Coffee Value Chain Report

1.0 INTRODUCTION

1.1 Value chain definition

The agricultural commodity value chain concept has been used since the beginning of the millennium, primarily by those working in agricultural development in developing countries. Although there is no universally accepted definition of the term, it normally refers to the whole range of goods and services necessary for an agricultural product to move from the farm to the final customer or consumer.

At the heart of the agricultural commodity value chain concept is the idea of actors connected along a chain producing and delivering goods to consumers through a sequence of activities.-However, this "vertical" chain cannot function in isolation and an important aspect of the value chain approach is that it also considers "horizontal" impacts on the chain, such as input and finance provision, extension support and the general enabling environment. The approach has been found useful, particularly by development actors, in that it has resulted in a consideration of all those factors impacting on the ability of farmers to access markets profitably, leading to a broader range of chain interventions. It is used both for upgrading existing chains and for development actors to identify market opportunities for small farmers

1.2 Contexts of the coffee value chain

Value Chains are found at the core of high-impact and sustainable initiatives focused on improving productivity, competitiveness, entrepreneurship, and Small-Medium Enterprises (SME) growth. Value Chain approaches are revolutionizing agriculture and the food industry. Focus has shifted from agricultural production to consumer demand, marketing and the coordination of product flows from producers to consumers. The Value Chain concept acknowledges that production must be linked to demand and the critical role of organizing the flow from farmer to consumer opportunities.

Uganda is the 2nd largest exporter of coffee in Africa, Coffee is an important cash crop that supports over 3.5 million families. This is at all levels of the value chain; especially for income security. It contributes to approximately 20 - 30% of foreign exchange earnings.

Eastern Uganda is one of the key Coffee producing regions in Uganda. Bugisu / Mt Elgon and Iganga areas account for the largest production of coffee in Eastern Uganda, then some parts of Luuka and Bugiri. Coffee production is done at individual and farmer group levels. Production is influenced by Inputs, extension services, land size and preparation, and seed quality.

They are two major species of coffee grown in Uganda; Robusta coffee which is indigenous in Bugiri, Luwuka, a bit of Iganga. Arabica Coffee – introduced from Malawi (Nyasaland) in the 1890's as main cash crop - now grown in highlands of Bugisu-Mbale districts. Uganda has about 500,000 coffee farms of which 93% are small scale in the country. The coffee industry was fully liberalized in 1991 and 1992; Co-ops lost monopoly of marketing coffee.

Sector performance in 2010/11 Season

- Robusta 2,402,000 bags (79%)
- Arabica 658,000 bags (21%);
- Total 3,061,000 bags (each 60 Kg)

The Projection of 2011/2012 was as follows:

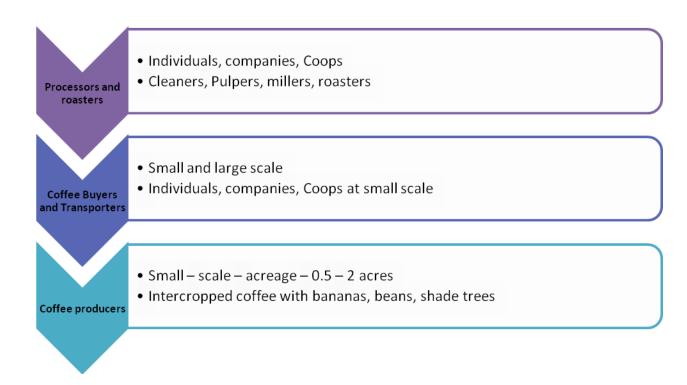
- Robusta 2,523,000
- Arabica 691,000;
- Total 3,214,000 bags.
- Local consumption is limited at around 3% of production.

Success Factors for Uganda's Coffee Industry:

The success factors for Uganda's coffee growing industry are: Good weather, New crop coming into production following a relatively massive campaign on planting new coffee bushes, Management and containment of Crop pests and diseases, Increased number of organised farmer groups and the drive for sustainable production initiatives, and Favourable farm-gate prices.

Other factors include Generation of Coffee Wilt Resistant Planting Material (CWD-R) which has been raised through extensive research, seed multiplication through nursery operators and tissue culture and public – private partnerships. Furthermore a favourable National Coffee Policy has been adopted that aims to strengthen coffee research through restructuring and increased funding; strengthening farmer organizations through capacity building; adopting and strengthening extension that is coffee specific as well as through collaborative linkages with the local governments and the NAADS programme; development of a National Coffee Strategic Plan; and finally, increasing Government support to commodity value chains in which coffee is prioritised; Coffee production campaign – operational platform – Multi-stakeholder and seeking support from Development Partners and other institutions (source: UCDA 2011).

COFFEE VALUE CHAIN



1.3 Study purpose and objectives

To undertake a comprehensive study and value chain analysis by EADEN for Coffee, Cassava, Rice and Maize in the districts of Tororo, Mbale, Bugiri, Luwuka and Iganga and come up with practical recommendations.

2.0 METHODOLOGY

2.1 Study Scope and Coverage

This study was conducted between December 2014 and February 2015. Four value chains were analysed: that of maize, rice, cassava, coffee, in the-regions of eastern Uganda and Busoga. The Value Chain Analysis is based on the case studies undertaken with specific stakeholders within the value chain especially cooperative societies visited specifically in Eastern Uganda in the districts of Mbale, Tororo, Luwuka,

Bugiri, Iganga that work closely with EADEN. In this particular report, emphasis has been put on maize.

2.2 Study methods and tools

A value chain analysis was done for each of the following four crop commodities: maize, rice, cassava and coffee. This included mapping of the value chains, detailed descriptions of the main actors involved in the value chains (from farmers to end consumers) and lastly, analysis of how the value is distributed across the different actors. The methodology involved collection of information and documentary review of secondary literature, collection of primary information from the field through focus group discussions and semi structured interviews using purposive sampling. The study focused quite closely on the cooperative societies EADEN works with. Lastly, data was compiled and analyzed to generate gross margins obtained by different actors along the value chains.

3.0 General Findings

Most farmers were smallholders cultivating a wide range of crops for household consumption and food security purposes, but organized under various cooperative societies in the districts of Luwuka, Iganga, Tororo, Mbale and Bugiri especially for marketing purposes. Part of the farmers land is also utilized for growing crops that are later sold on the market and generate revenues for farmers. This study focused on the latter group of crops, known as "cash crops".

All value chains were similar particularly at the upstream stages of the chain, right after harvest. Once farmers harvested their crops, they either sold directly at the farm gate level or dried especially coffee, stored it and bulked under the various cooperative societies. Selling at farm gate level was not preferred by farmers but was often done out of necessity (e.g. immediate need for cash) or simply due to very limited access to markets (e.g. no means of transportation).

Farmer bargaining power was diminished and the selling prices of their crops were often very low. Another marketing strategy as earlier mentioned was to sell under cooperative societies such as Gumutindo Coffee Cooperative Enterprise, Buluguyi Farmers' Cooperative Society (BUFACOS), Budaya Farmers' Savings and Cooperative Association (BUFAMA), Namungalwe Integrated Farmers' Association (NAMIFA) Namungalwe Sub county, Iganga District, Namungalwe integrated farmers association, Mukuju United Cooperative Farmers' Association in Mukuju Sub County Akadot parish Tororo district often to bulk up the dried coffee in stores, process a bit to remove the cover in order to seek better prices (sold at the right time and in larger quantities).

The local traders were farmers' first link to the market. These local traders at times through use of agents travel to remote and difficult to access areas to collect harvests from farm gates, collection points (storage facilities) and small rural markets until they accumulate a sufficient quantity e.g. one or more truckloads.

Subsequently, local traders transport the commodity to coffee factories located in the vicinity for processing where it is sold to processors who are often exporters to regional markets including in east Africa.

The final market destination differs according to crop type; some of which are destined for export markets. Crops that need secondary processing like cofeee, and have slightly different value chains, Processors have a central role to play in these value chains and are usually located in urban trading centres such as Mbale and Tororo and even other parts like Kampala. Most of the time they serve as marketing centres where sellers and buyers meet: local traders deliver the crop and sell it directly to wholesalers while processors take a fee for processing the crop commodity. Farmers also bring their crop directly to processors and thus directly bear the transport cost.

4.0 THE FINDINGS

4.1 Structure of the findings

The findings are structured based on the levels of production, processing, marketing and consumption. The staff of the following cooperative societies were key informants

- a) Gumutindo Coffee Cooperative enterprise Mbale Industrial Division , Namatala Division
- b) Khabutoola Integrated Farmers' Association (KIFA)
- c) Sibalanga Integrated Development Association (SIDA)
- d) Nawandala Integrated Farmers' Association : Nawandala Sub county , Bugogo Parish—Iganga District (NIFA)

5.0 PRODUCTION

5.1 Production actors and players

Farmers, input dealers such as nursery owners, land owners, Uganda Coffee Development Authority, private support extension workers and support organizations such as EADEN that have supported farmers with in puts are some of the players in the coffee value chain. Then we have NAADS as a government arm supposed to provide seedlings and technical extension services. Under the various cooperative societies organized around coffee they have Executive committees to provide the overall leadership. Then the societies have production officers and community based facilitators that are responsible for the various farmers that produce coffee by providing technical support.

5.2 Production capacities

Coffee production takes place in all districts of eastern Uganda but as earlier mentioned varying in acreage under crop and in the type grown. The biggest growers of Arabica coffee are in Eastern Uganda. Coffee has been traditionally cultivated in Uganda by small-scale farmers for income generation through selling the coffee beans, either raw, dried and processed.

Some of the activities at production levels are done by the cooperative enterprises e.g. at Gumutindo Raising nursery beds- seedlings, Distribution of seedlings to farmers, Training of farmers, Post harvest handling and providing Extension services

5.3 Production systems

On the part of the production system of coffee, at Sibalanga Integrated development Association, according to Mr Kangala steven the community based facilitator and Munialo the vice chairperson they do Preparing the land, Ploughing (2 times), Digging holes, Prepare nursery beds, Buying seedlings, Applying fertilizers, Planting, Spraying, cutting of buds (this is done soon after transplanting the coffee for it to develop branches), Weeding, Pruning, Picking red coffee beans, Pulping, Fermenting of pulped coffee, Washing, Grading and Drying

According to Mr Mutanda Fred of Khabutoola Integrated Farmers there is similarity to that of Sibalanga because they do Nursery bed preparation, Main garden preparation, Potting (putting coffee seedlings into buveeras /pots to allow for proper growth up to the stage of transplanting, Watering, Transporting

Measuring and marking of spaces, Digging of holes, Manure application, Spraying, Weeding, Pruning- cutting off unwanted buds

5.4 Opportunities

Some of the opportunities for coffee production include favorable climate, Rich and fertile soils, presence of good and improved coffee seedlings mainly from the NAADS and other related programs, ucheap and abundant labour. Fairly good rural feeder road network and the presence of many actors in the liberalized industry mainly the private

sector. In fact coffee growing here was described as a low cost input venture requiring minimal external inputs.

As generated from Gumutindo the following opportunities were given; High quality processing unit, Market for coffee exports, High returns and growth of the company, Transfer of entrepreneurial skills to farmers, Growth of membership base from the current 17, Growth and expansion of the company, Improved household incomes for farmers and Improved skills and production

5.5 Challenges and constraints

One of the key constraints in coffee production include low levels of productivity, poor general agronomic practices e.g. failure to prune and or stump old coffee bushes; poor crop protection practices that has result into a high disease and pest burden e.g. the coffee wilt disease, Fluctuating prices which discourage farmers from growing more coffee.

Most of these challenges are attributed to a dysfunctional extension and advisory service, which EADEN is coming to offset. Most of the farmers and staff of cooperative societies interviewed reported that they had not received any extension advice on coffee for a while. Although NAADS is present in the region and was reported as one of the key actors in the coffee value chain, their staff concentrates on only selected crop enterprises leaving the rest of the crops unattended to. NGOs in the area have attempted to bridge this gap but have worked with only crops of their choice and often focus on postharvest handing and marketing aspects, leaving out production

Mr Nyiro, Bateganya and Kubwani of Nawandala saidPoor roads during rainy seasons, Price fluctuations, land shortage, Limited storage facilities at primary societies, Insecurity at the stores were some of the constraints highlighted Other constraints at the farmer level are limited access to and high cost of finance, progressively smaller average farm sizes, Low levels of farmer organization, Low Yields at farm level, Ageing trees (and farmers), High cost of farm inputs and very limited usage of inputs, and very limited access to on-farm extension services.

High post-harvest losses, using old crop rather than good coffee seeds, lack of modern storage facilities, high bank lending rates, and poor market access roads among others.

Poor crop protection practices that has result into a high disease and pest burden e.g. the cassava wilt disease and lastly fluctuating prices which discourage farmers from growing more maize.

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Farmers face great difficulty accessing coffee seedlings in terms of quantity and quality because of availability limitations. Production is also limited by a lack of capital and access to rural credit; the majority of farmers lack access to formal financial services. When farmers manage to contract a loan, the interest rates are high, around 20- 35% per year. Another option is to get affiliation to a co-operative or similar group where they can get access to group loans via SACCO schemes. Donors and other aid projects for agriculture also often prefer to lend to co-operatives and similar farmer groups. Commercial bank lending rates in November 2012 were about 24% while SACCOs seem to lend amount in the range of up to 10% per annum.

Other factors affecting yields include: use of rudimentary tools and equipment (e.g. hand hoe); farmers' lack of agronomic knowledge; incidence of pests, weeds, vermin and diseases. Some areas are affected by soil exhaustion; most of these lands were

previously occupied and over cultivated. Weather is also a crucial issue, with rainfall patterns becoming more and more unpredictable for farmers.

Fluctuating prices

Coffee has traditional crop been grown seasonally during the rainy seasons of Mid-February or March to June, and second rains from Mid-August to December. As a result, the prices fluctuate significantly with low prices just after the traditional harvest season and high prices during "off seasons". These fluctuating prices are also a result of market inefficiencies where there is lack of information on more suitable prices (for example export markets especially the dried one).

2. Drought

Climate change has resulted in less than predictable rains, even in Uganda which has traditionally had known seasons.

3. Access to financing

The cost of agriculture capital equipment like threshers, water reservoir, ploughs and tractors is high. In addition as maize takes about 3 months to mature, it means for at least that time the farmer will have to finance the crop growth without any expected income.

It is however pretty difficult to get agriculture loans in Uganda (well not just agriculture but credit in general) but hopefully with the WRS mentioned above, it should be easier for the farmer to use their produce as security for a loan. Furthermore there are some organizations that are increasingly seeking to help the agriculture sector.

We would recommend that in order for the farmer to have higher chances of accessing loans, they keep records of their agriculture produce to show that they do not have high incidences of crop failure (which is one of the factors that makes the sector high risk to lend to).

6.0 PROCESSING/VALUE ADDITION

5.1 Processing actors and players

The Biggest processing actors for cofee are coffee processors who are in the towns in the area with the majority in Mbale, Iganga and Tororo at times based in towns and the outskirts of towns. Other players in the processing are Uganda Coffee Development Authority (UCDA) who are in charge of Regulation of marketing, processing and export manufacturers of bags, transporters and finance institutions. Farmers in most cases market their crops without processing it (e.g. raw coffee) and sell it with minimal added value. Farmers lack simple processing equipment or direct access to processing facilities of making coffee. Another problem is the absence of postharvest handling equipment to improve the quality of the product (e.g. tarpaulins for drying the harvest). And finally, farmers lack knowledge on postharvest handling and value addition.

5.2 Processing capacities

Processing capacities of coffee is still monopolized by a few rich people who can own processing facilities and then cooperative enterprises such as Gumutindo and may be Bugishu Cooperative societies who even export to outside markets.

Constraints in coffee processing

ome	of the constraints as pointed out by key informants include
	High Cost of electricity to run processing machines / equipment
	High bank interest rates ranging from 18-25% p.a.)
	High costs of processing equipment
	Processing of wet coffee again reduces quality,
	Poor infrastructure especially the roads in most rural
	Processing stops at selling coffee beans
	Traceability of coffee from farm to final product say Nescafe
	Government policies in agriculture
	Failure of cooperatives

7.0 TRADING/MARKETING

7.1 Trading actors and players

Organization of the coffee buying business: mainly private buyers some of whom are individuals and others groups or companies or their agents. Individual buyers operate as far down as the farmers' households from where they collect either fresh or dry coffee and dry and bulk it in local stores in the village trading centres. From these stores the bulked coffee is taken to the larger stores or to processing plants (for hulling) which are mainly located in towns and major trading centres and possess larger storage facilities. Trucker drivers and owners are also key actors in the coffee value chain, that need to be cautioned on the issue of quality as they transport coffee from the gardens/primary stores.

There are also specialized coffee buying companies e.g. Gumutindo in Mbale, Kyagalanyi, UGACOF coffee, this one is Bweyogere that penetrate the region for coffee some of which have branches that extend down to the grassroots.

Some traders have taken on the role of drying coffee from the farmers but because some of them lack space they deliver it to the coffee stores and processing factories who in turn end up drying it on bare ground or tarpaulins. We found coffee in various stages of drying (ranging from totally Red/Green cherries to FAQ) at the factories

Farmers sell their coffee unprocessed as fresh cherries (sherishe), dry 'kiboko' and or dry hulled to local stores or to buyers who moved from home to home. Others through cooperative such as Sibalanga, Khabutoola and Nawandala

Some farmers were pre-financed by coffee traders who bought the crop while still in the field and these were exerting immense pressure on the farmers to deliver which made farmers to supply coffee of whatever kind whether cherries are ripe or unripe and dipping of coffee in hot water to disguise its colour. This is because traders obtained the

money for pre-financing as loans from banks and SACCOs and were themselves under pressure to payback it back.

Coffee Buying Stage of the Value Chain

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The opportunities at the processing level according to Gumutindo is that there will be Growth and expansion of the company, Growth of primary societies and Quality and standards once maintained will provide better prices for farmers

Analysis of the cost of Processing Coffee

- The biggest cost is on milling which is followed by electricity, transport, grading and packing, casual labour, taxes and rent.
- None of the coffee processors indicated any expenses on insurance meaning they are not insured.
- Revenue: millers realized revenue from milling for others, and sale of coffee beans and husks.

- Overall, coffee processing proved profitable for all the dealers visited as most of them broke even over the 3 years reviewed.
- Millers make more money milling for others than for themselves perhaps because of the volume of coffee brought in by others.

Challenges at processing level

According to Gumutindo coffee in Mbale the major constraints are Poor adherence to best practices, Market fluctuation worldwide, Poor quality coffee and Machine break down

- Losses which result from market (price) fluctuations, foreign exchange variations, and failure by traders advanced money to meet their obligations.
- Adulteration of coffee e.g. some traders mix Arabica and Robusta coffee beans,
 addition of extraneous materials such as sand/pebbles and metal chippings
- Competition amongst the coffee buyers/processors which has led to unethical practices such as buying low grade coffee in order to meet the demand obligations, mixing of coffee with extraneous materials including rejected coffee beans and sand. This leads to low quality coffee and loss of premium prices and hence loss of business.

Others are: high cost of finance / credit; Insufficient volumes of coffee to generate sufficient profits; Frequent defaults on deliveries; Exchange rate volatility; Lack of access to hedging tools and price risk management knowledge and, finally, for bigger firms, difficulties securing sufficient volumes of high quality coffee

Competition: there are several plants both in the towns and, lately, in the rural areas following the extension of electricity there. Hulling coffee that is not properly dried, Machine break downs, Power outages and transformer breakdowns, Lack of skilled manpower to maintain the plants and Irregular supply of coffee are some of the challenges processors in the districts under study face

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Transportation

- Coffee companies like Gumutindo reported that they had company lorries or hired private ones to transport the coffee from the farmers to processing plant to the cleaning, drying and packing centres before the coffee is either roasted or exported. But other cooperative such as Khabutoola as expressed by Matanda lack lorries for transport
- It was reported that coffee transporters relied mainly on their own capital to finance the coffee transportation business. Due to this reason the transporters pass on this cost to their customers through the prices.
- Coffee transporters face a number of challenges such as break down of the lorries which necessitated loading and offloading and exposing the coffee in transit to insecurity and theft. As a coping mechanism the coffee transporters respond to these challenges by using mechanically sound lorries, cutting the price to attract customers and escorting the coffee to the final buyers and exporter.

 Coffee transporters reported that they have to ensure quality of coffee is not lowered by re-wetting of coffee during transportation e.g. by rain.

Marketing constraints faced by producers (farmers)

Financial constraints that manifest themselves in form of; inadequate financial resources for investment, too high interest rates on borrowed funds, unfavorable terms of borrowing usually a grace period of one month. Most farmers depend on own savings (77%), family or personal friends (23 %) to engage in their faming activities. When borrowing is done under prevailing terms provided (loan repayment period of 6 months and grace period of 1 month) by commercial banks and micro-finance institutions, farmers' properties have often been sold. One farmer observed that: "borrowing these days is a recipe for loss of my property and am not ready for that." small scale farmers require financial assistance to buy farm inputs- seeds and fertilizers; storage/safety houses; purchase of harvesting materials; land preparation mainly slashing; preservation/drying equipment, training and transport.

Limited participation of farmers in the marketing chain. - Transactions are dominated by spot markets, lack of trust and opportunism, with very few contracts or long-term business relationships. This situation breeds speculation and opportunism, leading to distortions and loss of interest on the part of the producers.

Lack of information on market requirements; quality, volumes, prices and location has resulted in quality ignorance among the farmers and sometimes sustained an attitude of 'impatience' or hasty sales reducing the quality of farm gate produce put on the market and ultimately their incomes. The main source of information for the farmers were the middle men.

Limited skills and knowledge of improved agricultural technologies resulting in a slow rate of technology adoption, high post harvest losses, poor quality products and generally low production levels. The poor harvesting practices are attributed to

ignorance and sometimes "greed for money' that reduces the quality of output which reduces the price bargaining power of farmers and ultimately their incomes. Agricultural extension services are not readily accessible to the farmers.

Inefficient and costly transport systems. Roads at all levels in production areas impassable leading to isolation of farmers in the rural areas as pointed out by Matanda Fred of Khabutoola Cooperative. Modern transport methods do no work in these rural areas making accessibility to markets impossible.

Trading levels and systems

Rural agents mostly planted by big buyers such as Gumutindo are the main buyers of all coffee traded in the sub-counties (smaller administrative units in the districts). Their main function is to buy and/or assemble coffee from the numerous scattered farmers, often located in inaccessible rural areas. They find market for the coffee (often the urban traders and processors) when they have accumulated sufficient quantities. The urban traders and processors arrange transport to collect the coffee either directly from the farmers whom they pay on a cash basis, or from the collection points/stores of the agents. Since the agents live in the rural areas, they are a reliable linkage between the farmers and urban traders and processors/millers.

Urban traders are found in major urban centers in producing districts. Their main activities include networking with rural agents, serving as a market outlet for farmers, and collecting coffee before selling it to the various clients, including processors, located in the districts. Urban traders are also sources of bagging materials (sacks) used by farmers as well as market information in their areas of operation.

Marketing constraints of Traders and processors

Poor transport networks, limited communication infrastructure increase transaction costs for bulking affecting profit margins and the prices given to farmers by traders. Poor storage facilities reduces the quality and undermines faster bulking and

consolidation of surplus in the supply chain. This was pointed by the staff of cooperatives interviewed.

Lack of valid and reliable market information and requirements. Traders rely on radio and newspaper news and commentaries for market information. Such information is often inaccurate, not targeted, not update and usually has no information about exports.

Limited business skills and competences. The key areas where shortages were highest are: knowledge of premiums available for better quality; regional/international quality standards; knowledge of improved packaging options; current international prices and markets, sources of finance, and knowledge of better/improved technologies for use. The others which were also severely in short supply were: knowledge of value-adding and (further) processing opportunities and business planning.

Limited knowledge by traders about market requirements/specifications has resulted in the mixing of crops from different locations and grades, which further reduces quality. The lack of knowledge of premiums for better quality has resulted in the failure to pay premium prices for quality produce, which demotivates farmers in their efforts to improve produce quality.

Limited knowledge of technology options by processors has resulted in a slow rate at which new technology is adopted which in turn has limited processing efficiency and the production of new and improved products.

High trade taxes, fees and dues all along the produce marketing chain. Currently traders face a minimum of six taxes, fees and dues in the process of transporting and marketing coffee to the main buyers in Kampala. These include: License tax, Weighing scale fee, income tax, loading fees, produce tax and different types of product tax.

Unreliable and costly Hydro-electric power (HEP) and there are no alternative energy options. Energy costs accounted for up to 73percent of milling costs in 2002 (PSFU, 2002). By 2006, all indications are that this proportion has increased further to over 85percent following the general increase in energy prices countrywide. Energy is a very significant consideration in the profitability of a milling business. Recent tariff hikes have hit the milling industry particularly hard, resulting in some wholly or partial closures. Although tariffs are high, poor energy efficiency of machines and operations tend to expound this particular problem.

Inadequate enforcement of quality standards, weights and measure and lack of premium prices has undermined crop quality improvements in the supply chain. This was pointed out explicitly at Gumutindo in Mbale.

8.0 SUPPLY CHAIN INTERACTORS

8.1 Actors interactions

There are two areas for continued work to help redress the supply issue especially on the part of farmers. First, it has been identified that improvements in good agricultural practices could lead to relatively short-term increases in yields on smallholder farms. Therefore support needs to continue to assist farmers in improving their yields.

Changes in the informal supply environment have accompanied changes in the broader industry. The entry of large, private, companies in coffee growing calls for informal suppliers to consolidate and formalize, the way EADEN is doing it. To meet supply requirements arising from changing demands, coffee buyers shall often prefer to source through lead farmers or farmer cooperatives as opposed directly from individual farmers. When sourcing directly from farmers, processors have little quality control, face uncertainties in supply and price, and lose the ability to trace products (which consumers especially those in developing countries increasingly demand). The following actors therefore need to work together in the supply chain with the help of EADEN and other actors to maintain quality supply

- Processors and manufacturers (like those based in Mbale, Jinja and other bigger towns)
- Input suppliers who produce fertilizer, nursery owners of seedlings, pesticide, irrigation equipment, and farm machinery (especially those that are based were EADEN operates).
- Producers/farmers that are organized in cooperative societies such as Nawandala, Sibalanga and Khabatoola.
- Other intermediaries in a supply chain that connect processors to producers (
 e.g Rural agents).
- NAADS that provide support

8.2 Institutional interactions

There is need for organizations supporting farmers such as EADEN to interact with finance institutions to agree on a moderate interest rate for farmers, Uganda consumers associations to understand the needs of consumers. Also organizations providing market information such as FIT, input dealers like UNADA, and then government institutions and frameworks such as NAADS that provide extension support and policy direction are key players in the value chain to ensure better returns to the farmers.

8.3 Policy and legal frame works

The association members do not seem to be well conversant with policy and legal frameworks guiding their operations especially those of Sibalanga Cooperatives. From the very start of commercializing coffee in Uganda, the industry has been guided by coffee laws to ensure production and post harvest processes that would guarantee the quality and reputation of Uganda's coffee.

However the sector faces the following challenges

 Operating under an obsolete law that was enacted in 1991 and had had no comprehensive revision to cater for developments since its enactment. In particular the existing law concentrates on post farm operations leaving out research and production, which need to be incorporated in the law.

- The industry lacks a national coffee policy to guide development strategies
- Role demarcation and coordination between public and private sector institutions involved in the coffee sector is not clear.
- There are no national guidelines on coffee research, production and their funding. Funding of coffee research shows a steep downward trend since 2001.
- Lack of farmer ownership over coffee, policies and programmes that come with coffee puts the coffee sector in unsustainable situation.

In regard to gender issues and dynamics, SIDA has 120 members (64 F & 56 M). Members have been trained in human rights issues and advocacy. These trainings may have had a positive influence on relations. Land is generally owned by males who are the household heads but there are also cases of households headed by women who ultimately own land.

The produce is sold with full knowledge of household members. Specifically members of SIDA were subjected to moral scrutiny and therefore cases of husbands' forcefully using proceeds for personal gains have not been reported. In some cases the papas have their own gardens and the mamas have their own. Mr. Kangala reported that he is a maize farmer while his wife is a coffee farmer and has not had any scenarios. SIDA is implementing directly with the NAADS office which has trained its members in modern farming techniques, agribusiness and has even promised more support as need may arise.

8.4 Cost analysis and profitability

The investment in the growing of coffee in eastern Uganda entails having land- owned, coffee seedlings, farm labor and at times other inputs such as fertilizers. Depending on the cost of investment is what will determine the profit. Eastern Uganda is the biggest

producer of Arabica coffee in Uganda which gives a better competitive advantage to the rest of the regions.

- FAQ Hulled coffee farmers is paid about UGX 8000 per kg
- Kiboko is sold at 2000 3000/-
- Farmers realized between 500 1000Kg of dry unprocessed coffee (kiboko) per acre which fetched between Ushs1m to 3m in revenue
- Profitability: most respondents declared that coffee was a more profitable venture than other crops.
- In fact this was validated by reviewing the costs incurred in the planting of coffee
 where farmers reported that they didn't incur any expense in the growing of
 coffee since they maintained it using their own family labour while some incur
 expenses of between Ushs 100,000 500,000 UGX in a season mainly on
 labour to maintain the coffee plantations.

9.0 OPPORTUNITIES

9.1 Opportunities at production

- There is a large number of actors and hence competition which can ensure better prices for the farmers;
- Willingness of the widely spread financial institutions to extend banking services and loans to the coffee buyers;
- Availability of a fair supply of coffee
- Support from the Uganda Coffee Development Authority which ensures quality.

Longer-term opportunities for coffee-based products have been identified in sectors such as making coffee for human consumption.

Local consumption	is steady	especially	for super	markets	and o	other	retail	outlets
all over the country	were cus	tomers can	get coffe	e for drin	king			

Export market is growing especially the regional market. Kenya being the
neighboring country to the east a lot of maize can be sold there
Improvements in agro input supply standards
Growing urbanization and consumer population
Growing local industry (
Expert support for example SIDA is blessed to have a retired extension worker
from Serere Agricultural center who has been very helpful to the association.

1. Free or cheap Technical support

Considering that coffee is one of the key cash crops in Uganda, there is a significant amount of technical support available right from research institutions such as NARO, NAADS government programmes as well as NGO support. We would however recommend if possible identifying a suitable technical officer who is readily available to advice the farmers on aspects like pests and diseases, soil fertility et al.

We recommend that the farmer affiliate themselves with a relevant co-operative societies such as Gumutindo as in addition to the technical support, they could get access to get cheap credit (or a grant).

2. Intercropping

Coffee can for example be intercropped with beans. This has various advantages including increased profitability from the same acreage and reduced need for fertilizer. Care should however be taken before considering intercropping as crops have different cycles and there might be difficulty in use of say mechanized implements.

3. Good Return on Investment (ROI)

Some coffee varieties are more profitable like Arabica and other varieties like coronal coffee. If well maintained can be more profitable. So farmers can be encouraged by EADEN to take up such and maintain the gardens well..

9.2 Opportunities at processing

According to Gumutindo cooperative enterprise the following are the opportunities at processing; High quality processing unit, Market for coffee exports, High returns and growth of the company, Transfer of entrepreneurial skills to farmers, Growth of membership base from the current 17, Growth and expansion of the company, Improved household incomes for farmers, Improved skills and production. The processors through UCDA can be helped to link with big companies such as NESCAFE World Wide company.

9.3 Opportunities at trading/Marketing

best volume Robusta coffee.
The farm gate price covers both farmers' costs and his/her profits. Though it may
not be satisfactory
Farmers have the potential to double their incomes if they improved on
production and handling practices
Value addition opportunities, which factories can be set up anywhere in the

☐ Uganda produces what is generally considered by the market to be the world's

country

Global marketing with Government support

10.0 CONCLUSION AND WAYFORWARD

10.1 Conclusion

Coffee has a great potential for expansion as a cash crop in the districts of Luwuka, Bugiri, Mbale, Tororo and Iganga since the soil is most fertile, improved varieties such as ss4 are available, and its production is profitable. The coffee market is open and there is an expanding demand for the crop in urban areas and the region.

EADEN and other NGOs in the region could continue providing Training, Provision of pesticides and hand pumps, Market linkages, Processing equipments for value addition, Formation of more cooperative societies and Provision of transport facilities

Some of the recommendations given by the key informants talked to for the coffee value chain as way forward include Adequate supply of seedlings ,Advocacy and market linkage, Continued partnership with EADEN, Provision of storage facilities, Provision of drying racks, Training in agronomic practices and post harvest handling, Processing plant for value addition (Simon Nyiro, Bateganya and Kubwani Mohamed of Nawandala cooperative in Iganga). Then provision of Agricultural inputs brought near to the community, and Training in nursery bed maintenance (Matanda of Khabatoola Cooperatives)

Improvement of the feeder roads in rural areas and in urban areas to ease access to suppliers and markets, Increased multiplication of improved coffee varieties by NARO coupled with robust extension and advisory services from NAADs would boost production .The government should consider subsidizing electricity to encourage more ventures in to value addition of coffee including processing in to high quality coffee products.

Recommendations

- Lowering prices for milling and offering the best customer care to ensure they out compete each other
- Plants employ resident engineers to ensure the breakdowns are fixed as fast as possible.
- Drying coffee before processing on bare ground, cemented floor or tarpaulins be it green or even Fair Average Quality.
- · Advancing cash to the suppliers
- Delivering on contracts in time and honestly e.g. in the use of good scales.
- Reducing costs of operation by keeping salaries of workers low but nevertheless
 paying them promptly on time and ensuring the workers were well motivated by
 matching workers' jobs with their abilities.

10.2 Way forward for EADEN and other partners

In an effort to improve the competitiveness of coffee produced in Eastern Uganda, and destined for both local and export markets, EADEN and Uganda Coffee Development Authority (UCDA) and other coffee dealing companies in the region should enhance/facilitate collaboration with all the actors from the farm to the last consumer to develop specific commodity value chains further. The overall objective of such a programme would be to identify and remove all major constraints to achieving competitiveness, and to also ensure equitable returns for producer cooperatives that EADEN, UCDA works with and those who operate within the local and export food distribution The systems. system can cover two phases. starting technical analysis and support to coffee farmers, processors, nursery owners and other input dealers, and followed by an action-oriented dialogue phase wherein chain stakeholders seek to arrive at agreed strategies for implementation.

EADEN should continue organizing training programs to enable smallholders to develop more effective marketing strategies and to negotiate more effectively with traders, in order to raise the prices that they receive for their coffee.

EADEN, UCDA and coffee cooperative and primary societies such Bugisha should advocate for increased public investment in, coffee processing technologies, storage road, rail, and port infrastructure to reduce marketing costs as well as the cost of modern inputs such as fertilizer to the farm gate. Rehabilitating the Ugandan railway system would be a key priority.

There is a need to have a definitive national coffee policy document that guides the strategy for the revival of the Coffee industry in Uganda in which the roles of the private and public actors in the sector are clearly set out; and all industry strategies are developed with a focus of fulfilling the set policy objectives which EADEN and other partners can advocate for.