to undertake more functions without overstretching resources • Opportunities to create value
Access to finance	• Opportunities for financial resources throughout the supply chain • Opportunities for stakeholders to link to lead firms

However, value chain deepening and upgrading requires new investment, either through new domestic or foreign entrants/entrepreneurs, or existing actors. Existing firms frequently identify opportunities to incorporate new technologies or operations into their structures. The formation of new organizations, such as farmers associations, service-provider associations, and marketing organizations also provides opportunities for otherwise fragmented producers or other businesses to combine their resources to add operations to a value chain.

Needless to say, ease of access to investment finance, and the quality of the investment environment, will encourage or block this new investment.

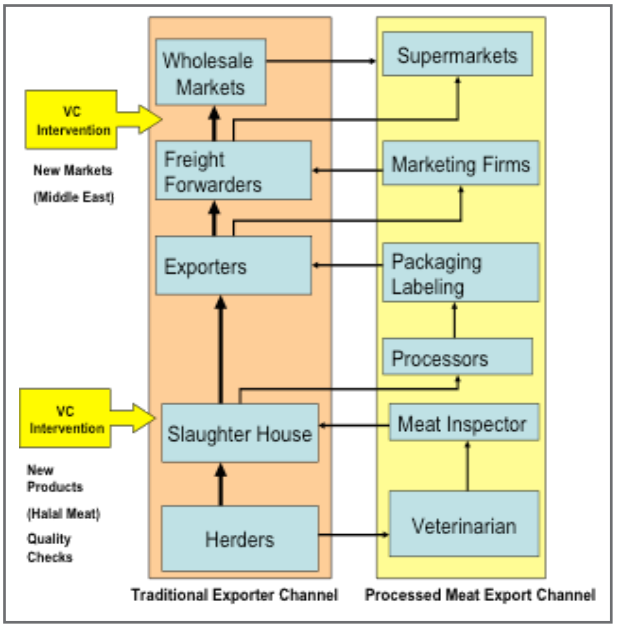
Upgrading and Deepening the Value Chain: The Mongolia Meat Industry[16]

The Mongolian meat industry has traditionally been oriented toward low-end exports of animal carcasses to Siberia. Through work with the Mongolian Competitiveness Initiative (MCI)[17], plans were made to integrate value-added operations such as quality checks, packaging, and marketing into the meat industry value chain. These upgrades were intended to reorient firms toward more demanding and lucrative export markets.

MCI also identified transport options and completed cost studies to confirm the feasibility of export to five Asian and two Middle Eastern markets. Lobbying various associations and Government agencies, the project worked with industry to streamline government policies and standards related to agricultural export.

[15]Adapted from Building Competitiveness in Africa's Agriculture – a Guide to Value Chain Concepts and Applications by Webber and Labaste (2010)
[16]Ibid
[17]The Mongolian Competitiveness Initiative was implemented by Nathan Associates and J. E. Austin Associates

Figure 5: Mongolian Meat Export Value Chains

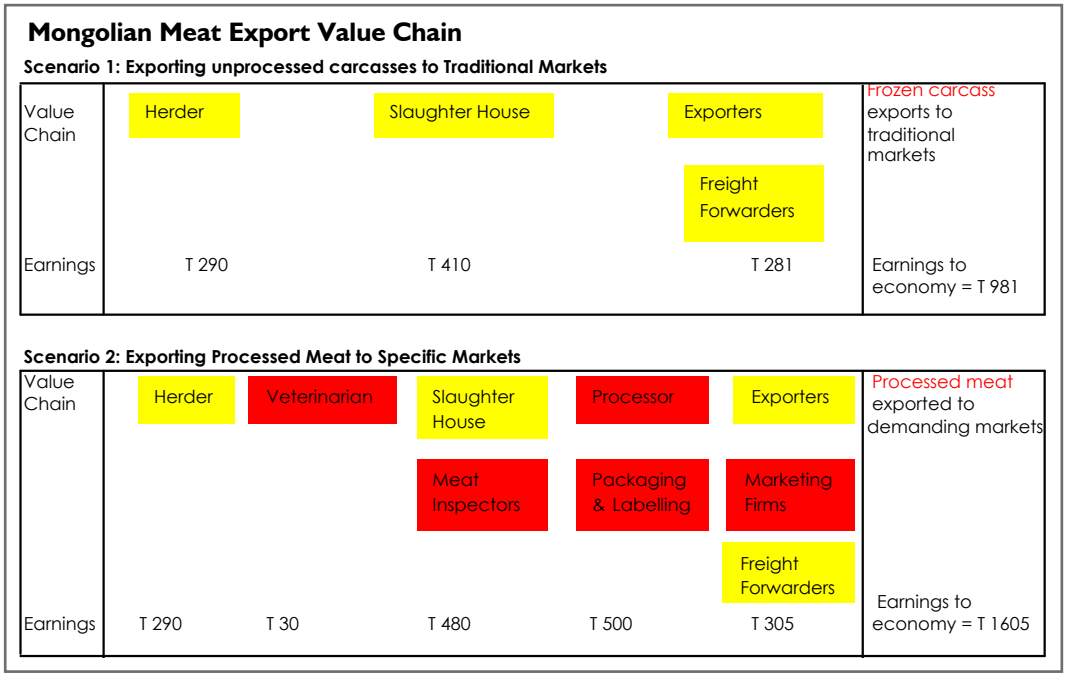


Source: J. E. Austin Associates, Inc, Adapted from Webber and Labaste (2010)

In Figure 5 both the traditional and a new "processed" meat export value chain are detailed. The processed meat export channel represents the opportunity to add value by incorporating additional operations within the value chain. The "VC Intervention" arrows represent opportunities identified for intervening in the Mongolian meat industry in order to deepen the value chain.

Figure 6 quantifies the value that can be added by deepening the value chain. In this instance, the addition of veterinary services, meat inspection, processing, packaging, labelling, and marketing operations to the Mongolian meat value chain provides gains of nearly 40 percent in earnings from the meat industry.

Figure 6: Deepening the Value Chain under Two Scenarios



Source: Nathan Associates, Inc. and J.E. Austin Associates, Inc. Adapted from Webber and Labaste (2010)

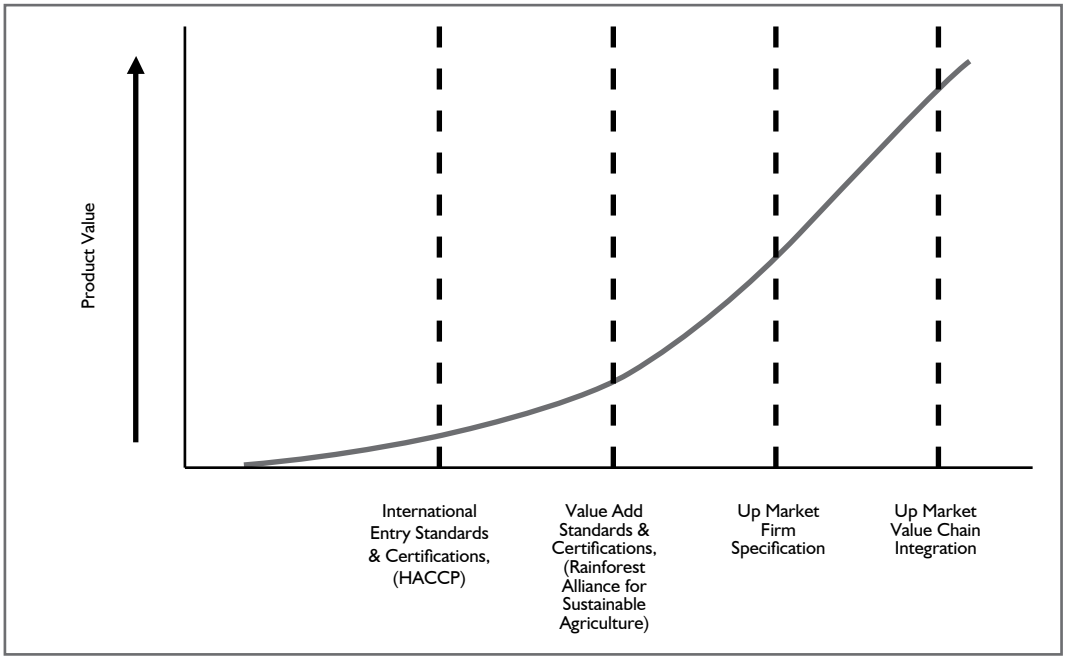
3.6 Standards and Certifications[18]

Meeting quality and performance standards is integral to the success of agricultural value chains. However, the importance of specific qualities, standard measurements, informational or other characteristics may not be readily apparent to all the actors in a value chain if they are not familiar with the target market. Apart from normal ethical, consumer health, and safety requirements, the market side of the value chains pays increasing attention to standards and certifications, and national and regional markets are imposing increasingly strict requirements for basic market entry (e.g., HACCP, GlobalGap). Powerful buyers and retailers, especially supermarkets, impose additional requirements on their supply chains.

As a result, the value chain must meet increasingly stringent requirements relating to product health and safety, intrinsic product qualities (shape, colour, taste, texture, etc.), packaging and labelling, and other accompanying information.

[18]Adapted from Building Competitiveness in Africa's Agriculture – a Guide to Value Chain Concepts and Applications *by Webber and Labaste (2010)*

Figure 7: Standards Plotted Against Product Value



Source: J. E. Austin Associates, Inc, Adapted from Webber and Labaste (2010)

Value chains are also beginning to understand that meeting recognized standards is not just a condition for market access but a powerful way to compete for market share and higher unit values. Value chains can obtain price premiums if they meet these standards, especially if they achieve valued product and production certifications. These certifications can go well beyond market-entry requirements and appeal to special customer segments that are willing to pay premium prices (Figure 7). Thus, value chains are increasingly recognizing the opportunities inherent in providing Certified Organic, Fair Trade, bird-friendly and other high-standard products, as well as the value of marketing and quality-control initiatives that are promoted through seals of quality.

As product is affected by many actors from farm to market, achieving quality standards and certifications is a value chain issue, and the strategies must be value chain-wide strategies. Choosing and targeting standards should be part of a strategic market exercise. Many export markets have standards and/or certifications that are needed for entry. By achieving international certification or standards, local value chains have the opportunity to export to other countries and select the market positioning of their products. However, implementing standards does not automatically mean that the value chain can sell in those export markets; the chains must still market and sell to customers in those countries.

Value added standards allow for entry into certain niche markets. For example, Rainforest Alliance standards for coffee products, appeal to many coffeehouses and speciality marketers in the United States. Many individual importers and retailers have their own quality standards that appeal to their particular customer base.

Implementing the processes and systems to meet standards requires resources. Therefore, it is important that the value chain's leaders and firms choose the most strategically appropriate target market segments. Comparing implementation costs and the local value chain's capacity to incorporate standards against the benefits of selling up-market is a strategic choice that must be considered before incorporating standards.

Uganda Nile Perch Quality Management and Certification[19]

In the 1990s, opportunistic growth and poor regulation in the processed fish industry in Uganda, led to an undisciplined value chain and serious quality issues. For instance, between 1997 and 2000, several health incidents in the European Union and in Uganda, including an incidence of fish poisoning in Lake Victoria in 1999, caused the EU to place numerous bans and restrictions on Nile perch imports (and other fish) from Uganda. The EU import bans had wide-ranging effects in Uganda; in addition to lower fish exports and export revenue, fishing communities suffered tremendous damage, as did fish processors and related service industries (packaging, transport, etc.) As a result of the bans, three plants closed down completely. The remaining plants worked at 20 percent capacity, while 60-70 percent of employees were laid off.

Missions sent by the European Commission to investigate identified the following problems

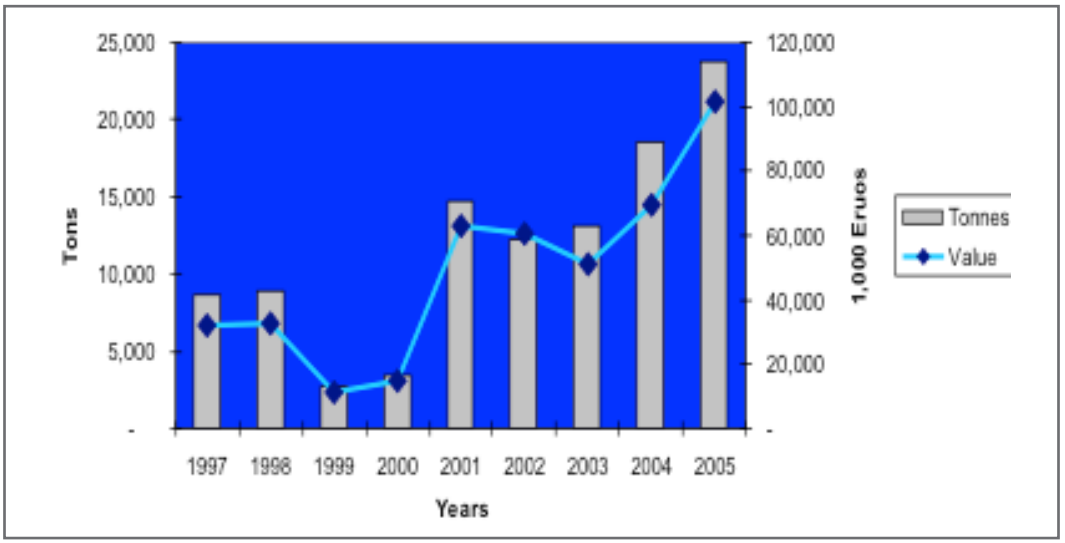
- Failure of fish-processing plants to meet conditions laid out in EU regulations;
- Incorrect issuance of health certificates by The Uganda National Bureau of Standards (UNBS);
- Lack of microbiological check tests to support government health certificates;
- Lack of routine government monitoring for presence of chemicals in fish and water;
- Lack of sanitary infrastructure and fencing at landing sites; and
- Unhygienic fish handling throughout the value chain.

Members of the Uganda Fish Processors and Exporters Association (UFPEA), European fish importers, the Government of Uganda (GoU), and the EU worked together to remedy the issue (Figure 8). The GoU streamlined its fish regulatory and inspection systems, with the Department of Fisheries (DFR) formally becoming the sole competent authority for fish-safety issues and certification of fish exports as compliant with EurepGAP. In order to doso, DFR also had to achieve Hazard Analysis & Critical Control Points (HACCP) accreditation, which is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product.

DFR's inspectors operate at 14 landing sites that are approved as sources of fish for export. These inspectors issue local fish-health inspection certificates, which contain information on both supplier and buyer, and the origin of the fish, and are required to move fish from a landing site to a processing factory. However, DFR did not have the capacity to handle quality control with

[19]Adapted from Building Competitiveness in Africa's Agriculture – a Guide to Value Chain Concepts and Applications by Webber and Labaste (2010)

Figure 8: Uganda's Nile Perch Exports



Source: Eurostat, J.E. Austin Associates calculations

Figure 9: Good Manufacturing Practice and HACCP

the fishermen or at many of the 600 landing sites away from major urban centers. As a result, different monitoring procedures were put in place at the local level, including the formation of committees at landing sites and Beach Management Units (BMUs) that registered boats and gear. This approach, known as co-management, allows for power-sharing between state and local communities and to shift of responsibilities from the former to the latter.

The EurepGAP certification process also requires biochemical tests to check for pesticide residue. The absence of appropriate laboratory facilities in Uganda to perform pesticide residue tests, required samples to be shipped to Belgium, where a Belgian firm, Chemipher (U) Ltd., did the tests. Recognizing that there was sustained business for them, Chemipher opened a laboratory in Uganda, which assisted in streamlining the certification process and reducing costs. Ugandan fish exports resumed and grew substantially to over US$140 million in 2005. Over fishing in Lake Victoria has since caused a mild decline, fish exports in 2012 were US$ 120 million (Figure 9).

3.7 Lower Investment Risk

Any investment involves risk. Greater risk will restrict the willingness of producers, entrepreneurs and large firms to invest, and will cause business and investment strategies to have short term horizons. It is a corollary, then, that reducing risk will increase investment of exactly the type that will increase long term agricultural competitiveness. Examples of risk include uncertain availability of business services, uncertain availability of working capital, policy uncertainty, political uncertainty, uncertain enforcement of regulations and procedures, non-payment by creditors and weak contract enforcement.

Globally, banks and other providers of finance and investment capital are also risk averse. The same issues impact their sense of risk. However, the sense that investment in agriculture is risky is often compounded by climatic variability, lack of collateral (in cases where land cannot be used as collateral), and the tendency for rural actors to lack a credit history. Of course, much of the actual and perceived risk, and the reduction of such risk, is in the hands of the government and the public sector.

Stakeholders in agricultural competitiveness of course seek ways to reduce risk. In some cases, governments and donors "buy down" or subsidize risks associated with proving or demonstrating a business model. Increasing the private sector basis for sector operations helps to reduce risk. For example, the Dairy farming in Pakistan, described below, and Rwanda Coffee (see page 23).

Identifying and Replicating Business Models Within the Value Chain: Dairy Pakistan

An estimated 30-35 million farmers in Pakistan are engaged in raising livestock, which generates 30–40 percent of their income. Ninety-seven percent of fresh milk is either consumed locally or distributed through informal trading routes. The farmers' dairy production has not reached domestic markets, despite the fact that the market for dairy is growing twice as fast as the supply.

Stakeholders in dairy value chains in Punjab Province and in the area around Karachi recognized an opportunity to improve the quality and increase the quantity of the milk that they were producing and marketing. The industry's Strategic Working Group (SWOG) recognized that stakeholders were losing valuable revenue from the loss of milk collected in the evening, which accounted for 40 percent of milk produced. The absence of both storage facilities and transportation in the evening meant that most of this second milking was wasted.

Assured collection and the creation of a cold chain in the dairy industry had the potential to provide the storage needed to allow farmers to capture the revenue from the second milking, as well as to reduce losses of milk that was already sent to market, as 15-19 percent was often wasted, due to lack of chilling. Despite the existence of such opportunities to invest, it can be difficult to create the conditions within the value chain to motivate businesses to invest and to encourage the value chain to upgrade its practices. Buying new equipment and changing their practices means both costs and risks for farmers and intermediaries.

In Pakistan, these barriers were removed through a strategic planning process that identified a workable business model. The planning process developed sufficient trust among participants to create a strong win-win solution and to generate commitment to the model, with risk-sharing and up-front financing from Dairy Pakistan, the public-private institution that was designed by SWOG.

The core of the business model was to encourage entrepreneurs to invest in and to manage collection centers/cooling stations. The entrepreneur put up 20 percent of the investment and received a no-interest loan for the remainder, which was subsidized by the government, managed by Dairy Pakistan, and distributed by a consortium of banks. Dairy Pakistan then provided technical training on how to operate the cooling station. The large dairy processors/distributors committed to regular, predictable milk collection.

The supply of chilled milk has increased by an estimated 500,000 litres per day, and approximately 7000 direct jobs created in collection and processing. Based on the 2006 results, the entrepreneurs who own and operate the centers will earn an estimated US$ 63M (net present value). More than 30,000 farmers now have access to market and are able to sell at higher prices

Source: J.E. Austin Associates, Inc. and Adapted from Building Competitiveness, Africa's Agriculture – a Guide to Value Chain Concepts and Applications by Webber and Labaste (2010)

3.8 Positioning Products and Value Chains for Greater Value and Competitiveness

Understanding an industry or value chain's competitive positioning, making informed decisions as to strategies for repositioning, and implementing those strategies, is core to achieving greater competitiveness. The foundation for developing a strategic vision and a clear, actionable plan for locating the industry in current and new markets is based on positioning.

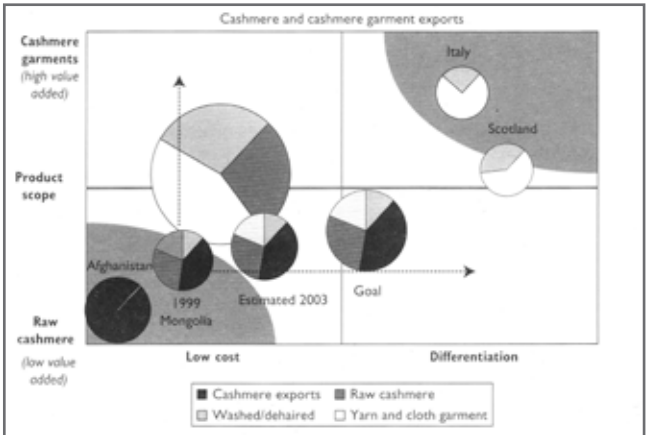
The story of Mongolian cashmere provides an instructive example to illustrate positioning the value chain within an international market. Mongolia produced the world's best-quality raw cashmere, but made very few value-added products, so all exports were in the form of raw cashmere or yarn. They therefore exported raw cashmere and yarn to processors in Italy and Scotland, where the cashmere was processed and transformed into extremely high-value garments and fashions.

China was also a major producer of finished cashmere products but of lower quality than those produced in Scotland and Italy. Seeking new and inexpensive sources of cashmere wool for their high-volume business, Chinese cashmere buyers competed with domestic wholesalers for Mongolian wool stocks. However, Chinese buyers had no incentive to encourage high quality as they planned to feed low value added industrial garment makers in China.

Figure 10 illustrates Mongolia's position in the world cashmere market relative to major competitors and partners. Each country's market share as measured in revenues is represented by the relative size of the circles. Higher profit per unit (and certainly higher prices per unit) is implied by a position in the top right corner.

This simple 2 x 2 matrix, allows the product or service of a company, value chain, or industry to be described in terms of product scope (complexity, value addition) and product differentiation (special qualities, lack of direct competitors). Products and services in the lower left are basic commodities, subject to severe price competition and very restricted profit margins. Products at the upper left have a lot of value added but may still be under severe price competition. Products to the extreme right are highly differentiated and, in that respect, may be able to command higher prices and margins but have little value added. Of course, products and services at the top right are in "competitiveness nirvana," commanding high prices and margins because of their complexity and special qualities in the customer's eye, all assuming, of course, that there is sufficient market demand to interest the value chain participant.

Figure 10: Product Positioning—Mongolian Cashmere Industry



Source: Nathan Associates Inc. and J.E. Austin Associates. Adapted from Webber and Labaste (2010)

However, it is important for this graph to be interpreted in the context of local market conditions and the overall profit and profitability of the activity. While the upper right quadrant is generally associated with high profitability, operations in the lower left may find that high volumes of low value production may generate total profits that outweigh the premium pricing available at other positions.

In the case of Mongolia, downstream buyers recognized an opportunity to increase the Mongolian product's quality differentiation by offering price incentives for higher quality and by implementing both a mark (certification) of quality and a Mongolian brand. At the same time, design and manufacture of cashmere products in Mongolia was encouraged, which added value within the Mongolian industry. The Mongolian cashmere industry understood the actions necessary to change its positioning in the value chain and acted to move to "the right" (greater differentiation) and "upwards" (more value added) – a more lucrative positioning with less exposure to competitive pressures.

Value Chain Strategies for Market Repositioning: Rwandan Coffee[20]

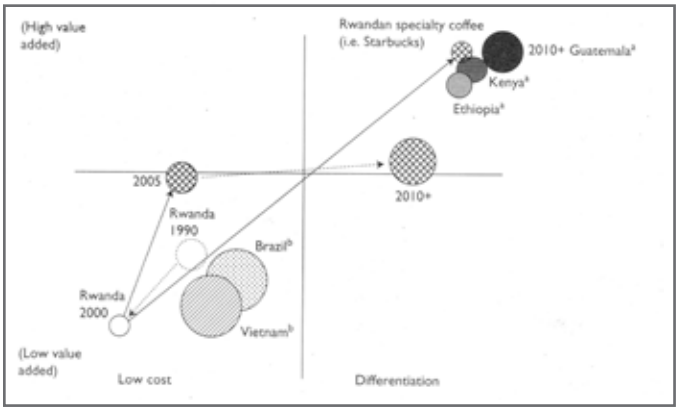
Figure 11 presents the evolving market position of Rwanda coffee as the result of the implementation a new coffee sector strategy. In the 1990s, coffee was a principal source of foreign exchange for Rwanda. However, it saw a sharp decline in the later part of the decade, due to the tragic 1994 Genocide, inefficiencies in the value chain and the a lack of incentives for farmers to reinvest. As growers were not offered higher prices for better quality beans, they spent little time grading and separating their harvests. They lacked access to wet milling stations, which would have significantly increased the value of their beans. Low coffee yields and poor price points influenced farmers to focus on other crops with higher margins, further diminishing coffee's competitiveness in world markets. The Government of Rwanda (GoR) was itself a major factor in the industry, providing fertilizer and other inputs, setting prices, and purchasing most of the coffee.

Despite the lack of technical capacity, market information, and a coherent strategy, the GoR and its development partners believed that Rwanda possessed the environmental conditions and political will to improve its coffee position in world markets. In response to the steady declines in production, quality and price, the GoR conducted a series of strategy sessions aimed at improving Rwandan coffee's positioning in world markets (Figure 11).These sessions resulted in coffee-sector liberalization strategies which, when implemented, began the task of improving Rwandan coffee. Armed with market information, the private sector learned that higher-value coffee was very attractive to global markets, that cupping/taste results indicated Rwanda had significant potential to produce specialty coffee, and that Rwanda could compete with higher-end producers such as Guatemala, Ethiopia, and Kenya.

To move from being considered a commodity-grade to a specialty-grade coffee producer, Rwanda's coffee-producing sector needed to address three key areas:

Increase production.
Production levels were insufficient to attract global demand. Implemented actions included distributing improved inputs, supporting growing associations, replanting coffee trees, and constructing wet-mill stations in Rwanda's top

Figure 11: Rwanda Coffee Positioning Beyond 2010



Source: J. E. Austin Associates Inc.
[a]Represents specialty coffee/not drawn to scale
[b]Represents commodity coffee/not drawn to scale

[20]Adapted from Building Competitiveness in Africa's Agriculture – A Guide to Value Chain Concepts and Applications, by Webber and Labaste (2010).

50 coffee-producing districts. A donor-supported program, Assistance a la Dynamisation de Agribusiness au Rwanda (ADAR), worked directly with private investors to open 16 washing stations in 2005, and indentified prospects to establish coffee washing stations in Rwanda's top 50 coffee producing districts. The washing stations provide an important intermediate role in the coffee value chain and have also proven to be platforms for entrepreneurship and entrepreneurial innovation. Through this program, a platform was provided for a replicable business model. There are now more than 100 functioning stations.[21] In addition to the increased production and price/kg that Rwandan specialty coffee realized, the new wet-milling stations created 4,000 new jobs, and 5,000 rural households saw their income more than double.[22]

Improve quality. Educating producers on quality and cupping, establishing quality-control mechanisms, investing and technical assistance in wet-mill techniques and operational and financial management, improving infrastructure, strengthening cooperative and association management, strengthening institutions, and providing financial mechanisms throughout the coffee value chain.

Promote the Rwandan brand. Activities included establishing and improving market linkages through trade-show visits, sharing information on the local and global coffee markets with the private sector, and instituting other innovative promotional activities.

In 1990, Rwanda's commodity-grade coffee fetched US$ 1.18/kg (0.54/lb.), but by 2001 its price had decreased to US$ 0.40/kg (US$ 0.18/lb.). By 2005 it was receiving $3.10/kg ($1.4 per lb.) and by 2010, $4.10/kg. Rwanda had been able to effectively reposition its coffee and compete in higher-grade/higher-priced sectors.

With production and quality continuing to increase, and after visits to and from trade-show buyers, Rwandan specialty coffee made its first sale to Starbucks Coffee Corporation in June 2004. In November 2005, Starbucks selected two privately owned wet-milling facilities for an exclusive distribution program which provided coffee to 5,000 Starbucks retail outlets.

Owners continue to innovate and invest in the wet-mill facilities and related operations, to make better use of water sources, and to improve quality. They work closely with their base of coffee farmers, to improve growing practices.As Rwanda pursues its coffee sector initiatives, continued product positioning (Figure 11) will be required to help chart new strategies for the Rwandan coffee market. Rwanda has developed a plan to move away from standard coffee altogether and focus only on specialty varieties. However, Rwandans could also choose to diversify their product offerings by seeking broader markets for standard coffee while simultaneously maintaining focus on higher prices for specialty coffee. This would leverage the Rwandan coffee sector's increased capacity and maturing coffee acumen and could enable Rwanda to broaden its coffee production to more diverse markets.

Source: J.E. Austin Associates, Inc. and Adapted from Building Competitiveness in Africa's Agriculture – a Guide to Value Chain Concepts and Applications, by Webber and Labaste (2010)

[21]Bordeaux, C, "Economic Liberalization in Rwanda's Coffee Sector: A Better Brew for Success" in Yes Africa Can: Success Stories from a Dynamic Continent published by the World Bank
[22]Chemonics International: "Assessing USAID's Investments in Rwanda's Coffee Sector," April 2006.

3.9 Improve the Enabling Environment

The enabling environment for business is critical to the development and growth of any vibrant private sector and its firms, including agriculture. Given the integrated nature of value chains, they are particularly susceptible to constraints in the enabling environment, from the most basic supplier of raw materials to the broker who coordinates the shipment of exports to large international markets. Constraints in the enabling environment can limit business growth by:

- increasing costs;
- decreasing competitiveness;
- decreasing product and service quality;
- increasing business and investment risk;
- decreasing foreign and domestic investment; and
- constraining business' willingness to pursue long-term strategies.

The willingness and ability of key stakeholders in the value chain to upgrade and make strategic choices is dependent on the development of a long term strategy. However, a burdensome regulatory, legal, and policy environment severely hinders the growth of industries, diminishes competitiveness, limits local firms' capital investments, shortens planning horizons, and obstructs foreign investment. Reforming policies in favour of business promotion can encourage dynamism and efficiency.

While government is often the principal actor responsible for improvement and reforms of regulatory issues, the private sector often must serve as the impetus for change. While the capacities and knowledge of local government can be invaluable to the functioning of value chains, it often lacks the necessary incentives and experience to understand the constraints faced by value chain stakeholders in the enabling environment. The private sector can help lead the search for solutions by providing government officials with reliable data and a plan for change through an open dialogue process.

Associations and other business groupings are often critical in allowing the private sector to play this role effectively. Whether formal or informal, these organizations facilitate the exchange of information among members and can help foster cooperation. For example, business membership organizations (BMOs) are one such type of organization that can improve the business environment by building trust among members, establishing space for dialogue and advocacy, and developing a collective strategy. Nevertheless, these organizations can take the form of regional, social, or professional networks or they can be industry or professional associations that cut across various industry sectors and value chains and play a significant role in strengthening and promoting the value chain or industry agenda.

Improving the Operating Environment through Public/Private Dialogue: Botswana Cattle Producers Association[23]

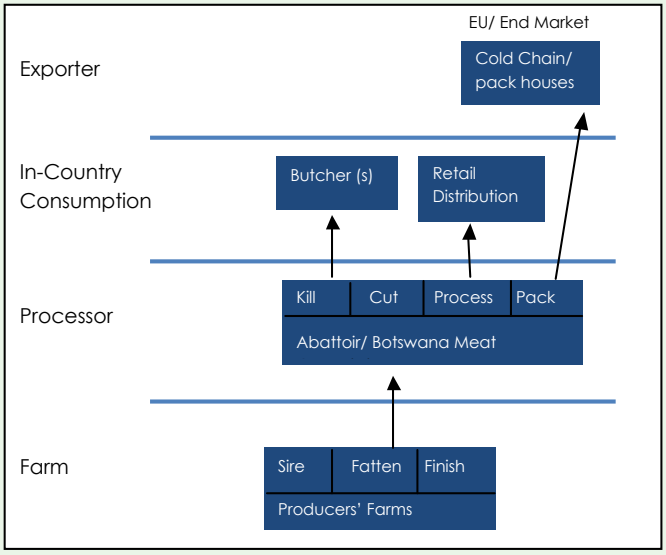
The red meat industry (see Figure 12) is one of the main economic pillars in Botswana. Between 1998 and 2004, beef prices and quantity of exports fluctuated significantly. In 1998, beef export value was US$92,570,000 (25,000 tons) but dropped to US$46,380,000 (8,600) by 2004. The value of beef exports rebounded to US$111,083,000 (24,600) by 2009.[24] As a result of the decline in 2004, the cattle farmers and state-run Botswana Meat Commission (BMC) suffered severe losses. Established in 1966, and protected as a monopoly, the BMC is the sole exporter and domestic wholesaler of beef and sets the prices it pays to cattle producers.

Botswana cattle farmers found it increasingly difficult to operate, and when losses continued and export revenue continued to decline, cattle producers established the Botswana Cattle Producers Association (BCPA) to represent the country's 60,000 cattle producers. Initial components of BCPA's agenda included the desire to receive export price parity for their livestock, an improved production system, and the liberalization of Botswana's entire red-meat sector.

A BCPA sponsored study identified the following constraints in the red-meat market:

- Decline in national herd size caused by rising costs, drought, and cattle-producer cash flow problems.
- Inefficient production system, which produced mature cows and oxen and would not provide enough 'offtake' to keep up with rising demand.
- High costs throughout the value chain due to underutilized abattoirs (at 50 percent operating capacity).
- Decline in prices paid by EU markets.
- Monopolistic operating conditions led to the non-sustainability of the entire red-meat and the sale of meat products below market prices.

Figure 12: Botswana Red Meat Value Chain



[23]Adapted from Building Competitiveness in Africa's Agriculture – a Guide to Value Chain Concepts and Applications, by Webber and Labaste (2010)
[24]FAOSTAT

Based on the findings of this study, the BCPA made the following recommendations:

- Shift from the "Oxen System" to the modern "weaner system" production technique, which would increase offtake rates and keep up with anticipated demand. In the weaner system, male calves are sold to feedlots as soon as they are weaned, with the benefit that farms have higher proportions of (productive) cows, rather than (unproductive) oxen and farms are able to provide younger, better-quality meat. Unfortunately, shifting to a weaner system isn't possible until prices for cattle are more aligned with costs.
- Introduce a national auction system as the primary method of cattle sales and price determination, accompanied by widely available beef-pricing publications. This would allow the entire beef and cattle industry to be regulated by competition and free-market principles, instead of prices being set solely by the BMC.
- Privatize the BMC in order to combat inefficiencies created by monopolistic tendencies.

In more recent years, BCPA was unable to maintain its level of activity and credibility, and was subsequently dissolved. Beef exports to the EU from Botswana were halted in 2010 in the face of compliance issues.

4.0 LESSONS FOR ZIMBABWE

Before tackling the lessons learnt from the international experience presented above, there is need to note the agricultural distortions due to government policy framework which led to gross market imperfections in both product markets (e.g. monopsonistic buying of agricultural outputs) and factor markets (e.g., inability of farmers to borrow so as to be able to store crops to take advantage of higher off-season prices). This situation deepened after the fast-track land reform program, which led to the steep decline in agricultural output in the post 2000 period (Ndlela and Robinson, 2007). These distortions at the higher policy levels which affected the economy as a whole, largely politically induced are likely to remain until such a time as there is political realignment which will enable the country to respond to the lessons learnt from the wide variety of international experiences.

Experiences from the international perspective provide some key lessons on how Zimbabwe can improve its agricultural competitiveness. The questions posed above with respect to assessing agriculture competitiveness and the performance of the Senegalese agriculture can as well be used to assess Zimbabwe's agriculture competitiveness. Zimbabwe policy makers and investors should be guided by questions such as:

- Why is it that a large share of the population is involved in agriculture activities yet accounting for a small share of GDP, i.e., 70 percent of the population producing 15 – 18 percent of the country's GDP?[25]. It is thus clear that labour productivity is relatively low in agriculture; hence increases in average agricultural labour productivity can generate relatively large impact on average incomes.

- Why does it cost US60 cents to produce a litre of milk in Zimbabwe compared to US35 cents in Kenya and US25 cents in South Africa?[26]

- Why is Kenya producing 10 times more horticulture products (450 000 tonnes in 2011), when Zimbabwe's total output for 2011 was just 45 000 tonnes?[27]

- Why was the value of Kenya's exports of horticultural products in 2011 (US$1.2 billion) higher than any of its regional competitors: Ethiopia (US$150 million), Tanzania (US$50 million), and Zimbabwe (US$25 million)?[28]

- Why is Zimbabwe's wheat productivity level of 3.4 tonnes per ha in 2011 lower than the 5.7 tonnes per ha achieved in 1993?[29]. What accounted for this fall in productivity?

[25] Presentation by the Secretary for Agriculture, Mr. N. Masoka at the Agriculture Competitive Conference held on 11-12 July 2012 in Harare
[26]Presentation by the President of the Confederations of Zimbabwe Industries, Mr. K. Katsande at the Agriculture Competitive Conference held on 11-12 July 2012 in Harare
[27]Presentation by the CEO of Fresh Produce Exporters Association of Kenya, Dr Stephen Mbithi, at the Agriculture Competitive Conference held on 11-12 July 2012 in Harare
[28]Ibid
[29]MoF (2012) The 2012 Mid-Year Fiscal Policy Review Statement

- Why is Zimbabwe's current maize productivity averaging 0.6 tonnes per ha in 2011, against a world average of above 4.2 tonnes per ha?[30]

- How has South Africa managed to achieve maize productivity levels of 4.0 tonnes per ha, whilst productivity levels of Zambia and Malawi's are estimated at 1.5 - 2 tonnes per ha and 1 - 1.5 tonnes per ha, respectively?[31] What should Zimbabwe do to attain higher levels of maize productivity?

The above questions provide some indication of the weak level of Zimbabwe's agricultural competitiveness. While data on agriculture-specific investments was not available, Zimbabwe performed poorly in terms of total FDI inflows; total FDI inflow presumably has direct bearing on levels of private investment that are channelled towards the agricultural sector. In 2010, Zimbabwe's total FDI inflows amounted to US$165.9 million and ranked 9th in the SADC region. Angola attracted the highest FDI inflows of US$9.9 billion[32].

Furthermore, with regards to the Doing Business indicators, Zimbabwe was ranked 171 out of 183 on the Doing Business Index 2011-2012 (Doing Business 2012[33]). Although this is an economy wide measure of competitiveness, the Index reflects concerns that have massive bearing on individual sectoral performance. For instance, the country ranks lowly on starting a business, getting credit, getting electricity, protecting investors, trading across borders, and enforcing contracts. These indicators directly affect the price, exports, investments, yields, productivity and value addition in agricultural activities, hence the overall competitiveness of the sector.

Very much related to the above, the following are some of the key factors that continue to militate against competitiveness of Zimbabwe's agricultural activities[34]:

i. Power shortages;
ii. Weak regulatory environment;
iii. Limited irrigation infrastructure;
iv. Limited mechanization and technological innovations;
v. Security of tenure;
vi. Shortages of key inputs, seeds and chemicals; and
vii. Depleted national herd.

Zimbabwe's challenge is to invest in developing a more sustainable, productivity-driven base for competitive, commercial agriculture over the long run. This could be achieved through drawing lessons from the nine approaches used by other international players to improve agriculture competitiveness.

[30]MoF (2012) The 2012 Mid-Year Fiscal Policy Review Statement
[31]Ibid
[32]MoF (2012) The 2012 Mid-Year Fiscal Policy Review Statement
[33]World Bank, Doing Business 2011-2012
[34]Presentation by the Secretary for Agriculture, Mr. N. Masoka at the Agriculture Competitive Conference held on 11-12 July 2012 in Harare

4.1 Reduce Losses and Costs by Improving Storage, Logistics and Transport

Reducing losses and costs by improving storage, logistics and transport remain key issues that Zimbabwe's agriculture sector will have to address. Stakeholders in Zimbabwe's agriculture sector have organised themselves in the form of clusters referred to as Commodity Industry Groups (CIG) and it is important to reduce farm wastage, and spoilage caused by poor handling, logistics, and storage en route to market, in each of the CIGs. Improving storage facilities helps ensure that quality of the crop is preserved and that farmers fetch higher prices by selling during off-peak periods.

Competitiveness can be enhanced by ensuring that the product gets to the market in a state that meets customer expectations in terms of time, without damage and with minimal transaction cost. Stakeholders in Zimbabwe's horticulture sector, for example, contest that the sector's competitiveness is being undermined by excessive logistics and freight charges. Stakeholders note that elimination of cost of phytosanitary certificate coupled with a 50 percent reduction in export document fees would result in a 0.66 percent increase in producer margin for flowers and 0.86 percent for vegetables[35]. Similarly, if cost of air freight (mainly landing fees levied by government for airlines landing at the Harare International Airport) were reduced by 10 percent, it would result in a 19 percent increase in producer margin for flowers and 34 percent for vegetables. Furthermore, a reduction in the water levy would result in a 4 percent reduction in the cost of producing vegetables and hence a 5.7 percent increase in producer margin[36]. Implementation of these measures would require the private sector to engage the government to consider whether these costs are appropriate, and then possibly reducing these transaction costs which impact on the competitive of the sub-sector.

For the tobacco subsector, farmers waste a lot of time and incur costs between delivery at the auctions and sales. Hence improving the selling logistics could significantly reduces transaction cost and improve producer margins. This could be improved through an efficient prior booking system so that farmers don't waste valuable time and resources queuing for a sell.

Furthermore, loses could be reduced by a deliberate policy to deal with all distortions particularly in the marketing of agricultural commodities. For instance, the policy reversal in 2001 through statutory Instrument 235A of 2001, which restored the Grain Marketing Board's (GMB) monopoly with regards to the marketing of maize, maize meal and wheat. The statutory instrument restored GMB's monopoly and criminalised the selling of maize and wheat to any institution or individual outside GMB, thus effectively reserving the liberalised marketing arrangements of 1994 under ZIMACE[37]. This affected maize supply as the prices offered by GMB could not match the inflationary environment.

[35]Statistics sourced from a presentation by Mr. T. Chamboko on Using Evidence to Prioritize the Competitiveness Agenda in the Horticulture Subsector, at the Agriculture Competitive Conference held on 11-12 July 2012 in Harare

[36]Ibid

[37]The Zimbabwe Agricultural Commodity Exchange (ZIMACE) was started in 1994 by parties in the private sector, viz, the Commercuial Farmer's Union and Edwards and Company, a stockbroking firm. It was Africa's first agricultural commodity exchange and sought to fill the vacuum left by the dismantling of State controls in the marketing of agricultural commodities. The Exchange traded in most crops with the exception of tobacco and horticultural crops. It however suspended its trade in August 2001 when state controls were reintroduced., (AIAS 2006)

4.2 Improve Economies of Scale

The Land Reform in Zimbabwe saw the parcelling out of large scale commercial farms into numerous small scale farms. The pig industry, for instance, currently consists of 5 large scale commercial farmers, 22 medium scale produces and more than 620 small scale commercial and semi-subsistance producers. The national pig head is estimated at 40 000 sow units. Of these, the commercial herd estimated at only 12 000 sow units (about 30 percent), whilst the remainder is produced by small to medium scale enterprises[38]. Given the role played by small scale farmers, with limited human and technical capacity, it is possible that the industry would benefit from bulking in the purchase of agricultural inputs and other technical services as well as marketing of produce. Bulking would enable these small scale farmers to enjoy economies of scale, hence improving viability and competitiveness.

Achieving economies of scale is important when the minimum units required to access desired inputs, services, technologies, or other capacities are quite large. Hence in order to increase efficiency stakeholders can set minimums for acquiring inputs or transporting harvest to the market. Lessons can be drawn from the Ghana pineapple experience where exporters were required to reach substantial volumes (scale) before they were able to access sea-freight transportation. Stakeholders in the cotton and tobacco clusters could benefit if a minimum tonnage if set for the transportation of their crops to the market.

4.3 Understand and Serve Market Needs

Markets have become increasingly sophisticated and highly demanding; therefore, producers need to respond to the ever-changing needs of the markets. Zimbabwe agriculture producers must keep track of market trends and be able to adapt value chains to respond to changing market needs and conditions. For example, in 2005 Ghana experienced a sudden halt in the growth of its pineapple exports, when it failed to respond quickly to changing market demands. The introduction of a new pineapple variety (MD2) by Costa Rica, that quickly became the product of preference in Europe, displaced Ghana's market share. Ghana's slow response, taking several years to introduce the same variety, demonstrates the importance of understanding and responding to market needs.

4.4 Standards and Certifications

The issue of standards and certifications should be viewed as the passport to international markets. Poor standard quality can indeed act as a non-tariff barrier to trade, hence agriculture producers should strive to adhere to specific qualities and standards. Hence, to ensure export quality products, standards infrastructure including accredited laboratories staffed with well trained and experienced personnel is a key imperator. This should help ensure that ethical, consumer health, and safety requirements are met to the satisfaction of national regional and international markets.

[38]Statistics sourced from a presentation by Dr. J. Mutambara on Pig Industry CIBER Assessment, Economic Analysis & Policy Recommendations, at the Agriculture Competitive Conference held on 11-12 July 2012 in Harare

Zimbabwean agriculture producers should understand that meeting recognized standards is not just a condition for market access but a powerful way to compete for market share and higher unit values. Meeting set international standards and certification can help products appeal to special customer segments that are willing to pay premium prices as seen in Figure 7.

It is also worth noting that many standards and certifications have international bodies that certify that products meet certain standards. Several have the ability to certify products and services in developing countries, but cost and timing can be a major issue in bringing these international bodies into developing countries. Therefore, especially if large numbers of producers or exporters will receive certification, it is often more beneficial to set up institutions in the local country. This provides an important window for public private partnerships in ensuring that all the agricultural products meet the quality and safety requirements of the market.

4.5 Lowering Investment Risk and Improving the Enabling Environment

Whilst this paper put prominent on the role of the private sector, lowering investment risk and improving the enabling environment are areas which the Government should address. Such investment risks include policy consistency and costly policy reversals. The Government would need to ensure policy consistency, predictability and credibility to attract investors into the economy and the agricultural sector. One key element to lowering investment risk is the need to address concerns regarding some aspects of the current Indigenisation and Economic Empowerment regulations so that they are consistent with the objective of attracting investments in the sector. In addition, stepping up efforts in enforcing bilateral investment protection and promotion agreements will be required to ensure security of foreign investment on farms. This could also be complemented by reforming the land ownership system so that land is fungible and can be used as collateral to improve access to credit by farmers. Enhancing security of land ownership for both local and foreign investors is key in motivating farmers to commit finances in long-term investments.

Zimbabwe will also need to establish agricultural marketing arrangements that guarantee prompt payment for delivery of the produce. The current scenario, in which farmers experience payment delays after selling their produce, particularly maize and wheat that is sold to GMB, poses a major investment risk (and transaction cost) in these subsectors. Delays in payments processing affects planning by farmers, and in effect represents an interest free credit to government at the expense of the famers.

Key also to lowering risks is the need to draw lessons from the country's experiences with liberalisation in the cotton sector, which did not lead to price competition in the cotton sector. Zimbabwe last had the number one ranking in yield of per ha in Africa of 459 kg and 497 kg per ha respectively in 1980/81 and 1981/82. Thereafter, Mali, Burkina Faso and Cote d'Ivoire began to take the lead in productivity (Goreux and Macrae, 2003). The drop in productivity immediately followed the exit of commercial farmers who had direct access to credit, as there was no need for a special input-credit scheme.

When the cotton sector was initially liberalized in 1995, it gave a boost to the sector as production quickly increased. Producer prices also increased initially due to competition between ginners

and lower subsidies to the textile industry. The introduction of competition through the arrival of Cargill, followed by Cotpro gave competition as Cottco had now to share the market with the other two large players. But after taking over Cotpro in 1999, Cottco had again became a dominant player with 75 percent of the market. Since Cottco was the only company that provided an input credit facility, it had to fight against 'side-marketing' (growers who had received inputs from Cottco began selling to smaller market players and thereby avoiding to pay for the inputs they had received).

With more traders purchasing without grading, quality suffered which would erode the high premium prices enjoyed by Zimbabwe on the international market. To limit 'side marketing' Cottco screened their customers more carefully and rewarded their most credit-worthy by granting them the status of "Gold Club members". This resulted in the cotton sector losing out on two fronts: a) with poor Zimbabwean farmers having a more restricted access to input credit in Zimbabwe than in other countries like Burkina Faso (Goreux and Macrae, Ibid); and b) tampering with the Zimbabwe's high level of cotton grading because of allowing unregistered buyers almost led to removing Zimbabwe's 10 percent premium over cotton from the Franco-fone countries and Ghana. Zimbabwean growers had been induced to harvest seed cotton with greater care, because only 15 percent of seed cotton is graded A for which growers are better paid.

However, Zimbabwe has lagged behind in technology than in its marketing strategies in the cotton sector, and one should be surprised by local farmers being tragically out-competed by growers that have adopted higher yield GMO varieties. The following quote sums up the debate and the reality faced by cotton growers, anywhere in the world:

"In the past 10 years, India, formerly self-sufficient or net-cotton importing nation, has become the world's second producer and exporter of cotton, by doubling its production and exports of cotton. While the area of production has increased marginally, cotton productivity jumped significantly from 2002 onward, in coincidence with the official introduction of transgenic-insect resistant but cotton variety. Many observers believe that the adoption of Btcotton was actually the engine of cotton productivity growth in India. For example, on October 19, 2011, India's minister of agriculture, Sharad Pawar, noted that seed cotton yields had gone from 150 kgs per hectare to 500 kgs per hectare, in response to the adoption of genetically modified cotton variety (Gruere, Gaillaume and Yan Sun (2012)

4.6 Positioning Products and Value Chains for Greater Value and Competitiveness

The Mongolian cashmere example provides an instructive example on how to position the value chain within an international market. In deciding how to position products and value chain for greater and competitiveness, producers need to understand where the product is currently positioned in the domestic or global market before deciding on where to position the chain's products or services. Producers need to answer the following questions: where do we want it to be and what are the quality, service, and other requirements to be competitive in that positioning? What are the best global performers in any of the positions doing to be competitive? What are the profit margins and likely market demand at each position? Who will our competition be? Once an objective is determined, value chain participants must decide which actions are necessary to achieve the desired positioning.

Furthermore, the role of Government should be to create an enabling environment critical for business development and growth of any business venture, including agriculture. A burdensome regulatory, legal, and policy environment severely hinders the growth of industries, diminishes competitiveness, limits local firms' capital investments, shortens planning horizons, and obstructs foreign investment. Reforming policies in favour of business promotion can encourage dynamism and efficiency.

As noted already, Zimbabwe was ranked 171st out of 183 countries on the Doing Business Index 2011-2012 (Doing Business 2012). Zimbabwe needs to prioritise reform of the regulations and procedures in areas in which it performs poorly – such as starting a business (including farming), protecting investors, trading across borders (export permits) and enforcing contracts. These issues directly affect price, exports, investments, yields, productivity and value addition in agricultural activities, hence the overall competitiveness of the sector. In addition, regulatory reforms are required with regards to land tenure security. Land tenure reform could, for example, enable farmers to use land as collateral security, or enable the use of long-term leases as tradable collateral securities in order to attract investment and to facilitate farmers' access to bank loans.

5.0 CONCLUSION AND RECOMMENDATIONS

The paper provides a wide ranging overview of situations, problems and opportunities for agricultural competitiveness as seen from the international experience. This rather elaborate treatment of the subject is meant to help Zimbabwe in learning from the international experience. It is in this context that the paper made an attempt to provide a perspective of Zimbabwe's agricultural competitiveness, in terms of the sector's performance as well as the challenges to expanding the sector and improving its productivity and profitability. The paper also described nine challenges to private sector driven; market based agricultural competitiveness, and presented approaches to addressing these challenges, illustrated by numerous international examples. International experience shows that a country's competitiveness performance rests on the willingness and the ability of the private sector actors (farmers, lead firms, processors, and service providers) to invest and operate their business productively. It also requires collaboration between the public and private sectors, and willingness of the public sector to assume responsibility for ensuring a strong platform for competitiveness and an enabling environment that encourages and supports the private sector. This is as true for Zimbabwe as it is for other countries.

Despite Zimbabwe's weak agricultural sector performance, this paper has been written with great optimism. A big change in the last 10 years is the accumulation of success stories from around the world, of approaches and business models, of policy reform and investments that have been effective in improving competitiveness. These achievements, and improved data and impact assessment, provide new initiatives with a tremendous resource of prior experience. There are really no surprises in the basic concepts and principles presented in this paper, in fact, the approaches presented are ones that have worked elsewhere. Thus, international experience and the available approaches to building agricultural competitiveness point to the direction that Zimbabwe can usefully consider. Zimbabwe can select and apply such experience at a national level, or more cautiously, on a subsector-by subsector level.

However, whilst these approaches have indeed worked in other countries, it is important to emphasise the need for Zimbabwe to address the "fist tier" issues to enhance agricultural competitiveness. Such challenges includes: creating an enabling stable macroeconomic environment characterised by policy consistent and predictability. More importantly is the need for Zimbabwe to deal with agricultural distortions due to government policy framework which can lead to gross market imperfections in both product markets (e.g. monopsonistic buying of agricultural outputs) and factor markets (e.g., inability of farmers to borrow for investing in long term projects). These distortions at the higher policy levels affect the economy as a whole, hence the need to address them, to enable the country to respond to the lessons learnt from the wide variety of international experiences.

Once the above "first tier" issues are addressed, then stakeholders can move on to implement the nine approaches, which remain available to Zimbabwe and if implemented can substantially transform the agricultural sector into a vibrant, viable and competitive sector. The paper recommends the following as some of the key strategies that the country can utilise to improve competitiveness:

- reduce losses and costs by improving storage, logistics and transport;
- improve economies of scale;
- improve business-business linkages;
- understand and serve market needs;
- upgrade and deepen value chains;
- understand and use standards and certifications;
- lower investment risk;
- position products and value chains for greater value and competitiveness; and
- improve the enabling environment.

The Government remains the principal actor responsible for improvement and reform of regulatory issues; however the private sector must serve as the impetus for change. Whilst the capacities and knowledge of the Government can be invaluable to the functioning of value chains, it often lacks the necessary incentives and experience to understand the constraints faced by value chain stakeholders in the business environment. The private sector can help lead the search for solutions by providing government officials with reliable data and a plan for change through an open dialogue process. This paper therefore, strongly recommends the private sector stakeholders to play a leading role in engaging the Government in active dialogue and push for the implementation of the approaches to enhancing agriculture competitiveness, discussed herein, among others.

5.1 Suggestions for Continued Research

The paper has only scratched the surface. Focus on competitiveness will require that many other topics be examined; and that all topics be considered in more detail. Choices, and the discussion and dialogue leading to these choices, should be informed by sound analysis and informed consideration of the approaches that would be most effective for the country. Thus, some of the next steps that are recommended for additional research and investigation would centre on more detailed understanding of the types of investments, value chain arrangements and price and other business-to-business incentives that would provide the needed motivation for improved value chain and sector performance.

Assisted by the Zimbabwe Agricultural Competitiveness Program (ZIM-ACP), Zimbabwean has already begun to consider these objectives and approaches, through a process centred on Commodity Industry Groups (CIGs). These CIGs, as they consider their objectives, strategies and action plans, will need specific data and analytical support. Further research could focus on how the nine approaches discussed herein, could help improve competiveness in the specific CIGs.

There is an ongoing initiative to establish an Agricultural Council for Zimbabwe. The specific action agenda of this proposed Council is still to be defined. The agenda would need to be supported by sound research.

Several references were made at the recent (July 2012) Conference on Agricultural Competitiveness on the need for accurate sector-level statistics. This is an opportunity for the Zimbabwe Statistics Agency (ZIMSTAT) to engage with the CIGs, and even the proposed Agricultural Council, to identify ongoing data collection and reporting needs.

The draft Agricultural Policy- April 2012, includes the policy objective to mainstream gender in agriculture. It states, "Women in Zimbabwe play a major role in the agricultural sector at all the stages of the value chain from accessing inputs, production of various products, storage, preservation and processing, marketing and distribution. Women have difficulties in accessing credit, equipment and machinery essential for production, technical knowledge and expertise to produce high quality products and markets. Information about markets and strategies to penetrate those markets on a sustainable basis is a big challenge for women. Women remain largely excluded from the decision making processes within the public and private spheres and this poses a major challenge for them to participate in the national development process".

Growing Zimbabwean agricultural competitiveness will provide tremendous opportunity for female employment and entrepreneurship, and especially in value adding pursuits. These opportunities suggest elements of a useful research agenda. For example gender-specific data and benchmark information could be developed.

- The work and planning of the CIGs could be examined to highlight opportunities for gender mainstreaming. This could be done as a benchmark exercise, using value chains in comparator countries; and
- Constraints to female participation in value chain growth can be identified, and leverage points recommended, addressing and providing increased opportunities for women.

REFERENCES

- African Institute for Agriculture Studies (2006): the Monopoly Role of the GMB in Food Security, Paper Prepared for the Zimbabwe Project Trust Dialogue on Land and Resource Rights, 16 November 2006
- Bolnick B, (3003). "The Economic Impact of Cluster Initiatives under the Competitiveness Initiative (TCI) project: Interim Assessment and Report". November 2003.
- Bordeaux C, (2011) "Economic Liberalization in Rwanda's Coffee Sector: A Better Brew for Success" in Yes Africa Can: Success Stories from a Dynamic Continent. World Bank. 2011.
- Chamboko T, (2012). "Using Evidence to Prioritize the Competitiveness Agenda in the Horticulture Subsector" (presentation)". The Agriculture Competitive Conference. Harare. 11-12 July 2012.
- Chemonics International, (2006): "Assessing USAID's Investments in Rwanda's Coffee Sector." April 2006.
- Doran S. (2009), "Zimbabwe's Economy: A Report Card Mid – 2009" The Brenthurst Foundation 2009.
- Dunne, et. Al, (2005), United Stated Agency for International Development. "microNOTE #6. AMAP BDS Knowledge and Practice Task Order Lexicon." USAID. March 2005.
- European Commission. EUROSTAT. European Commission, 2012. July 2012.
- Food and Agriculture Organization of the United Nations (FAO). FAOSTAT. FAO, 2012. Web. July 2012.
- Goreux L and Macrae J, (2003) Reforming the Cotton Sector in Sub-Saharan Africa (SSA), Africa Region Working Paper Series No. 47, March 2003, World Bank
- Government of Zimbabwe (2012), The 2012 Mid-Year Fiscal Policy Review Statement.
- Gruere, G.P. and Sun, Yan (2012). "Measuring the Contribution of Bt cotton adoption to India's cotton yields leap". International Food Policy Research Institute (IFPRI), Series No: 1170.
- J.E. Austin Associates, Inc. (2008), Recommendations for the Sugar and Maize Value Chains in Bihar - a Background Internal Analysis/Document Prepared for the IFC. October 2008.
- Katsande, K. The Agriculture Competitive Conference. Harare. 11-12 July 2012. Presentation.
- Masaw P, et al, (2011),. "Tanzania's Cashew Value Chain: A Diagnostic". African Agribusiness and Agro-Industries Development Initiative. 2011.
- Masoka N, (2012), The Agriculture Competitive Conference. Harare. 11-12 July 2012. Presentation
- Mbithi S, (2012), Horticulture as a Food Security Option: Experience from Kenya, The Agriculture Competitive Conference. Harare. 11-12 July 2012. Presentation.
- Ministry of Agriculture, "Draft Comprehensive Agricultural Policy Framework (2012-2032)" April 2012.
- Mutambara J, (2012), Pig Industry CIBER Assessment, Economic Analysis & Policy Recommendations,The Agriculture Competitive Conference. Harare. 11-12 July 2012. Presentation.
- Ndlela D and Robinson P, (2007), Distortions to Agricultural Incentives in Zimbabwe, Agricultural Distortions Working Paper 39, December 2007
- Ouma, S., Boeckler, M. and Lindner, P, (2012), Extending the Margins of Marketization: Frontier

Regions and the Making of Agro-export Markets in Northern Ghana. Geoforum, Special Issue 'The Market Reconsidered' (forthcoming). 2012.

- Rikken M, (2011), "The Global Competitiveness of the Kenyan Flower Industry". The Fifth Video Conference on the Global Competitiveness of the Flower Industry in Eastern Africa. 2011.
- The Government of Zimbabwe (2011), Zimbabwe Medium Term Plan 2011- 2015
- The World Bank (2012), Doing Business 2012, Economy Profile: Zimbabwe. The World Bank
- The World Bank. Doing Business: Measuring Business Regulations. The World Bank. 2012. Web. July 2012.
- United Nations. "A Competitiveness Strategy for Sri Lanka's Rubber Industry". Sri Lanka Rubber Cluster. 2002.
- United Nations. United Nations Commodity Trade Statistics Database (Comtrade). United Nations, 2010. Web. July 2012.
- USAID, The Ties that Bind: Case Studies in Making Buyer-Supplier Relationships Last. 2007.
- Webber, C.M. and Labaste, P, (2010), Building Competitiveness in Africa's Agriculture: A Guide to Value Chain Concepts and Applications. Washington DC: World Bank, 2010.
- World Bank 2012, Note II- Agriculture, Zimbabwe Growth Recovery, The World Ban Zimbabwe Office

Zimbabwe Economic Policy Analysis and Research Unit (ZEPARU)

55 Mull Road
Belverdere
Harare
Zimbabwe
Tel: +263 4 778 423
Fax: +263 4 778 415

ISBN: 978-0-7974-5584-9