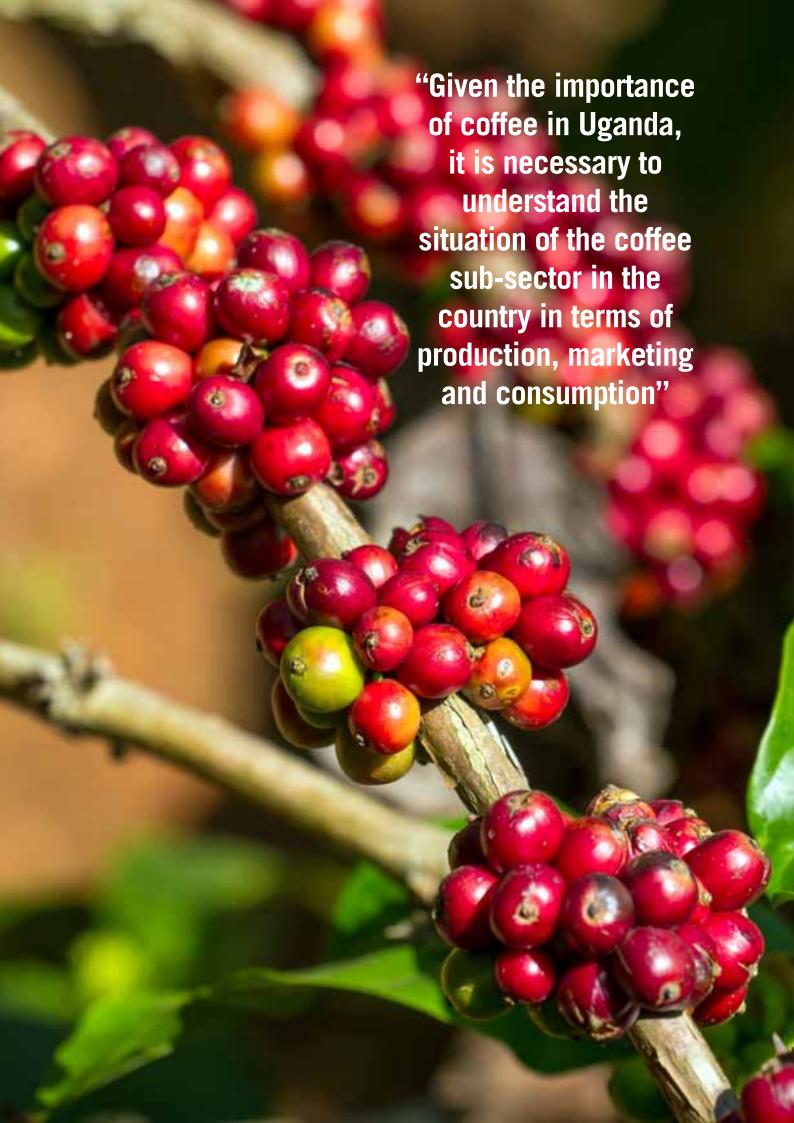
Development of Inclusive Markets in Agriculture and Trade (DIMAT)





Value Chain Analysis (VCA) of the Coffee Sub-sector in Uganda





The Market and Nature of Coffee Value Chains in Uganda

Development of Inclusive Markets in Agriculture and Trade (DIMAT) Project

December, 2012











About DIMAT

Development of Inclusive Markets in Agriculture and Trade (DIMAT) in Uganda is a project supported by the United Nations Development Program (UNDP) and the Government of Uganda (GoU). Enterprise Uganda (EUg) is the implementing partner while Kilimo Trust (KT) and Private Sector Development Companies (PSDCs) are the Responsible Parties (RPs) for the project. The aim of the project is to contribute to Programme 2 of the Uganda's Agriculture Development Strategy Investment Plan (DSIP) — in relation to enhancing "Market Access and Value Addition". The project is focuses on building strong business linkages and inclusive business approaches to link small and medium scale producers and enterprises to profitable markets at national, regional and global levels.

About this Report

The value chain study was conducted between July and December, 2012. The report was developed using both secondary literature and primary data gathered from various coffee growing and trading districts of Uganda. The report provides a background of the DIMAT project, the purpose of the VCA, the methodology applied, the status of the sector and the value chain characteristics of demand and supply, the characteristics of the coffee value chain actors, processes, services, relationships and key partners. It also highlights the constraints the actors face and the opportunities available within the value chain. It then presents conclusions and recommendations of strategic interventions for the project, regarding entry points to the coffee value chain in Uganda.

Acknowledgement

Availability of data and information related to agriculture is a huge problem in Uganda. Therefore the authors would like to thank all the organizations, private companies and individuals who provided data and information that went into developing this report.

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EXECUTIVE SUMMARY









offee, is the second largest valued commodity in international trade, and the most widely traded tropical agricultural commodity after petroleum. Trade in coffee is dominated by Latin America and Caribbean countries which account for about 57% of world exports while African countries account for about 14%, mainly of the Robusta type. In Uganda, which is the 2nd largest exporter of coffee in Africa, coffee is an important cash crop that supports over 3.5 million families at all levels of the value chain especially for income security and contributes to between 20 - 30% of foreign exchange earnings.

Given the importance of coffee in Uganda, this study was carried out to disentangle the micro, meso and macro level factors influencing the coffee value chain in Uganda so as to guide the development of a detailed project design, if coffee is selected as a key commodity for intervention by the DIMAT Project, as well as any interventions targeting the sector.

Over the last 5 years, coffee production has decreased by about 5% while land under cultivation has increased by 23%. This decrease in coffee productivity is attributed to a combination of factors such as pests and diseases, unpredictable weather conditions, volatile market prices and poor agricultural practices especially with regard to use of improved planting materials. The acreage under coffee production ranges from 0.1ha to 12 ha per household with an average of 0.5 ha. Robusta is the major grown variety.

Inputs used for coffee production include land, labour, seed, herbicides, pesticides and fertilizers. For instance, seedlings from research and development organisations are supplied to UCDA that multiplies them and later supplies them to private agro-input dealers, local coffee nurseries, NAADS and District Farmers' Organizations. Other inputs are supplied by farmers or their family members and/or NGOs.

Regarding production and processing, farmers on average harvest $0.5 \, \text{Kg}$ of coffee per tree, compared to the research station yield of $2-3 \, \text{kg}$ per tree per season. This is due to minimal application of Good Agricultural Practices (GAP). About 40% of farmers sell hulled coffee beans instead of the un-hulled kiboko coffee because of the slightly higher price. A few producer organisations/ co-operative unions have their own hullers and are able to integrate production and hulling, while the majority of producers outsource the hulling service.

Arabica Coffee is usually wet processed, while most Robusta coffee is dry processed. In addition to primary processing at farm level, there are about 26 independent wet processors in Uganda. The processed coffee is then transported to exporters or export grading factories for secondary processing which transforms the clean coffee into the various coffee grades that meet the international standards.

Nearly all the produced coffee is sold at the farm-gate with key marketing outlets being cooperative unions, village collectors, brokers/agents, exporters and coffee processors. Local traders (popularly known as middlemen and/or assemblers) purchase from individual farmers and farmer groups. Most of these traders sell to other big traders in major trading towns. However, traders often fail to get the required quantities and quality of coffee. For example, in 2011, traders fell short by 22% of the amount of coffee they had planned to trade. Almost all coffee trading activities in Uganda end in Kampala as over 95% of the coffee traded within the country goes to the export market through Kampala. Consumption of coffee in Uganda is generally low with an estimated per capita consumption of 0.25Kg/Yr. Although the local markets are under developed, per capita consumption has increased slightly over the past few years.

Men and women are employed in the various stages of the value chain although some activities such as weeding are carried out mainly by women while land preparation, pruning and marketing are dominated by men. There is minimum youth involvement in the coffee value chain largely due to inadequate access to productive assets especially land and start-up capital and a general negative attitude towards agricultural activities in perennial commodities, which are perceived as slow income generating crops.

Although coffee farmers fetch a high value share of the final retail price compared to other actors in the chain, the margins are low (125 UGX/Kg of red cherries sold) compared to traders and exporters, who, although they have a much lower value share of the retail price, deal in big volumes of coffee throughout the year. Coffee retailers (coffee shops that serve the beverage) receive a gross added value of 199,000UGX/Kg of ground coffee. These figures may not be directly comparable since farmers deal in red cherries, while retailers deal in ground coffee and the conversion ratio of red cherries to ground coffee has not been accounted for, neither have all the costs incurred in producing a cup of coffee been fully factored. However, this is an indication of the degree of increase in value when commodities are transformed through processing.

Coffee value chain is largely controlled by co-operative unions. These unions have managed to establish strong institutional linkages from input supply to exporting. Producer organizations and individual producers have horizontal relationships with the co-operative unions where they deliver their coffee beans. In addition, since some of the unions are also involved in primary processing, the strong linkages are often extended to the wet and hull processors of the raw dry coffee beans. Vertical linkages can be seen in the form of channels where coffee is delivered up the chain by middlemen, other than co-operative unions.

The weak linkages in the coffee value chain are mostly in the by-products sub-value chain. The most common coffee by-product is the husk that comes from the hulled coffee. This product is normally used as a warmer in poultry sheds, source of heating in cement manufacturing companies and as mulch in banana plantations but, the suppliers and buyers have not established long term relationships. Coffee value chain actors are also receiving different support services along the chain in the form of finance (mainly loans and savings), extension, inputs and market information. The leading agricultural financial service providers are small and medium financial institutions although there is a significant percentage of traders providing these services inform of pre-finance to suppliers. Large commercial banks are lagging behind in financing agriculture in general.

The coffee value chain is also supported by several policies including: Agriculture Sector Development Strategy and Investment Plan (DSIP), Uganda coffee plan, Uganda National Coffee Regulations Statute1994 and the draft National Coffee Strategy. The sub-sector has also attracted support from various development partners, although more support is needed in the structuring of the chain, enforcing quality, developing storage facilities, combating the coffee wilt disease, and organizing marketing by producer enterprises.

It is very important to note that the majority of farmers accused traders of contributing largely to the poor quality of traded coffee. This is because the traders are known for buying all grades of coffee at the same low price, whether it is moulded, premature or discoloured. This is a disincentive to the producers for there is no premium price for quality. Even though the coffee sold by the traders is subjected to grading at the exporter level, the price at this level is good enough and compensates for the rejected beans for up to 55% of rejected beans. Therefore, since the trader role is central to the value chain, all interventions must integrate the traders in taking a major role in quality assurance.

The study recommends that, interventions in the coffee value chain should aim to improve, replicate or upscale value chain models that can integrate large number of producers. In the short term, this can be achieved by directly linking them to off-takers that have strong linkages with big international importers and/or growing specialty markets for green coffee. There is also need to enhance initiatives for increasing coffee consumption at national and regional levels, with the aim of penetrating the market of established brands of value-added coffee products produced in Uganda. In the medium term, the study proposes strengthening multi-actor platforms for advocacy. It also recommends driving the agenda of inclusive development and growth in the sector through key areas of sustainable coffee production and increasing productivity. In the long term, the study proposes a strategy to re-orient the overall long term performance of the sub-sector towards greater competitiveness among other global players. At the same time, this strategy will aim at increasing the long term demand and consumption of locally developed and produced value-added coffee products that target the changing tastes and demographics of the national and regional population



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LIST OF ACRONYMS & ABBREVIATIONS

ACP Africa CaribCoffee Pacific

AgGDP Agricultural Gross Domestic Product
AGRA Alliance for a Green Revolution in Africa

ASERECA Association for Strengthening Agricultural Research in Eastern and Central Africa

ATAAS Agriculture Technology and Agribusiness Advisory Services

BCtA Business Call to Action

BDS Business Development Service
BMO Business Membership Organizations

CIAT International Centre for Tropical Agriculture

COMESA Common Market for Eastern and Southern Africa

CSO Civil Society Organization
CORI Coffee Research Institute

DANIDA Danish International Development Agency

DIMAT Development of Inclusive Markets for Agriculture and Trade

DRC Democratic Republic of Congo

DSIP Development Strategy Investment Plan

EAC East African Community

FAO Food and Agriculture Organization

FDI Foreign Direct Investment

FG Producers Group
FY Financial Year

GDP Gross Domestic Product
GoU Government of Uganda

Ha Hectare

IDO International Development Organization

IFAD International Fund for Agricultural Development
IFFPRI International Food Policy Research Institute

ITC International Trade Centre

JICA Japan International Cooperation Agency
KRC Kabarole Research and Resource Centre

KT Kilimo Trust

LEAD Livelihoods and Enterprises for Agricultural Development

MAAIF Ministry of Agriculture, Animal Industry and Fisheries

MDI Microfinance Deposit-taking Institution
MEPE Mini-estates and Processing Enterprises
MSME Micro, Small and Medium Enterprise

MT Metric Tons

NAADS National Agricultural Advisory Development Services

NAP National Agricultural Policy

NARO National Agricultural Research Organization

NGO Non-Governmental Organization
PABRA Pan-Africa Coffee Research Alliance

PMA Plan for the Modernization of Agriculture RIC-NET Rwenzori InformationCentre Network

R&D Research and Development

SACCO Savings and Credit Cooperative Society

SMS Short Message Service SSA Sub-Saharan Africa

SWOT Strengths, Weakness, Opportunities, and Threats

UBOS Uganda National Bureau of Statistics
UEPB Uganda Export Promotion Board

UGX Uganda Shillings

UIA Uganda Investment Authority

UNADA Uganda National Agro-Input Dealers Association

UNBS Uganda National Bureau of Standards
UNDP United Nations Development Programme
UNFFE Uganda National Farmers Federation

USAID United States Agency for International Development

USDA United States Department of Agriculture

VCA Value Chain Analysis

VSLA Village Savings and Loan Association

WFP World Food Programme
WRS Warehouse Receipt Systems





1. INTRODUCTION



1.1 Situation Analysis

This subsection gives a preview of coffee production, marketing and consumption globally and in Africa. The aim is to provide the reader with basic information on the supply and demand of coffee and build a case for a value chain mapping and analysis in Uganda.

1.1.1 Coffee Production, Marketing and Consumption

Nearly 8.3 million MT of coffee were produced in year 2011/12 globally from over 50 countries in the world (USDA, 2012). This production is projected to increase by 7.5% in the year 2012/13. The projected increase is attributed to increased production in Brazil and Vietnam which will account for half of the expected global increase as a result of the biennial production cycles. Leading countries in the production of coffee are: Brazil, Vietnam, Indonesia, Colombia and Ethiopia.

Coffee is the second largest valued commodity in international trade and the most widely traded tropical agricultural commodity after petroleum. The trade is dominated by Latin America and Caribbean countries that account for about 57% of world exports while African countries account for about 14% mainly of the Robusta type. Brazil alone accounted for 24% of the total export, Vietnam 15% and Colombia 6% in 2011 (ITC, 2012). Other leading exporters include Germany and Indonesia. The major markets for coffee and their market share in 2011 were; USA (20%), Germany (16%), Italy (7%), Japan (6%) and France (5%). In Africa, Algeria is the leading coffee importer (1%) (ITC, 2012).

In Africa, coffee is mainly produced in Ethiopia, Uganda, Ivory Coast, Madagascar, Angola, Cameroon, DRC, Sierra Leone, Kenya, Zimbabwe and Zambia. The leading producer in Africa, Ethiopia produced 378,000 MT in 2011/12 almost twice that of ganda (ICO, 2012). In these countries, coffee is considered as a major commodity that supports majority of rural households.

It is estimated that the Coffee production in Uganda for the year 2011 was 199,800 MT (3.3 million 60kg bags) (ICO, 2012; GAIN, 2010). It is an important cash crop that supports over 3.5 million families at all levels of the value chain contributing to income security. It also contributes between 20 - 30% of the foreign exchange earnings (UCDA, 2012). Producers sell about 99% of the coffee they produce compared to 98% reported in 1999/00 (PMA, 2008).

1.1.2 Objectives of the Study

The situation analysis has demonstrated the importance of coffee both as an income security crop and as a commodity that can be used to enhance the economy of Uganda. Given its importance, understanding the coffee value chain in Uganda with an aim of upgrading it is paramount. Such an understanding would be with respect to production, marketing and consumption. It would also be important to have information on the players in the value chain, as well as identify the constraints and opportunities for the different players. Understanding the policies and institutional frameworks guiding the operations of the coffee sub-sector is also important for they determine the smooth operation and competitiveness of the chain. It is against this background that this study was carried out to aid in understanding the value chain. Using the value chain and the SWOT analyses approaches, the study was carried out in key coffee producing and and trading districts of Uganda. .

- 7. The specific objectives of this study were to:
 - Compile and assess baseline information with respect to the coffee sub-sector.
 - Undertake a coffee value chain analysis with the aim of mapping the main characteristics of the value chain.
 - Identify and examine constraints and opportunities within the coffee value chain.
 - Identify the underlying policies, institutional and infrastructural issues that affect competitiveness of the chain.
 - Identify any bilateral partners, NGOs, facilitating organizations and private sector players within the value chain and their specific regions of operations.
 - Identify the potential for upgrading the coffee value chain.



2. METHODOLOGY



2.1 Value Chain and SWOT Analyses

This study employed the value chain analysis and SWOT analysis approaches to achieve its objectives. The value chain approach is an accounting framework which uses both the functional and economic analysis (at market prices) of an identified value chain (FAO, 2005). The functional analysis was used to define the actors (agents) in the value chain while the financial analysis was used to analyze the financial returns for the different value chain actors.

In the functional analysis, different agents in the chain and the roles they play in the chain were identified. The functional analysis involved: a) identification and quantification of the physical flows along the chain, b) identification of the technical functions of the players, and c) identification of the agents.

The financial analysis of the value chain is a data intensive approach which involves identification of the inputs used in a particular activity in a value chain as well as the resulting output(s) and attaching monitory value to them. The aim of financial analysis was to determine whether: a) every agent was generating a surplus, b) the surplus was adequate to ensure sustainability of the agents' activities, c) the surplus was a sufficient, acceptable return on investment, d) the value chain was profitable, e) there were winners and losers in the chain, and f) the prices between agents correctly reflected production costs.

The internal and external situation analysis produced large amount of information, while the SWOT analysis served as an interpretative filter to reduce the information to a manageable quantity of key issues. The SWOT analysis classified the internal aspects as strengths or weaknesses and the external situational factors as opportunities or threats. Strengths served as a foundation for building a competitive advantage by value chain actors, whilst weaknesses as those that hinder it. By understanding these four aspects of the coffee value chain, actors can better leverage their strengths, correct their weaknesses, capitalize on golden opportunities and mitigate potentially threats.

2.2 Data Needs and Sources

The key sources of data for this study were primary and secondary level data. The main sources of secondary data that were specific to coffee included surveys from Civil Society Organizations (CSOs), Uganda Coffee Development Authority (UCDA), Food and Agriculture Organization (FAO), International Coffee Organisation (ICO), COMESA, International Trade Centre reports, Uganda Bureau of Statistics, MAAIF, Business Membership Organizations (BMOs), development agencies and past value chain analysis (VCA) studies.

More specifically, the following information on the coffee sub-sector in Uganda was assembled from secondary data: a) global, regional and national structure of demand for raw and processed coffee, b) production and trade volumes and trends in the past 10 years, c) inputs and products' prices and trends in the past 5 years, d) key drivers of demand of coffee products globally, regionally and nationally and how these affect market shares of key industry players, e) data on the relationship between commodity sector contributions and broader macroeconomic indicators (GDP, inflation, employment, foreign earnings and tax revenues); e) potential public and private sector players (including market leaders) that may influence coffee of trade, f) underlying policies, institutional and infrastructural issues that affect the competitiveness of the coffee value chain, and g) the current and planned investments and priorities of government and development agencies in the sector.

The following primary data specific to coffee sub-sector were collected:

- a) Costs, production, sales volumes, values and margins.
- b) Types of facilities and services offered, loan were available for the sector as well as the terms and conditions for access and levels of lending to arable farming, processing and marketing. These were collected from finance institutions.
- c) Support services to coffee value chain, trade volumes, storage facilities, constraints and opportunities. These data were collected from traders and trader associations. Some of these traders were lead firms/market off-takers and their data further included demanded volumes from suppliers, volume projections, pricing mechanisms, willingness to enter into contractual arrangements with other actors and operators along the value chain and conditions for these contractual agreements.

d) Value chain support institutions like market information providers, input suppliers, technology providers also provided data on nature of services they provide, their target recipients, the constraints they face and any unexplored opportunities.

2.3 Sampling and Data Collection

Purposive sampling was used to select districts to be included in the study. The choice of the districts was guided by a criteria focussing on: a) districts where the production of coffee is significant by volume, and/or b) where there was significant trade of coffee and/or coffee products; and/or; c) areas where the consumption of coffee by volume was significantly high to provide attractive markets.

Table 2.1: List of districts selected for coffee VCA

	Selected Districts	Reason for Selection for Coffee VCA
1	Rubilirizi	Significant trade
2	Kampala	Significant trade
3	Ntungamo	Significant production and trading activities
4	Mbale	Significant production and trading activities
5	Kayunga	Significant production and trading activities
6	Mubende	Significant production trading activities
7	Sironko	Significant production trading activities
8	Isingiro	Significant production
9	Bushenyi	Significant production
10	Masaka	Significant production

The sample size was determined using precision criterion determination which assumes that the dominant characteristics of the study would occur if the confidence interval is set at 95% confidence interval. A total of 107 micro-level respondents were selected as shown in Table 2.2a and 2.2b. Other meso and macro-level actors constituted 443 respondents. The total sample was therefore 550 respondents.

Table 2.2a: Number of respondents by category of value chain actors

Category of Value Chain Actor	Specific to Coffee	Cross Cutting	Total
Input Suppliers		65	65
Farmer Groups	42		42
Traders	28		28
Retailers	8		8
Processors	29		29
Transporter		50	50
Institutional buyers		133	133
Financial service providers		77	77
Market information providers-Checklist		31	31
BDS (Extension, R&D, Technologies, Support Institutions)		34	34
Government Officials		13	13
BMO's		40	40
Total	107	443	550

Table 2.2b: Number of respondents by district

Districts	Farmer Groups	Processors	Traders	Retailers	Total
Bushenyi	5	3	6	1	15
Isingiro	5	2	3		10
Kalungu		1			1
Kampala				1	1
Kayunga	10	7	6	2	25
Masaka	5	1	1		7
Mbale	3	3	4		10
Mbarara	4	4	1		9
Mubende	4	4	2		10
Ntungamo	6	4	3	3	16
Rubilirizi			1		1
Sironko			1		1
Wakiso				1	1
Total	42	29	28	8	107

2.4 Data Analysis

The collected data were entered in spread sheets and cleaned of any outliers and entry errors. The first stage of the analysis involved descriptive statistics which were conducted to aid in characterising coffee production, consumption and marketing in Uganda.

The second stage involved functional analysis of the coffee value chain. This involved mapping of the value chain processes identification of the roles of the different actors at different stages and quantification of flows (volumes) of the coffee along the value chain. At this stage, it was important to categorize the chain actors into different categories based on the volumes of coffee they handle.

The third stage was to undertake financial analysis of the value chain which involved attaching prices to the various quantities of outputs and inputs along the value chain. The aim was to determine the financial returns for the respective agents of the value chain and also determine the value added at each stage of the chain. SWOT analysis was the last approach to delineate factors which influence the internal operations of the chain and categorized them into strengths and weaknesses while those influencing the chain from outside were categorised as opportunities and threats. The aim was determine improving the competitive advantage of the chain so as to capitalize on them but, also identify those that may weaken or threaten the chain so they could be mitigated.

The next chapter presents the results from the descriptive statistical analysis, value chain and SWOT analyses.

"No one can understand the truth until he drinks of coffee's frothy goodness." - Sheik Abd-al-Kadir







3. RESULTS AND DISCUSSIONS

3.1 Coffee Production and Supply in Uganda

Production of coffee in Uganda has been increasing rapidly (Figure 3.1). Though coffee production is on an increasing trend, over the last 5 years, the volume produced has decreased by about 5% by volume while land under cultivation has increased by 23% (USDA, 2012; FAOSTAT, 2012). The decrease in coffee productivity, despite the increase in production, is attributed to factors such as pests and diseases, unpredictable weather conditions, volatile market prices, low yielding varieties and loss of Uganda's global market share (World Bank, 2011). For instance, Robusta coffee has been largely destroyed by coffee wilt disease affecting over 50% of both young and old Robusta coffee trees since 1993 (World Bank, 2011).

Among the farmer groups interviewed, the acreage under coffee production ranged from 0.1 ha to 12 ha per household with an average of 0.5 ha. Eighty percent (80%) of the coffee grown in Uganda is Robusta.

Robusta coffee is grown in the low altitude areas of Central, Eastern, Western and South Eastern Uganda of about 1,200 meters above sea level. Arabica coffee on the other hand is grown in the highland areas on the slopes of Mt. Elgon in the East and Mt. Rwenzori and Mt. Muhavuura in the South Western region, with Kapchorwa, Mbale and Nebbi districts being the major districts where Arabica is grown.

3.2 Coffee Marketing and Consumption in Uganda

Coffee trade in Uganda involves local traders (popularly known as middlemen and/or assemblers) who purchase from individual farmers and farmer groups. The coffee is then sold to medium and large scale traders and exporters. The price of coffee and coffee products is set through competitive market forces (as mentioned by 52% of traders) while the buyer determines the price in other instances.

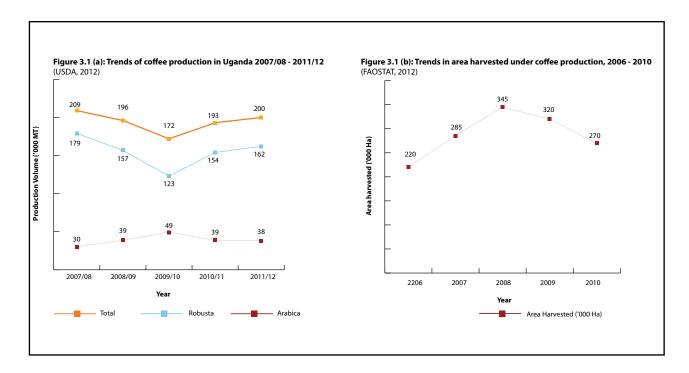


Figure 3.1: Coffee production and Area harvested in Uganda, Source: USDA, 2012

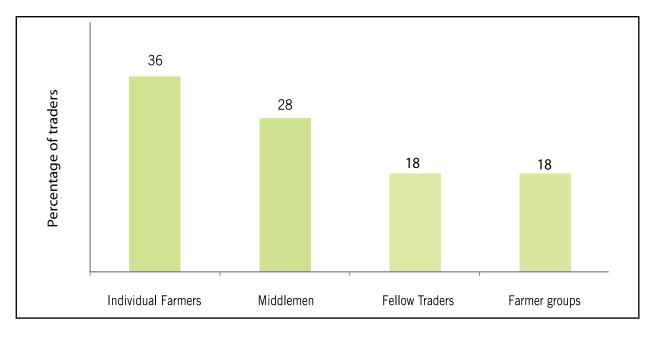
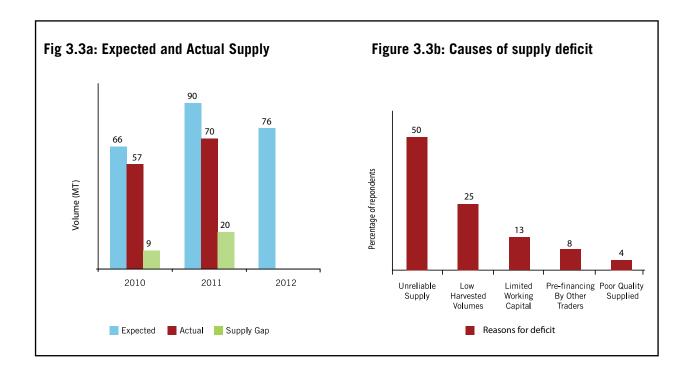


Figure 3.2: Source of coffee by Traders

Regarding the supply of coffee, traders often fail to get the required quantity and quality of coffee. For example, in 2011, they fell short by 22% of the amount of coffee they had planned to trade in (Figure 3.3a) with the most frequently stated reasons being unreliable supply from farmers and fellow traders, and low harvested volumes. Other reasons for the supply gap include limited working capital and high volume losses due to poor quality supply.



Most of the coffee produced and traded in Uganda is exported to international markets. Consumption of coffee in Uganda is generally low with an estimated per capita consumption of 0.25kg/yr (ICO, 2012). According to UCDA 2009, the consumption of coffee is slowly increasing due to consumption by young

Ugandans, most of whom are not regular consumers), who regard the coffee offered by hotels, restaurants and coffee shops as good quality coffee. The common coffee powder brands on the market include; Nescafe, Good African coffee, Star café and Nguvu.

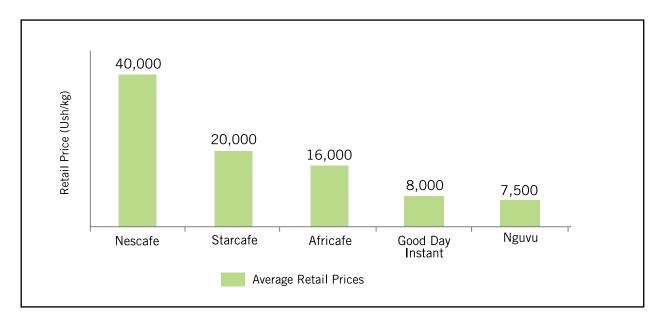


Figure 3.4: Retail prices of coffee (UGX/Kg)

3.3 Coffee Exports and Imports in Uganda

Although the contribution of coffee to total export earnings declined marginally from 17.9% (181,324 MT) in 2009 to 17.5% (159,433 MT) in 2010, the nominal value increased from US\$ 280.2 million to 283.9 million on account of improved prices on the international market (MAAIF, 2011). In 2011/12, coffee exports for the first seven months of 2011/12 totalled 89,063 MT valued at US\$ 221.2 million compared to 90,344MT valued at US\$ 203.1million for October – April 2010/11, representing a slight drop of 1.42% in volume and a rise of 8.9% in value (UCDA, 2012).

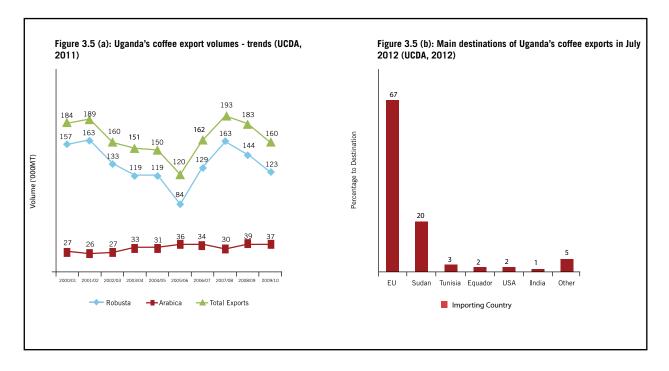
According to UCDA (2012), close to 160,000MT of coffee was exported from Uganda in 2009/2010. For the years 2007 to 2010, the exports decreased by over 17% with Robusta comprising 80% of the total coffee exports on average.

Uganda coffee is mainly exported as FAQ based on different grades and coffee types as specified by the coffee regulations of 1994. These grades are based on variety, bean size, quality or place of origin. Robusta variety is mostly exported as Screen 15. Other forms include; washed Robusta, Org. Robusta, Screen 18,

Screen 17, Screen 15, Screen 14, BHP 1199 and other Robustas. On the other hand, Arabica is exported as drugar, Bugisu AA, Organic-Bugisu, Bugisu AB, Mt Elgon, Rwenzori, Okoro A, Organic Okoro, Bugisu Supremo, Organic Drugar and Wugar. Exporters and different value chain actors identified Organic, 4C (Common Code for Coffee Communities), Fair trade, UTZ certified and Rain Forest Alliance as some of the standards the coffee exports conform to.

The major exporters identified from the study include; Ugacof (U) Ltd, Kyagalanyi Coffee Ltd, Olam (U) Ltd, Kawacom, Savannah commodities, Ibero, Gumutindo, Kampala Domestic Store, Job Coffee, Busigu Cooperative Union, and Great Lakes (see Appendix 3 for the rest of exporters and major buyers). Most of the coffee from Uganda is shipped to the European Union (accounts for 67.3%), Sudan, USA, Ecuador, India, Switzerland, Kenya, Russia and many other countries as shown in Figure 3.5 (UCDA, 2012).

Figure 3.5: Coffee export volumes and main destinations



Regarding imports, coffee imports to Uganda are negligible with no recorded formal data published to explain the demand and characteristics of these imports. Though not formally recorded, Uganda imports Arabica coffee from DRC, Rwanda and Burundi, and most of this is eventually re-exported.

3.4 Functional Analysis of Coffee Value Chain

3.4.1 Mapping of Coffee Value Chain in Uganda

The first step of the functional analysis is mapping of the actors in the coffee value chain. Figures 3.6 show the key interrelated and structured processes that enable coffee as a finished product reach the final consumer.

"Coffee should be black as hell, strong as death and as sweet as love.
-- Turkish proverb

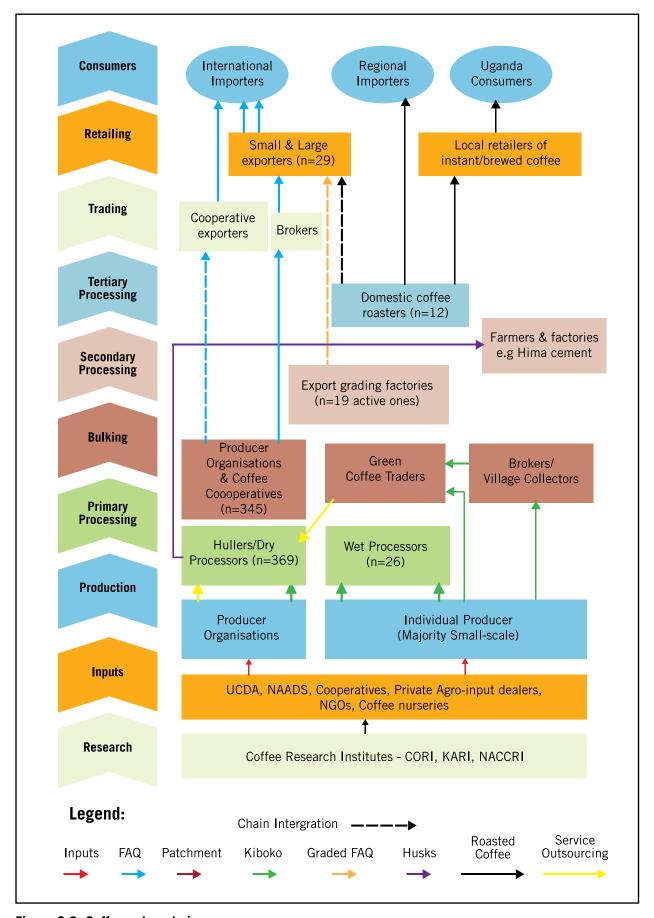


Figure 3.6: Coffee value chain core processes map

Input Provision Production Assembling **Trading** Processing Coffee Producers Producer Wet processors Exporters Retailers of Nurseries, (Individual Organisations, & Hullers, (small & large), Instant/ Brewed Coffee Government and producer Coffee **Export Grading** Cooperative Cooperatives, & NGOs groups) Factories and Exporters Roasters Village programs, Collectors/ Agro-input dealers, UCDA Brokers and... Supply farm Bulking, Weighing and Retailing of implements preparation, Transporting, processing, packaging, instant coffee Washing, Drying, Drying, and coffee Planting, Marketing on Storing, and brewed Transporting seedlings. Weeding. behalf of coffee and Shipping Fertilizers and producers, sorting, Checking for Extension and chemicals Processing of Coffee advisory application. and/or dryness Harvesting, Wet outsourcing services Hulling. processing, processing Quality control producers Sorting, Drying, services on and size Packaging into hehalf of grading, Gravimetric sacks. farmers. sorting/ production and de-stoning, Packaging into sack, Roasting marketing

3.4.2 Identification of technical functions of Coffee value chain actors

Figure 3.7 Technical functions of actors

The different stages of the coffee value chain in Uganda, the function at each stage, the agents playing the different roles and the outputs at the different stages of the chain were identified and mapped (Figures 3.6 and 3.7). The value chain actors comprise of input providers, producers, assemblers, processors and traders, who sell to consumers.

Input suppliers: The sources of inputs for coffee production include: research and development institutions, which supply seedlings to UCDA that in turn multiplies them and supplies them to private agro-input dealers, local coffee nurseries, ACEs, NAADS and District Farmers' Organizations. The coffee seedlings usually supplied by local nurseries are Robusta clonal cuttings and Robusta clonal elite.

Other inputs are supplied either by the private sector or NGOs. Private sector service providers are organized under the umbrella organization, Uganda National Agro-Input Dealers Association (UNADA), which has a total of about 2,200 members spread across the country. NGOs that supply seedlings are particularly common in northern and eastern Uganda. The major buyers of coffee seedlings are individual farmers who account for 53% of the buyers. Other buyers of seedlings are: farmer groups (23%), institutions (12%) and NAADS (12%).

For more efficient and profitable operations, input

suppliers reported that they had particular information needs like understanding the size, location and requirements of the market for inputs and the coffee beans, as well as more understanding of good agricultural practices for coffee production.

The study noted that most input suppliers are located in Kampala and other up-country towns. They mostly supply farm implements, coffee seedlings, fertilizers and pesticides for use in the coffee farms. They also provide after sale services such as training on product usage and offer some extension services to the coffee producers.

Producers: Mostly coffee is produced by smallholders who have an average of 0.4 ha and harvest about 0.5kg/tree. Approximately 80% of these farmers grow the traditional Robusta coffee, which requires less inputs compared to improved Robusta varieties like clonal elite and clonal cuttings. It should be noted that some farmers still get their seedlings from own bushes and own gardens.

The main inputs in coffee production are land, labour, seed, herbicides, pesticides and fertilizers. Most of the labour used in coffee farms are manual especially at harvest time when the coffee berries are picked by hand.

Among the activities and functions undertaken by the technologies collectively, marketing was the most dominant, followed by access to inputs, production, access to capacity building trainings, access to credit, primary processing of coffee (milling/wet processing), storage and social support to group members.

Producers usually undertake wet processing by outsourcing the services of hullers. Some producer organisations/co-operative unions have their own hullers and are able to integrate production and hulling. The producer organisations and/or cooperatives are also involved in bulking of coffee to facilitate collective marketing.

Nearly all the produced coffee is sold at farm gate since it is a major source of income for 1.32 million smallholder households (MAAIF, 2010). At the farm-level, several marketing outlets were identified. These are: selling coffee to cooperative unions, village collectors, brokers/ agents, exporters and coffee processors. Most farmers sell coffee within their districts and neighbouring districts. Virtually all harvested coffee is sold (99%) and majority of interviewed farmer groups (52%) sell their coffee in semi-processed form commonly referred to as Fair Average Quality (FAQ) while 48% of the farmer groups sell it in raw form, commonly referred to as "kiboko". For example, in Mubende, farmer business entities sell FAQ directly to the exporters after hulling thus eliminating middlemen. Farmer groups and cooperatives not only sell their coffee within the major producing and trading districts in the country but also to export markets such as the European Union, Sudan, Switzerland and USA (UCDA, 2011). Examples of such cooperatives include Gumutindo, Bugisu cooperative and ACPCU.

Rural traders/brokers or company agents: They provide the brokerage function between farmers, coffee exporting companies and processors/ traders thus termed as the middle men of the value chain and are a vital source of information to actors on either side of the chain. They often advise the big traders, processors or exporting companies on when sufficient stocks have been bulked in order to arrange for transportation.

They are based at the villages and purchase coffee cherries or Kiboko on behalf of the green coffee traders. Another set of traders/brokers is usually stationed at the hullers, waiting to buy farmers' milled coffee. Brokers are usually paid on commission, which ranges from 20 UGX/Kg to 50 UGX/Kg. These rural traders also buy coffee cherries, dry them before taking them to the hullers from whom they out-source the hulling services. They also buy dried coffee cherries from farmers and then sell to exporters (35%) and other big traders (13%). The exporting companies then sell directly to export markets.

Traders were noted as the biggest drivers of poor quality, as reported by the majority of coffee farmers and some experts in a validation workshop for this report. This is because they are mainly driven by volumes, and not quality. They often buy premature coffee beans, poorly dried cherries, and have poor storage facilities, which

further deteriorate the quality of the beans. When the coffee beans are received by the big exporters, who have grading facilities, over 50% of the beans are rejected on account of poor quality. The farmers, especially members of ACEs, said that the traders do not pay much attention to the quality because the price they receive for the beans almost doubles the farm-gate price, and the profits they make are still very attractive and compensate for the rejected coffee beans. This practice has also been reported to encourage stealing and selling of raw coffee beans from farmers' gardens, as well as low attention to quality by a number of farmers, due to lack of incentives for production of good quality coffee, making the farmer the biggest loser in the value chain.

On the other hand, the farmers involved in production of sustainable coffee seem to have better incentives for producing better quality coffee due to the different incentives in place e.g. free washing facilities, collection centres, training in good agricultural practices, premium prices for premium quality in some instances, fair trade benefits and bonuses at the end of the year. All these have driven production of better quality coffee, although despite the high investment by processors in this production of premium quality, about 30% of the harvested coffee is still side sold to other traders and processors, who have not invested in the incentive system.

Processors: Coffee is either dry or wet processed. According to World Bank, 2011, there are about 26 independent wet processors in Uganda. Wet processing involves cherry separation, pulping and washing. The mucilage layer is removed by bio-chemical enzyme activity through controlled fermentation to give 'fully washed' coffee. It can also be removed mechanically using a mechanical mucilage remover. Some producers are wet processing at farm level thus, presenting an opportunity for increased vertical integration and better prices for the farmers.

Dry processing involves drying and hulling which results in clean dry coffee beans referred to as FAQ (Fair Average Quality). According to World Bank, 2011, there are about 369 hullers in Uganda. Coffee processing equipment owned by processors include hullers, mixers and sieving machines. The average installed capacity for these machines is 28MT/day. However, the processors are currently able to process 11MT/day of coffee representing 39% capacity utilization. The main causes of such low utilization are power disruption and low coffee supply.

Coffee (Kiboko or cherries) is processed to FAQ, parchment or by products such as BHP or husks used as manure and a source of heating energy for other industries. The FAQ coffee is then transported to exporters or export grading factories for secondary processing. Secondary processing, also known as export grading transforms the clean coffee (FAQ) into the various coffee grades that meet the international standards. The process involves

cleaning FAQ, drying the coffee if wet (moisture content over 13 %) and then size grading using perforated screens to the desired size. The sorted beans are then gravimetrically sorted to have uniform specific density before bagging off and loading into containers for transportation to major export markets through the port of Mombasa. This is done by export grading factories (UCA, 2012). There are about 19 of them in Uganda (World Bank, 2011).

Traders (bulk buyers, wholesalers, retailers): A total of 28 coffee traders were interviewed from 10 districts. They included rural traders/village collectors, big town traders or export companies. They purchase most of the coffee directly from farmers. They are mostly based in the districts of production, urban areas like Kampala or in upcountry towns. Small-scale traders operate from farm to farm, or from town to town, with larger traders purchasing from these small traders and processing the coffee either at private mills (for a fee) or at mills they own. It is estimated that there are approximately 6,000 middlemen/traders, ranging from very small to medium-sized, operating in the supply chain (World Bank 2011).

The coffee traders sell 74% of their coffee to exporters, 35% to big traders and 13% to local processors or roasters. Exporters are the "pull" in the coffee value chain since almost all the coffee produced in Uganda ends in the export market. Retailers in the coffee value chain include retail outlets distributing coffee: coffee shops, supermarkets, open markets, grocery shops, cafes, hotels and restaurants. Identified local roasters include Star café, Good African coffee, Wangolo processors, Gayaza coffee roasters and packers Ltd, Kakinzi farm and general works, Dimo Investment company, Zigoti coffee works Ltd, and Nguvu. Cafes, hotels and restaurants serve ready-to-drink coffee.

Exporters: There are about 42 registered coffee exporting companies in Uganda which are subsidiaries of large coffee multinational companies such as Abaco International, Olam International, Bernard Rothfros and Eco Agro-industrialists. Some of the major exporting companies include; UGACOF, Kawacom, Kyagalanyi, Savannah, Gumutindo, Busigu cooperative union, Great Lakes and Ibero.

3.4.3 Trade flows in the coffee value chain

The main coffee producing areas in Uganda are Central, Eastern and Western parts of the country. Coffee trading takes place in almost all the major urban centres in these coffee-growing areas (Figure 3.8). However, because most of the planting activity has taken place over the last two years, there is little participation of the northern region in the coffee trade flows as reflected in the map. The West Nile region produces Arabica coffee.

Almost all coffee trading activities in Uganda end in Kampala as over 95% of the coffee traded within the country goes to the export market through Kampala. This is because, a majority of exporters and key transport and export facilitation infrastructure and services are located in Kampala. However, some arabica coffee, particularly from Mbale is exported through other routes. The following being the key trade towns: Jinja, Iganga, Mbale, Masaka, Bushenyi, Luweero, Mbarara, Ntungamo, Kasese, Kayunga, Mityana and Mubende.

In major towns and urban centres in the coffee producing areas, trade is mostly driven by the existence of primary processing facilities (hulleries) that hull cherry coffee (Kiboko) into the highly marketable Fair Average Quality (FAQ). Traders, brokers, and agents of exporters then buy the FAQ coffee from farmers and owners of these hulleries and transport it to other major towns or Kampala for secondary processing into clean graded coffee and exporting.

Significant production and trade in Arabica coffee takes place in Eastern Uganda around Mbale. Kasese, Kanungu, Rukungiri and Nebbi districts are also trade hubs for coffee. Some Arabica coffee comes from the DRC through Nebbi, Kasese, Kabale and Kanungu to Kampala. The trade of robusta coffee represented in green on the map is 80% of the total coffee produced in the country, while that of Arabica in red represent 20%. Figure 3.8 shows the geographical trade flows of coffee from different districts in Uganda.

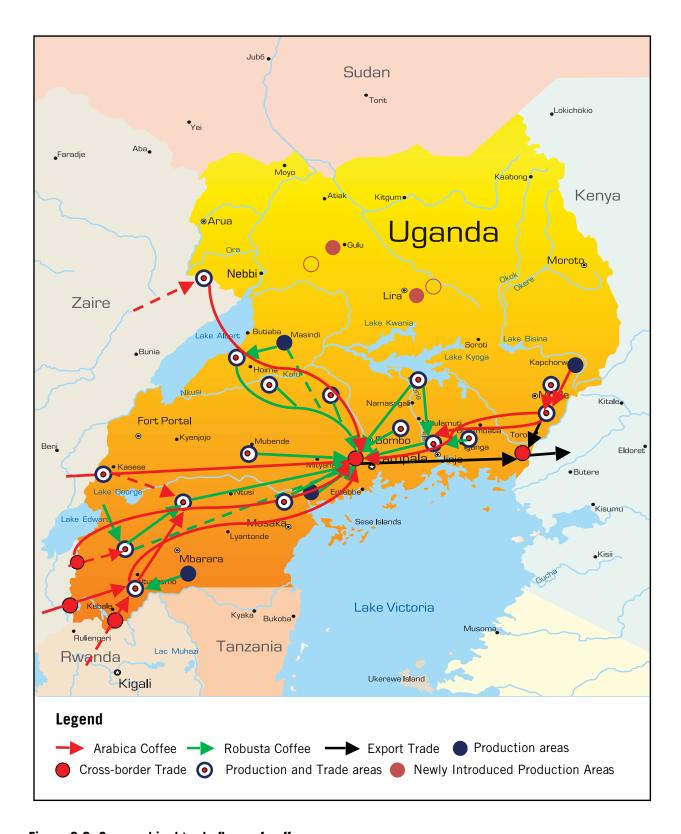


Figure 3.8: Geographical trade flows of coffee

3.4.4 Employment in the coffee value chain

Generally, farmers reported that both men and women were involved in all activities including marketing of coffee. Among the major farm activities, the biggest percentage of respondents (89.7%) reported harvesting as the main activity conducted by men and women. The activity that was most reported as was weeding. Marketing, pruning, fertilizer application and land preparation were reported as male dominated activities with only an average of 4% of respondents considering them as purely done by women.

The study also found out that there is little youth involvement in the production of coffee. This has been largely attributed to the fact that youth prefer quicker income generating activities. This seems to be exacerbated by inadequate access to productive assets like land, which is critical for production of such a perennial crop. They therefore usually opt for crops like maize, which take shorter periods and are more suitable for leased land.

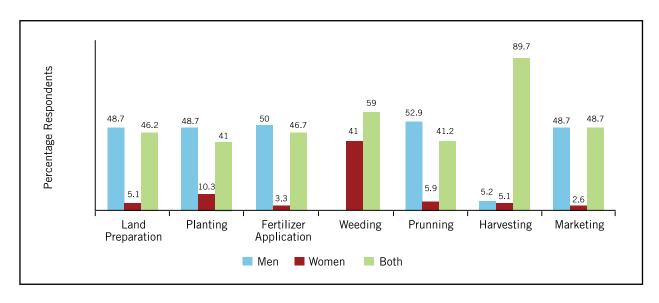


Figure 3.9: Workload distribution by gender in coffee production and marketing

Men constitute majority of the workforce in the chain. Their control is evidenced in the managerial positions, where by the average ratio of women to men in processing and trading are approximately 2:5 and 3:5 respectively. The only employment level which has more women than men is the casual labour at processing level. In this level, women are clearly the majority, with the average ratio of women to men standing at 4:1

"The morning cup of coffee has an exhilaration about it which the cheering influence of the afternoon or evening cup of tea cannot be expected to reproduce"

~Oliver Wendell Holmes, Sr., "Over the Teacups," 1891



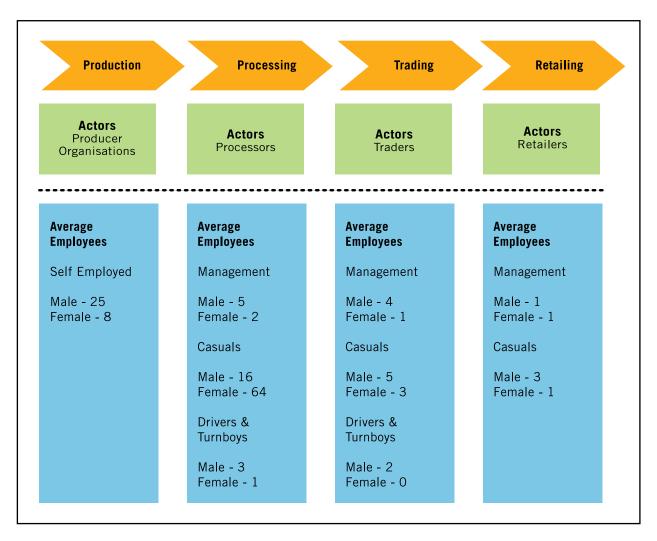


Figure 3.10: Levels of employment along the Coffee value chain

3.5 Financial Analysis of Coffee Value Chain

The value shares of the different chain actors were determined in order to determine price distribution along the chain. Secondly, market price was attached to the different activities, inputs and outputs and the gross value for each agent along the value chain was estimated. The aim was to determine the value added and how much of it accrued to each agent.

3.5.1 Estimation of shares of value

The coffee prices received depict the value at each node of the chain. The case presented below is just one of the scenarios taking into account only two traders (the village collector and the exporter). This may differ where there are more than two traders. The Kiboko/FAQ value chain shows that the exporters sell the FAQ at an average price of 5,580 UGX/Kg to the importers in Europe. The price distribution has been calculated based on the

export price. The exporter buys the FAQ coffee from the traders at 4,700 UGX/Kg. Expressing the share of the margin received by the exporter as a ratio of the export price, the exporters share of value is 16%. The village collector is responsible for hulling and transporting the coffee which justifies the share value of 39% (Figure 3.11). The processors (hullers) do not appear in this share of value because they are usually only offering the hulling services.

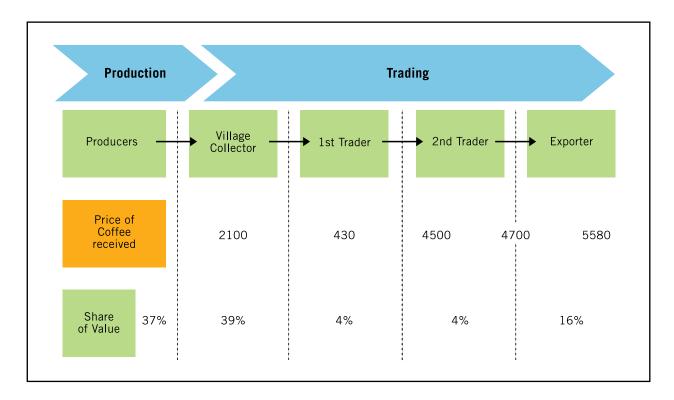


Figure 3.11: Shares of value of coffee value chain (Kiboko/FAQ - Robusta variety)

It is however critical to note that although the farmer seems to be having a relatively high share of value, it does not translate to equally high margins. This is because the farmer is only able to sell limited volumes seasonally, compared to a trader who will aggregate much bigger volumes and operate throughout the year taking advantage of varying seasons in different districts and neighbouring countries. This offers a higher turnover and ultimately higher margins, compared to the farmer, as shown in table 3.1.

A case study taking into account the end retailer (brewer) of instant coffee in a coffee shop was adopted from NUCAFE, 2011 for comparison.

Actor Costs & Revenue	Producers	Kiboko Trader	FAQ Trader	Exporter of graded coffee	Roaster	Retailer of ground coffee	Coffee shop (coffee brewer)
Revenues (UGX/ Kg)	1,000	1,500	2,500	5,000	25,000	75,000	400,000
Total Operation Cost (UGX)/Kg	875	1250	1750	2875	15,000	45,000	201,000
GVA (UGX)/Kg	125	250	750	2,125	10,000	30,000	199,000

Table 3.1: Gross Value added of different actors in the chain – adopted from NUCAFE 2011

3.6 Linkage of Coffee Value Chain with Meso and Macro-level Institutions

This section explores the intra value chain linkages between the micro level coffee value chain actors (producers, collectors, processor, retailers) as well as the inter linkages between the micro level actors with meso level actors (such as input providers and financial service providers) and macro level actors (government agencies and development agencies). The linkages are either horizontal or vertical and the strength/weaknesses of these linkages influence the operation of the chain.

3.6.1 Horizontal and Vertical Linkages of Microlevel Coffee Value Chain actors

The coffee value chain is largely dominated by cooperatives at various levels. The unions have managed to create strong institutional linkages from the input supply to the export of coffee beans. Producer organizations and individual producers have horizontal relationships with co-operative unions where they deliver their coffee beans. In addition, since some of the unions are also involved in primary processing, the strong linkages are often extended to the wet and dry processors of the raw and dry coffee beans. Other established horizontal linkages are those between co-operative unions and FAQ coffee exporters. The exporters often grade the coffee for exporting and/or selling to coffee roasters.

The established vertical linkages involve middlemen, other than the co-operative unions. Village collectors go around coffee producers collecting coffee and then take it to be hulled by small hullers. Thereafter, the collectors sell the FAQ coffee to traders and/or middlemen, who in turn, sell it to exporters. Exporters grade the coffee and sell the best quality coffee to the export market while the BHP is sold to local coffee roasters. In the roasting linkages, the roasters usually supply the roasted/instant coffee to retailers, where domestic final consumers can easily access it.

The weak linkages in the coffee value chain are mostly associated with by-products. The most common coffee by-product is the husk that comes from hulled coffee. It is normally used as a warmer in poultry sheds, source of heating in cement manufacturing companies and as mulch in banana plantations. The husks are usually distributed by the wet and hull processing centers. However, the linkages between the centers and their customers are always weak because of lack of long-term agreements between them.

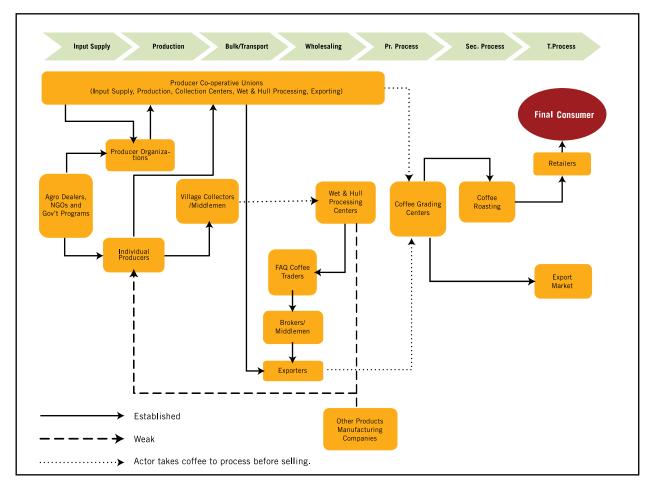


Figure: 3.12: Map of Horizontal and Vertical Linkages

3.6.2 Linkages between Micro-level Coffee Value Chain Actors and Service Providers

Coffee value chain actors receive different support services along the chain in the form of finance, extension, inputs, and market information.

Financial service providers: A total of 77 different types of financial service providers consisting of commercial banks, SACCOs, microfinance institutions, VSLAs, Credit institution tierII, International Development Organizations (IDO), MDIs, NGOs and risk capital

providers were interviewed. Ninety six percent indicated that they offer financial products and services within the agricultural sector. In terms of numbers of providers of financial services to the coffee value chain actors, SACCOs took the lead at 38%, followed by commercial banks at 27%, Microfinance institutions at 20% and VSLAs at 10 %.

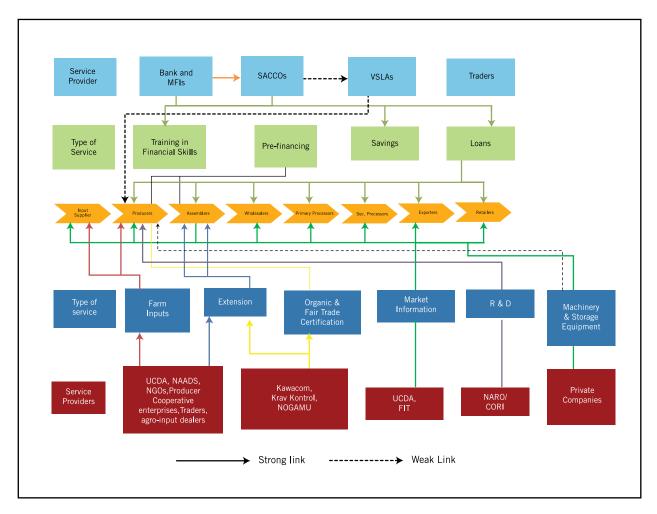


Figure 3.13: Map of value chain services

Notably, the financial service providers that are taking lead in agricultural financing are mainly MFIs and SACCOs. There is also a significant percentage of these services being provided by traders (pre-financing to farmers and fellow traders) while large commercial banks are lagging behind in financing agriculture. However, compared to commodities like beans, cassava and rice, which are the commodities targeted by the DIMAT project, the coffee sector receives the highest share of financial services (22%) because of its status as a cash crop, high returns from its sales and the ready market. In addition, farmers

who cultivate coffee usually have sufficient collateral because they own their land. The level of organisation in the chain is incentive enough to the financial service providers to trust the actors.

Actors in the coffee value chain also get finance in form of advance payment from some processors and traders who pay in advance either in cash or in-kind (inputs) to producers. The finance advance is deducted from the value of the coffee delivered.

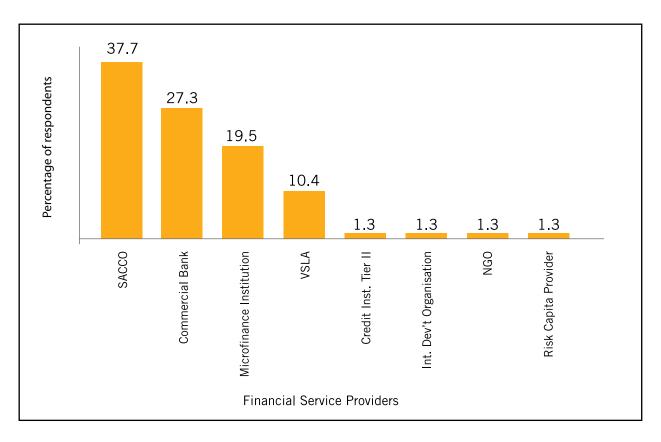


Figure 3.14: Categories of the coffee VC financial service providers (by number)

The main products and services offered by the financial service providers are loans which were categorized as agricultural, asset, business, microfinance, group, land title processing and animal traction loans. They also provide products such as savings accounts, commodity financing, working capital, financing towards agricultural production and livestock production enhancement, input supplies and trainings in agriculture specifically offered by the VSLAS.

Most of the providers of financial services indicated that they prefer lending to individuals rather than groups because: i) it is easy to manage individuals, ii) loans and accounts are operated on individual basis, and iii) most bank policies require collateral most of which is personal property.

Market Information Providers: A total of 29 market information service providers were interviewed and the findings showed that majority of them were private companies including radio stations. Government agencies and NGOs are also involved in providing market information. Where as most market information providers are not commodity specific, some like the Uganda Coffee Development Authority (UCDA) deal specifically with coffee.

The common types of information provided cover commodities and inputs prices (83% of providers), coffee quality requirements, market locations (local and international), areas of demand locally and internationally and a few on consumer preferences. The major clients for the market information providers were producer groups, individual farmers and traders. The information is packaged in the form of printed materials, posters, fliers, SMS, talk-shows, magazines and audio tapes translated into local languages.

The most popular modes of delivering information were field visits, pre-recorded radio programs, SMS, Radio/TV talk-shows and field visits to groups (Figure 3.17). The SMS system which costs between UGX 50 to UGX 220 per text was handy in delivering information on prices of coffee (both local and international) because of the high level of penetration of mobile phones. For example, the Uganda Coffee Development Authority (UCDA) has a system that is capable of delivering local and international prices of coffee daily via SMS. A client needs to send the words 'coffee international prices' or 'coffee local prices' to '7197' to get an instant response to the requested prices. This service applies to all mobile networks in Uganda. A single SMS, in the case of UCDA, costs UGX 220.

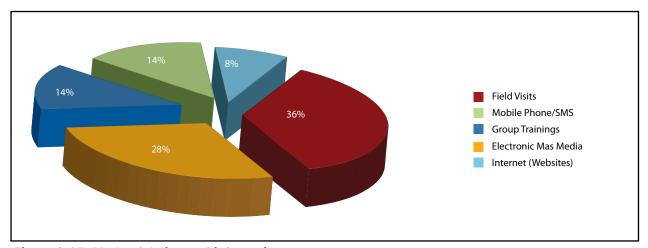


Figure 3.15: Mode of delivery of information

The major sources of information for the market information providers include major markets, internet, government departments and other market information providers. Government departments mentioned to be sources of information include: NaCCRI, NARO, NAADS (district commercial offices), UEPB and Uganda Investment Authority (UIA). Most of the information from these organizations is obtained from their websites or through the various workshops they organize. Market information providers have contacts in the major markets who update them with the current information on prices, demand and supply.

Technological and Business Development Service (T&BDS) Providers: The NGOs dominate the provision of BDS (60%) compared to 17% by government organizations. The rest of the BDS are provided by business enterprises such as FIT Uganda and Agrinet. The focus of services provided by the 52 BDS actors was R&D, technological advice and extension and agronomic extension. There were only 4% of BDS providers dealing with issues structure development of structured trade such as Warehouse Receipt Systems (WRS).

The National Agricultural Research Organisation (NARO) provides several technologies through (CORI). For Robusta coffee, the Coffee Research Institute (CORI) developed new clonal varieties do deal with coffee wilt disease (CWD) problem; investigations on crop management practices including intercropping coffee with annual crops and banana inter-cropping systems; and integrated weed management and use of organic fertilizers. CORI has also developed soil fertility improvement packages using locally available organic fertilizers. It has also recommended new approaches for weed management/control for large-scale robusta coffee production. For Arabica coffee, CORI evaluates of new introductions, yield improvement coupled with resistance to coffee berry disease (CBD), leaf rust, and quality. Other services include the modification of chemical control procedures for pests to reduce costs, improvement of soil fertility and crop management.

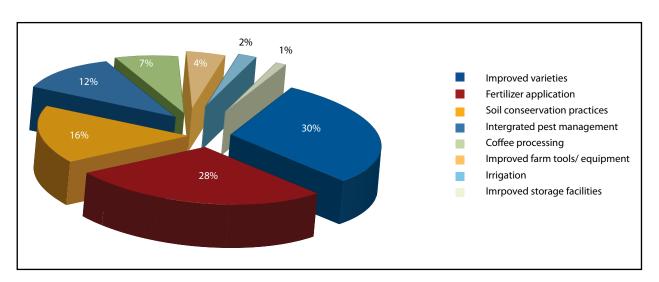


Figure 3.16: Technologies applied in coffee production

The major technologies applied by farmers in coffee production were: improved coffee varieties (30%) in an attempt to increase productivity: fertilizer (28%), soil conservation practices (16%), integrated pest management practises (12%) and use of improved storage facilities (only 1%). Farmers irrigate their seedlings.

3.6.3 Willingness to enter into Formal Business Linkages

Eighty four percent (84%) of the interviewed farmer groups did not have contracts with buyers. This was attributed to: i) lack of interested contract buyers ii) farmer groups not trusting the buyers iii) availability of a ready market for coffee and iv) low production volumes by the farmer groups which makes it difficult for them to meet the required volumes by the potential contract buyers. Other factors were price fluctuations of coffee which greatly affects farmers when the contract price goes below the on-going market price, and sheer lack of interest by farmer groups to enter into contract.

For farmers with existing contracts, access to ready market, ability to meet the quality requirement of most buyers and access to financial advance for production (pre-financing) were the main incentives for their current engagement in contractual arrangements with their buyers.

For the farmer groups with contracts (83%), the terms in such contracts included contract price of 2,600 UGX/Kg of "Kiboko coffee" and 4,700 UGX/Kg of FAQ coffee. In terms of quality, the farmer groups were required to supply coffee that is well sorted, brown in colour and well dried (not exceeding 14% moisture content). The contracts are seasonal.

For farmers with no contracts, 65.8% were willing to enter into contracts with buyers (Appendix 1). This is an opportunity for buyers to lower their operational costs and time involved in sourcing of coffee. The farmer groups would also benefit by securing a ready market for their coffee.

Thirty percent (30%) of the traders had contracts with suppliers which had a maximum duration of one year. The conditions considered before awarding a contract included: i) ability to supply required volumes (40%), ii) favourable prices to both parties in the contract(40%) and iii) good quality (20%) coffee.

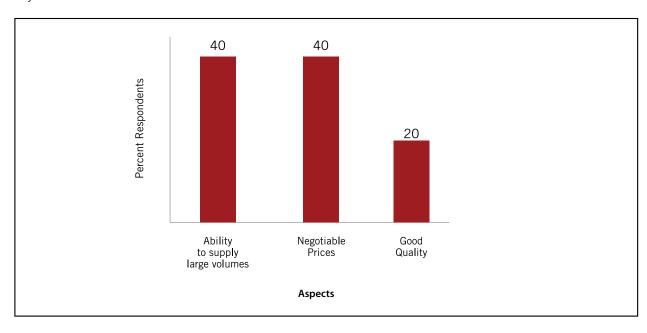


Figure 3.19: Aspects considered by traders before awarding contracts to suppliers

Only 5 of the 16 interviewed traders were willing to enter into new contractual arrangements with suppliers. These traders include Ndiwalana coffee factory, Ntungamo Coffee Traders, Twesigye Traders and NUCAFE. Most of these traders are willing to provide loans to suppliers, sensitise farmers on quality and provide technical support to farmers.

Reasons cited by traders for their unwillingness to enter into contracts include: losses if market prices drop below the contract prices which are normally fixed during signing of the contract, suppliers do not respect agreements, do not supply on time and do not supply the right quantities. Other reasons included risk of farmers dishonouring their contracts due to delayed payments and limited capital for pre-financing. In order to address the current short comings of contracts, 67% of respondents suggested stabilisation of prices as an important factor.

Only 18% of the interviewed processors indicated that they have formal contract with suppliers. The processors have contracts with farmer groups, traders and few individual farmers. Fifty percent (50) of these contracts are seasonal with the length of other contracts varying

from six months to one year. Majority (82%) of the processors are not in any kind of formal agreements with suppliers. Seventy nine percent of these respondents still prefer not to enter into contractual arrangements with suppliers due to: lack of transparency, the risks involved and lack of seriousness by the suppliers.

The processors willing to enter into contracts expressed their desire to have strong linkages in order to function properly. They were willing to advance part of the payments to suppliers when needed as well as pay the balance promptly upon delivery. In turn, they emphasized the need for the suppliers to produce good quality coffee. They also insisted on introducing mechanisms whereby, suppliers especially farmers, would not be held liable in case of harsh weather conditions which may negatively affect their anticipated yields.

In addition, they indicated they were willing to enter into contracts only with organized farmer groups (68%) and well established individual farmers (28%). The rest of the processors suggested traders and middlemen as the best players to partner with in such linkages. The willing processors were keen to bringing both direct and in-kind contributions to the linkages.

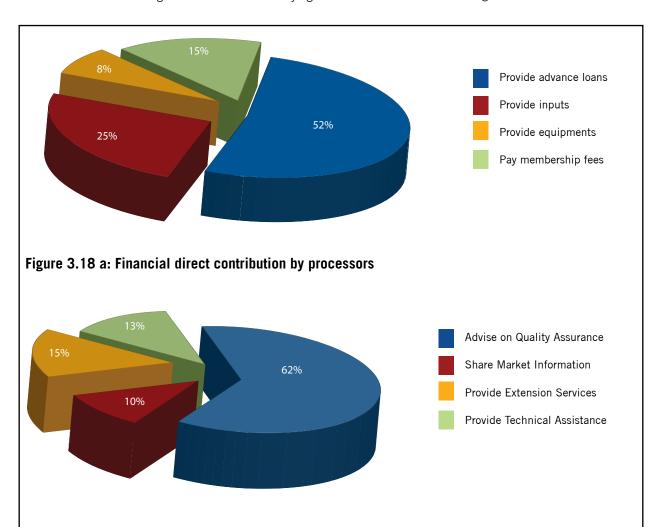


Figure 3.18 b: In kind contribution by processors willing to enter into contractual agreements with farmers

The conditions set for awarding contracts depend on the agreement between the two parties. Usually, price, quality and quantity are the main determinants. Price is by far the biggest determining factor and the minimum price is always set depending on the market projections. The maximum price is always driven by the prevailing market price at the time of selling. Conditions stipulated in the contracts can also involve exchange of services between the parties. About 40% of the respondents suggested that crop financing, training, monitoring and evaluation are some of the services which could be included in the agreements.

3.7 Macro Level - Coffee Value Chain Supporting Policies and Institutions

The Uganda's Coffee Plan aims at commercial multiplication of traits resistant to coffee wilt disease, improve Robusta coffee yields, establish a quality rating system for Robusta coffee so that Ugandan coffee can penetrate the specialty coffee market, and putting in place, practices that will enable producers to take economic advantage of the standards of specialty coffee.

Uganda National Coffee Regulations Statute 1994: Interventions in the coffee sub-sector aim to support the realization of the objectives of coffee production, processing and marketing in Uganda as outlined in the Coffee Regulations Statute, 1994. This statute aims at ensuring proper registration of coffee buyers, processors and exporters; stipulates the provisions relating to registration and quality control in the coffee sub-sector and regulates coffee prices and ensure optimum running of the coffee sub-sector in Uganda. The important pillars of the Coffee Regulations Statute are: formalization of internal trade of coffee, regulation of coffee prices in the country, export trade in coffee and quality control of coffee products.

The National Coffee Strategy: UCDA is in the process of drafting a national coffee strategy and coffee policy to harmonize all interventions in the sector.

3.7.1 Interventions by Macro-level Coffee Value Chain Actors

Besides linkages between micro and meso-level actors, the coffee value chain is supported by other organizations at the macro-level. These organizations have different roles and responsibilities including from technology development, dissemination, production, processing, transporting and marketing. These include bilateral partners, NGOs, government ministries and related agencies and private sector organisations including business development service providers.

These organizations have programs/projects operating at the various stages of the value chain such as production, bulking, processing and marketing. Some of them e.g. the Uganda Coffee Farmers Alliance engage in more than one function along the coffee value chain. In addition, Uganda Coffee Development Authority focuses on improving quality standards and marketing of the coffee produced in Uganda, but also provides support in the enforcement of the Uganda Coffee Regulations, 1994 and the current policy framework guiding the sub-sector. Others such as USAID, DANIDA, the European Union and the Netherlands Government have been providing support towards revamping and boosting the coffee sub-sector in Uganda.

Bilateral Organizations: The following is a brief description of some of the bilateral organizations and/or their programs directed to supporting the coffee sub-sector:

a) Uganda Feed the Future (FTF) Strategy 2011 – 2015: This is a strategy funded by USAID, World Bank, DANIDA and the European Union. The value chains targeted by FTF for investment are coffee, maize and beans. The strategy is multi-faceted and it focuses on: support policy reform in the agriculture sector and trade, support capacity of key public and private sector institutions at national and district level, investment in research to develop disease resistant varieties of improve quality of coffee production at farm level; and build capacity of farmer organizations to enter into contractual agreements with buyers, access finance and purchase inputs.







- b) The Netherlands Trust Fund Coffee Project in collaboration with ITC, NUCAFE, UCDA and UEPB: This project is funded by the Netherlands Government and aims at: improving the effectiveness of umbrella institutions and farmers' organizations, and improving access to support services for the coffee sub-sector and enhance its competitiveness in the EU market.
- c) European Union and Bill and Melinda Gates Foundation boost to Coffee Farmers Project: This project is co-funded by the European Union and BMGF in collaboration with USAID and DANIDA. It aims at boosting Robusta coffee production in Uganda including the development of coffee wilt resistant varieties. The funding is also intended to strengthen the Uganda Coffee farmers Alliance.
- d) USAID- Livelihoods and Enterprises for Agricultural Development Project (LEAD): This project is funded by USAID and aims at utilizing existing business development service providers to train coffee farmers achieve specific certifications. In addition, the existing BDS providers will be used to train coffee barristas, roasters and cuppers. The project also aims at re-introducing coffee production in Kitgum and Gulu districts.

e) Agriculture Productivity Enhancement Programme (APEP- USAID)

This program is funded by USAID and aims at increasing and expanding coffee demonstration sites where farmers could have practical demonstration of Good Agricultural Practices in coffee production. In addition, the project aims at training farmers on quality improvement and agronomic practices.

- f) ABI Trust/USAID: ABI Trust provides support to coffee sector development programs especially in areas of production, post-harvest and processing (ITC, 2012).
- **g) COMESA/Lion Assurance:** This is a pilot project in Lira on how to insure the coffee sector in Uganda.

Other programs and organizations supporting the coffee sub-sector include: ASARECA (develops cost effective technologies for staking of coffee, management of insect pests and diseases and soil fertility), VEDCO, CFC and DFI.

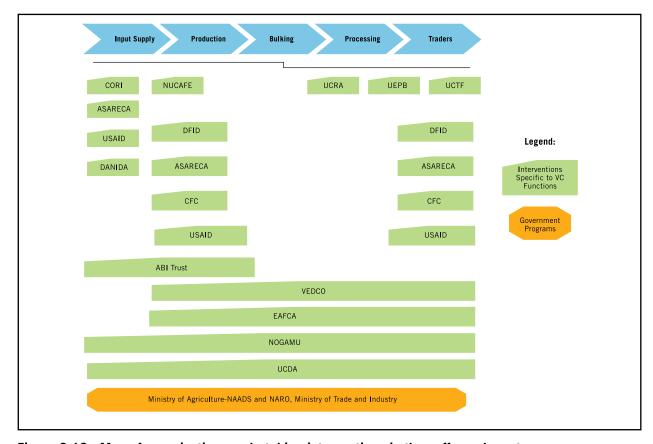


Figure 3.19: Map of organizations undertaking interventions in the coffee sub-sector

Public institutions: Several public institutions collaborate to support coffee development. These include: MAAIF which offers overall guidance and policy direction and the Uganda Coffee Development Authority, formed by statutory mandate in 1991. It is tasked with the enforcement of the Coffee Regulations 1994 as well as promoting and overseeing the development of the coffee industry through research, quality assurance and improved marketing of coffee nationally, regionally and internationally. Other public institutions include the Coffee Research Centre, Uganda Export Promotions Board, NAADS (extension and advisory services), UCDA and CORI. The roles of some of these organizations are discussed below.

- a) UCDA, the Uganda Coffee Development Authority is a major player in the coffee Value Chain. It promotes and oversees the coffee industry as a whole by developing research and controlling the quality and improving the marketing of coffee. UCDA has also rolled out Northern Uganda Coffee project that saw the introduction of coffee in the north (Gulu, Nwoya, Amuru, Lamwo, Lira, Kole, Oyam and Dokolo districts). It is also planning to distribute over 2 million and 20 million coffee seedlings countrywide in the next one and five years, respectively.
- b) CORI, the Coffee Research Institute (CORI) conducts research necessary to solve priority constraints that limit the production of coffee in Uganda. The Institute is part of NARO which, along with the donors, are the main sources of its funding. The institute aims at solving priority constraints that limit the production, productivity and marketing of coffee. Other institutes include CIAT, Kawanda Agricultural Research Institute and NaCCRI.

- c) BMOs: Most coffee value chain actors are members of business organizations (table 3.2) that act as the apex bodies. These BMOs mainly advocate for a favourable policy environment for their members. Below is a list of identified BMO's in the coffee sub sector:
 - i) NUCAFE: Founded as Uganda Coffee Farmers Association, but changed its name to NUCAFE. It aims at establishing a sustainable and profitable farmer operated organization for the benefit of coffee farmers
 - ii) Uganda Coffee Trade Federation: Protects, promotes and safeguards the business interests of persons engaged in the coffee trade and industry e.g. growers, processors, agents, brokers, roasters and exporters, and any other persons connected to the industry
 - **iii) Uganda Coffee Roasters Association:** Represents the interest of coffee roasters who supply the local market. Uganda consumes 100,000 bags per annum which is equivalent to 3% of the coffee produced.
- d) Uganda Coffee Trader Federation (UCTF): this is funded by its members and it protects, promotes and safeguards the business interests of persons engaged in the coffee trade and industry e.g. growers, processors, agents, brokers, roasters, or exporters; and persons connected with the industry in Uganda.

Table 3.2: BMOS that support the coffee sector

BMO's				
1. Uganda Coffee Roasters Association	2. National Union of Coffee Agribusinesses and Farm Enterprises (NUCAFE)			
3. Uganda Coffee Trader Federation	4. Union Export Services			
5. Gumutindo Cooperative Union	6. Bugishu Cooperative Union			
7. Good Coffee Traders Association	8. Good African Coffee- wet coffee promoters			
9. Ankole Coffee Cooperative	10. Masaka Coffee Campaign Platform			
11. Kaweri Coffee Farmers Alliance	12. Abadeyanda Cooperative Society			
13. Banyankole Kwetarana Union	14. Kanywa Twekembe Cooperative Society			
15. Kingo Farmers Cooperative Society	16. Magala Tugenda Mumaso Co-operative Society			
17. Kawonawo Growers Co-operative Society	18. Buyore Produce and Marketing Co-operative Society			
19. Coffee Marketing Board	20. UNADA			
21. Uganda Coffee farmers Association	22. African Fine Coffee Association			

VALUE CHAIN ANALYSIS (VCA) OF THE COFFEE SUB-SECTOR IN UGANDA

Private sector organizations: Some of the private sector organizations that support the coffee sub-sector include NOGAMU (National Organic Agricultural Movement of Uganda) - whose objective is to promote organic farming through training, development of standards and promotion (both local and international). Specifically, NOGAMU promotes and facilitates organic coffee export in Uganda.

In spite of the presence of different meso and macro-level actors supporting the coffee value chain, there are still gaps in interventions as shown in Table 3.3.

Table 3.3: Gaps on existing interventions

Activity	Research	Inputs	Production	Primary Processing	Trading & Brokerage	Biz/Fin Services	Secondary & Exporting (Green Coffee)	Tertiary Processing (Roasted & Instant coffee)	Distributing & Retailing	Consuming
NOGAMU					ü		üü			üü
USAID	üü		üüü	üü	üü	üüü	üü			
FTA			üüü			üüü			üü	üüü
World Bank										
EU/BMGF	üü		üüü							
DUTCH		ü	üüü	üüü	üü		üü			
DANIDA/ ABITRUST		üü	üüü	üüü	üüü	üüü				
UCRA			ü					üüü	üü	üüü
ASERECA	üüü	üü	üüü							
UCDA		üü	üü	üü	üü	ü	üü	üü		üü
COMESA						üüü				
MAAIF	üü		üü	ü						
CORI	üüü									
UCTF			ü	üü	üüü		üüü			
UCFA		üü	üüü	ü						
NUCAFE		üü	üüü	üü	üü		üü			
EAFCA			ü	üüü	ü		üü	ü	ü	

"I orchestrate my mornings to the tune of coffee" ~Terri Guillemets



The end markets part of the chain has less investment or interventions by the public sector. Here the main players are: NOGAMU and Fair Trade Africa who are mainly certification agencies, UCRA which is an association of Coffee Roasters and UCDA which is a regulator. Though coffee consumption is low in Uganda, there are considerable opportunities to increase coffee consumption in Uganda. These include the current efforts by UCDA and other companies to promote coffee consumption, potential of the EAC market, increasing urbanization and increasing range of coffee-based beverage products. Two possible interventions could be investing in developing the retailing of coffee products with opportunities targeting SMEs and products development, testing and promotion.

Interventions in BDS and Financial Services (FS) also seem to have few players. This may partly be due to the maturity of the chain where most of the traders and exporters can access financing and the existing interactor pre-financing mechanisms. However, access to finance for producers and access to longer term financing for the processors remain a challenge in the chain. There is scope for developing innovative products in both BDS and FS.

In spite of the serious problem of coffee wilt, there seems to be relatively low interventions at the inputs supply part of the chain. The opportunity here could be in developing sustainable input supply systems driven by both producers and other agri-based SMEs, or entrepreneurs to increase access to improved varieties and other inputs that can also impact productivity positively.

Many players at the production stage give attention to increased production and production practices with less emphasis on building producer institutions for economies of scale such as apex bodies, bulking, joint marketing, bulk procurement of inputs and services. This could be an opportunity for the project. There also seems to be few players in the coffee research part of the chain. Opportunities in this area should be explored.





4. CONCLUSIONS



4.1 Lessons from the coffee value chain analysis

Demand for coffee from Uganda remains stable inspite of the decreased export volumes recorded in the late 1990s and early 2000s. This demand is largely driven by the historical need to blend the Uganda coffee with coffee from other origins in a wide range of coffee blended products.

Local consumption of coffee has experienced very modest gains. An increasing share of the market of coffee products consumed is slightly increasing due to availability of value-added coffee products and brands produced in Uganda like Star Café and Good African Coffee brands. Penetration of these products into the EAC market is still at its nascent stages but, has promising results so far. Efforts to enhance these supply chains into the broad national and regional markets would enhance more diversification of the coffee products value chains. Increased consumption would further drive product development and other innovations.

The current value chain involves a relatively stable number of 5-7 core processes with a fairly well defined structure. However, this structure is still quite inefficient and leaves a number of opportunities unexploited, particularly enhanced productivity of the coffee farmers and the benefits of improved coffee quality. In particular, coffee quality is still affected at a number of nodes across the value chain, although a number of improvements have been noted.

There are emerging models of the chain that are being experimented and that have shown some promising results. An example is the Kaweeri Farmer Coffee Alliance project which has demonstrated that it is possible to shorten the chain by linking producers directly to exporters while increasing their productivity as well as enable them to vertically integrate and perform other value adding activities. Such models are worth experimenting for improvement, adoption and adaption with an aim to replicate.

Participation of youth in the sub-sector is on the decline. This is a worrying trend as coffee remains one of the key sectors contributing to the national economy. Coffee trees in Uganda are aging and producers as well and this poses a future challenge. However, there are opportunities for integrating the youth into the sector at different stages of the chain. The most notable stages are production and marketing of value-added coffee

products produced in Uganda. This way, not only will the employment opportunities provided by the sub-sector be exploited by the youth, but there are increased chances of entrepreneurial opportunities in the sector driven by this segment of the population. In addition, there are increased chances of this segment adopting coffee drinking in the long term and consumption driving the whole subsector.

With improved coffee varieties, the effects of the coffee wilt disease are lesser on the sub-sector. However, the disease is still one of the biggest challenges in the industry and will likely continue to be so in the medium term. With the impact of external factors on the coffee industry such as international price fluctuations, large volume coffee producers creating a supply glut, coffee wilt disease and climate change, a number of approaches have been adopted globally as well as at national level. However, to keep the whole sector focused on mitigating these risk factors and to increase the sector's ability to respond effectively, a multi-stakeholder platform has been established to be an effective means of driving the development and growth agenda of the sector. Though still developing, this initiative has provided some evidence that it can be an effective tool to addressing strategic issues in the sector in an inclusive and collaborative way.

Weak linkages and low trust among core actors of the chain continue to prevail, reducing the opportunities to maximize profits and win-win business transactions across the value chain. This situation is particularly prevalent in the middle of the chain where large numbers of intermediaries play a key role driving coffee volumes across the chain. This is perhaps the single most source of inefficiency in the value chain and a key source of bad practices and value destroying activities

4.2 SWOT Analysis

The study identified a number of strengths, weaknesses, opportunities and threats to the various actors along the coffee value chain as listed below.

4.2.1 Strengths

- a) Coffee trade in Uganda is relatively better structured than most commodities due to existence of support institutions and the ready export market.
- b) Local brands are well established.
- c) The chain has a critical mass of actors at most of the stages.

- d) Availability/existence of proven technologies
- e) Sector is attractive to private sector service providers e.g. transporters, insurance, finance, market information due to the associated returns to investment.
- f)There exist proven models for structuring the value chain to maximize inclusiveness.

4.2.2 Weaknesses

- a) There is poor and inconsistent quality control of coffee across the chain coupled with limited capacity to monitor and enforce quality standards
- b) The productivity of coffee of 0.5 Kg/tree/season is still low compared to 2-3 kg per tree if the right agronomic practices are applied
- c) There is limited access to improved planting materials
- d) There is still inadequate supply of coffee to the traders
- e) There is low local consumption of coffee and coffee products in Uganda and the East African region, leaving the coffee prices highly vulnerable to the global market prices
- f)There is limited willingness for formal market linkages with farmers
- g) Crop and weather Insurance are still highly demanded, but underdeveloped products due to high costs of investment and limited understanding by key actors and stakeholders
- h) There is limited R&D capacity
- i) There is inadequate appropriate financial products, especially for farmers and the big exporters of coffee

4.2.3 Opportunities

- a) Sustained demand for Ugandan coffee in importing countries
- b) Increasing consumption of coffee at national and regional level, albeit modest
- c) Potential to capture a high proportion of the FOB Kampala price
- d) On-going national level initiatives to grow more coffee
- e) Growing segments of the specialty coffees especially UTZ, RFA, Fairtrade in importing countries
- f) High availability of agricultural financing looking for investment (FDI, Equity investors, international/ regional/development banks) in the organised Value Chain
- g) Unexploited land and water resources with potential to produce more coffee especially in Northern Uganda
- h) Availability of local fabricators, especially for processing equipment
- i) Increasing alternative uses of coffee by-products from coffee husks and trees

4.2.4 Threats

- a) Pests and diseases (e.g. coffee wilt disease, twig borer etc.)
- b) Fluctuating world coffee prices and unstable exchange rate regimes
- c) Increased supply from large-volume producer countries e.g. Brazil and Vietnam
- d) Inadequate infrastructure especially to effectively connect different VC actors located in different geographic areas
- e) Unpredictable weather that affects productivity
- f) Competition for land within high producing areas like the central region (competition with traditional crops and urbanisation) and
- g) Low and reducing involvement of the youth in the subsector.

"I believe humans get a lot done, not because we're smart, but because we have thumbs so we can make coffee."~Flash Rosenberg







5.1 Preliminary Outlines of Potential Interventions

Results from the SWOT analysis were used to identify potential areas of intervention as shown in the matrix of interventions (Table 5.1). These are classified into short term, medium term and long term interventions.

5.1.1 Proposed Short Term Interventions

The interventions proposed for the short-term would be designed to enhance and to put into use the identified strengths in the coffee value chain in Uganda – so as to fully utilize opportunities available to the sub-sector.

There is need to improve, replicate or upscale value chain models that can integrate large numbers of organised producers. This can be achieved by directly linking them to off-takers that have strong linkages with big international importers and/or growing specialty markets for green coffee. The following are the proposed interventions to realise this.

- a) Build capacity of producers to meet required quality and quantity requirements (Good Agricultural Practices [GAP], Farming as a Business [FaaB], adoption of VSLA/SILC models and upgrading of producer institutions).
- b) Enhancement productivity: This will involve intensive and specialized extension services to coffee farmers on the best agronomic practices to improve coffee productivity. Agronomic and economic studies should be conducted to determine the highest productivity cropping system.
- c) Enhance access to the right technologies for processing coffee as well as promotion of good processing and handling practices.
- d) Enhance access to appropriate finance by providing incentives for financial institutions in collaboration with other service providers (e.g. collateral managers and meteorology agencies) to develop agricultural finance products to farmers, including insurance products. Banks and development finance institutions should be key targets in this endeavour, to ensure that products are conducive both to producers and exporters.
- e) Enhance the nputs supply chain by ensuring the right planting materials e.g. through stronger collaboration with national research institutes and coffee seedling nursery entrepreneurs.
- f) Avail regulatory services to producer groups to enable effective monitoring and enforcement of good practices

g) Enhance initiatives for increasing coffee consumption at national and regional levels, with the aim of improving market penetration of established brands of value-added coffee products produced in Uganda.

5.1.2 Proposed Medium Term Interventions

The interventions proposed for the short to medium term would be designed to remove the identified weaknesses in the coffee value chain in Uganda – so as, again, to fully utilize opportunities available to the sub-sector. These interventions would also be designed to enhance and to put into use the identified strengths in the coffee value chain, so as to reduce and/or mitigate the effect of the threats to the coffee sub-sector

Multi-actor platforms for advocacy and driving the agenda for inclusive development and growth in the sector should be strengthened. Key areas of focus for these platforms should be in:

- a) Supporting sustainable coffee production. This should be done while at the same time appreciating the potential adverse impacts of climate change on the subsector. The benefits of the coffee subsector are dependent on the stochastic form of biotic and abiotic constraints that could increase due to climate change. For full benefits to be realized in the subsector, Uganda should invest in adoption of climate change adaptation strategies to mitigate the negative effects of drought and floods.
- b) Increasing production and productivity which could be done through control of coffee wilt disease, increased adoption of coffee in other areas and adoption of GAP and post-harvest handling practices.
- c) Enhancing the development and dissemination of value-addition options for the sector and identifying investment opportunities for the industry.
- d) Target long term competitiveness of the coffee sector vis a vis the global coffee industry through increased yields, quality, removal of trade barriers, increased access to appropriate finance.

5.1.3 Proposed Long Term Intervention

The interventions proposed for the long-term would be designed to remove the identified weaknesses in the coffee value chain in Uganda – so as, again, to reduce and/or mitigate the threats facing the sub-sector. The strategy is to re-orient the overall long term performance of the sub-sector towards greater competitiveness among other global players. At the same time it should aim at increasing the long term demand and consumption of locally developed and produced value-added coffee products that target the changing tastes and demographics of the national and regional population.

This will be achieved through enhancing public and private investments along the chain to drive future growth of the sub-sector in ways that upgrade the sub-sector to become globally competitive at all stages of the chain. Such investments would include:

- a) Increase land under production through exploitation of irrigation and other technologies,
- b) Enhance coffee research infrastructure and staffing,
- c) Enhance infrastructure and services to support tertiary processing of coffee into products that are suitable for the regional market,
- d) Enhance 'last mile' infrastructure supporting the sector across the chain and
- e) Uptake competitive value addition practices at all levels of the value chain mainly by borrowing through, 'learning-by-doing', from other competitive countries with established and thriving coffee sub-sectors.



Table 5.1: Matrix of Proposed Interventions

a) Sub-matrix of Strengths, Weaknesses and Opportunities

Factors INTERNAL to the Value STRENGTHS WEAKNESSES Chain - (from Input Suppliers to Consumers) a) The value chain has a) Low quality standards of coffee attracted support in products with respect to quality demanded by the market - ethanol and development of various proven technologies e.g. flour for industrial use (breweries) through the establishment. b) High costs of operation along the chain center of excellence especially investment costs for high b) Coffee is widely grown. quality processing c) Coffee keeps for long in c) Inadequate availability of market information at users' level, control of the ground. d) Coffee is cheaper than pests and diseases its substitutes for d) Weak value chain institutions - low both processing and bulking, low access to markets consumption. e) Unattractive economies of scale **Factors EXTERNAL to** e) Coffee is a priority (production for processing due to the Value Chain competing uses for coffee) commodity in some regions e.g the Eastern and f) High level of soil nutrient mining Northern region. g) High prevalence of disease – brown streak and low yielding varieties **OPPORTUNITIES** Intervention Plan - Short Term Intervention Plan - Short - Medium Term (picking the low-hanging ripe (picking the low-hanging but not yet ripe fruits) fruits) a) Processors (such as breweries and confectioneries) are 1. Expand the utilization 1. Develop more structured trade models keen to using coffee as a of existing technologies, e.g. contract farming to improve products and practices to substitute. access to more non-traditional markets b) High demand for coffee exploit existing markets 2. Strengthen coffee value chain and its products in both 2. Facilitate multiplication of institutions such as BMOs to improve Uganda and the export improved Coffee varieties governance of the chain market at community level 3. Facilitate access to storage and post 3. Strengthening market harvest handing systems to ensure c) High potential for linkages between quality of coffee products increasing coffee yield d) Changing consumer producers, traders, preferences with processors to ensure good urbanization and health quality of Coffee and Coffee products and their conscious in the long term markets. 4. Formal lending to the

"He was my cream, and I was his coffee -And when you poured us together, it was something"

Coffee marketing sector

~Josephine Baker



b) Sub-matrix of Strengths, Weaknesses and Threats.

Factors INTERNAL to the Value to Consumers)

STRENGTHS

WEAKNESSES

Chain – (from Input Suppliers

- f) The value chain has attracted support in development of various proven technologies e.g. through the establishment. center of excellence
- g) Coffee is widely grown.
- h) Coffee keeps for long in the ground.
- i) Coffee is cheaper than its substitutes for both processing and consumption.
- j) Coffee is a priority commodity in some regions e.g the Eastern and Northern region.

- d) Low quality standards of coffee products with respect to quality demanded by the market - ethanol and flour for industrial use (breweries)
- e) High costs of operation along the chain especially investment costs for high quality processing
- f) Inadequate availability of market information at users' level, control of pests and diseases
- g) Weak value chain institutions low bulking, low access to markets
- h) Unattractive economies of scale (production for processing due to competing uses for coffee)
- i) High level of soil nutrient mining
- j) High prevalence of disease brown streak and low yielding varieties

THREATS

Factors EXTERNAL to

the Value Chain

- a) Attitude Coffee is seen as a subsistence crop and is unattractive to private sector service providers e.g. banks and market information providers etc
- b) Diseases are difficult to control
- c) Flooding in high producing areas in the eastern region
- d) Changing consumer preferences with urbanization in the short term

Intervention Plan -Medium **Term** (picking fruits high up the tree)

- 1) Strengthening of extension service provision to increase adoption of disease tolerant coffee varieties
- 2) Development of innovative and accessible financing models to encourage investment into the Coffee sub-sector
- 3) Development of mechanisms to deal with loods in prone areas including use of early warning systems.

Intervention Plan -LONG Term (grow new fruit tree)

- 1) Improvement of infrastructure like valley dams, roads to facilitate transportation of Coffee to urban markets, Strengthening of enforcement mechanisms for Coffee quality standards
- 2) Popularizing of alternative industrial uses of Coffee as a boost to production





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APPENDIX 1: DETAILED LIST OF CONSTRAINTS AND OPPORTUNITIES AS IDENTIFIED BY STAKEHOLDERS INTERVIEWED

Opportunities						
Inputs Suppliers	Producers	Village assemblers	Processors	Traders		
Availability of new technologies	Conducive climatic conditions	Available financial services	Ready and rapidly growing market	High demand for coffee		
Available financial services			Employing better processing technologies to boost their production	Good relations with farmers, especially where pre-financing is possible		
A draft seed policy	Unexploited land and water resources		Ability to offer competitive market prices to their suppliers	Available financial services		
Developed seed trade- Existence of Uganda Seed Trade Association	The producers have a high level of control of the coffee products along the chain		Increasing demand for better quality coffee	Investing in coffee trading in the international markets		
			Ability to export coffee directly to the final buyers	East African common market presents a big opportunity		

Constraints						
Inputs Suppliers	Producers	Village assemblers	Processors	Traders		
Lack of awareness of farmers about improved inputs	Pests and diseases, e.g. twig borers, CWD, etc	Inadequate storage facilities	Inadequate storage facilities	Unreliable/ untimely and limited supply from the suppliers		
Unfavorable financial products	Limited access to ready markets	Limited capacity to pre- finance suppliers	Limited capacity to pre-finance suppliers	Price fluctuations		
Adulterated products in the market which are cheap	Inadequate postharvest handling equipments such as tarpaulins for drying. In some cases, the available tarpaulins are used for covering the grains against rain, instead of used to dry coffee	Unreliable supply- unstructured trade	Inadequate drying facilities and technologies	Poor infrastructure especially roads		
Low commitment to pre-financing	Poor harvesting practices, e.g. harvesting immature coffee	Inadequate drying facilities and technologies	Poor quality coffee suppliers which is either not dry enough or contain a lot of foreign materials	Limited supply of coffee varieties		

	Constraints		
Low buying/ negotiation power of the farmers	Poor quality coffee	Low volumes supplied	High transport costs
Use of faulty weighing scales	Limited capacity to pre- finance suppliers	High operational costs	High competition from each other
Pcoffee fluctuation	Limited collective marketing	High competition from each other	Limited business management skills, eg record keeping
High transport costs		Inadequate grading facilities	Lack of enough working capital, which mainly caused by unfavourable financial products offered by lending institutions
Poor road infrastructure		Unfavourable financial products, e.g. long-term financing is limited to 5 years and it is associated with bureaucratic and politicized tendencies	For export traders, dollar volatility and scarcity is hindering their opportunity to exploit premium price coffee for FOB
Poor farming methods leading to low productivity		do not have labs to check the quality of the processed coffee	
Erratic weather Conditions			
Poor water management			
Limited access to finance and unfavourable financial products, especially high interest rates			
Limited access of improved inputs, especially seedlings			
Limited access to specialized extension services and BDS			
Weak organized farmer groups			
Soil exhaustion			

APPENDIX 2: RECOMMENDATIONS AND SUGGESTED INTERVENTIONS MADE BY STAKEHOLDERS

Producers

- The major recommendations suggested by farmer groups to address the challenges that they are currently facing include:
- Linking of farmers to financial or credit institutions (in order for them to be able to meet the necessary costs of production. For example, promotion of VSLAs model that has worked successfully in Nigeria and Uganda. In addition, there is a need to upgrade regional cooperatives, for example in Busia, Barclays bank has signed an MOU with some of the VSLAs, in which, members of these VSLAs can access bigger loans without collaterals.
- With regards to unfavourable financial products, policy framework needs to be developed to provide incentives to the banks to develop and provide agricultural finance to producers
- Training and capacity building of the farmers
- · Provision of improved seeds and agrochemicals at a free or subsidized cost in an attempt to increase coffee productivity
- Provision of market information to the coffee farmers
- Government should intervene in the pricing of agriculture produce to ensure that farmers are not over exploited by the traders
- · Supporting of farmers with drying materials such as tarpaulins in an attempt to lower postharvest losses
- Supporting of farmers with storage facilities as this would also aid in lowering the postharvest losses incurred
- Enabling farmer groups to access extension services throughout the growing season of coffee
- Government needs to provide subsidies to farmer
- Government to improve the poor road infrastructures especially in the rural areas
- · Supporting farmers to access improved farm machinery
- Linking of farmers to good and reliable markets for their coffee
- Support farmers with irrigation facilities
- · Buyers should pay in time for the coffee taken on credit
- · Coffee traders should be given tax holidays by the government
- · Linking coffee farmers to research institutions dealing in coffee to offer continued advice on coffee agronomic practices
- Organization of farmers into groups in order to access crop insurance. For example, UAP has worked well in Kenya using the same approach.

Processors

Several recommendations were given by the interviewed respondents. They include:

- Government should reduce taxes
- Coffee value chain Stakeholders should provide international market linkages
- Bank of Uganda should control borrowing interest rates
- Government should assist in importing improved seeds
- Government should leverage financial institutions to provide financial support to small and medium coffee processors
- Coffee value chain stakeholders should sensitize farmers on quality management
- There is a need to revive the development of finance institution to provide long-term finance
- UCDA and government should put a mechanism to ensure that all the processed coffee meet the set standards and requirements

Traders

- · The traders gave the following recommendations
- Farmers should be trained on improved production and post harvest handling
- · Government should regulate prices
- · Repair roads
- Build modern storage facilities
- Regulations to sell to only registered traders
- Government should distribute more improved seedlings
- Financial support is needed in terms of grants or loans with low interest rate. Several financing models can be researched to give a light on setting a model that would work. For example, 70% of traders in Kagera use warehouse financing system.
- For the case of exporters, government should provide cheaper sources of dollar financing for onward lending through commercial banks
- Government should strengthen cooperatives
- Farmers be encouraged to grow more coffee
- Provide competitive market prices
- Create more markets
- Stabilize exchange rate for companies to engage in contractual arrangements
- Provision of tarpaulins and monitoring of their quality
- · Reduction in cost of packaging materials
- More market developments outside Uganda
- · Traders to form an association

Retailers

Several interventions were recommended by the retailers in an attempt to boost coffee value chain. These recommendations are listed below:

- The need for government to regulate prices
- Stakeholders should step in to improve market information systems
- Farmers should be supported in growing more coffee using modern technologies
- More open markets should be created
- Financial institutions should introduce more affordable financial products
- Suppliers should build strong relationship with their customers

APPENDIX 3: PRODUCER ENTERPRISES WILLING TO ENTER INTO CONTRACTUAL AGREEMENTS

Producer entities willing to enter into contractual agreements with buyers

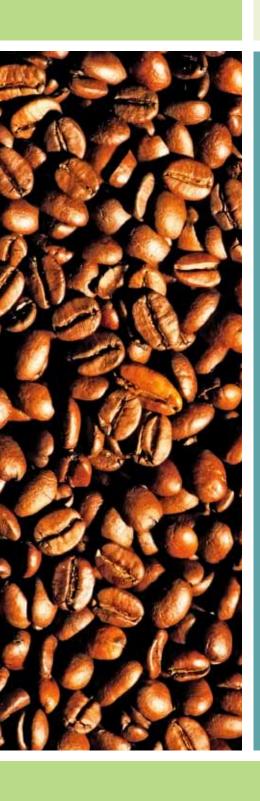
Farmer group	Sub county	District
Kanywa Twekembe Cooperative Society	Buwunga	Masaka
Kakyolu Cooperative Sacco	Kalungu	Masaka
Kyamamukaka Farmers Association	Kyamamukaka	Masaka
Kabonera Coffee Farmer Association	Kabonera	Masaka
Kingo Farmers Cooperative Society	Lwengo	Masaka
Rulengye Competent Development Group	Bugamba/Rwampara	Mbarara
Nabusondo POA Farmers Group		Mubende
Kassanda Coffee Growers Company Ltd	Kassanda	Mubende
Kamaga Coffee Farmers Association		Mubende
Bumbare 1 Tukwatanise	Bumbaire	Bushenyi
Kanyantama Twetungure Group	Nyabubaare	Bushenyi
Nyabubaare Farmers Association	Nyabubaare	Bushenyi
Kasambya Farmers Group	Kangulumira	Kayunga
Kyangukulwamukwama	Kangulumira	Kayunga
Magala Tugenda Mumaso Co-op Society	Nazigo	Kayunga
Tukoje Bukozi	Kayunga	Kayunga
Agali Awamu Farmers Group	Nazigo	Kayunga
Nazigo Farmers Association	Nazigo	Kayunga
Kawonawo Growers Co-op Society	Nazigo	Kayunga
Buyore Produce and Marketing Co-op Society	Kayunga	Kayunga
Kyabashenyi Bakyala Tukole	Bwongyera	Ntungamo
Bulusambu Ibikhisa Group	Busoba	Mbale
Makhai Miracle Farmers Group	Busoba	Mbale
Budwale Coffee Acup	Budwale	Mbale

APPENDIX 4: INVENTORY OF EXPORTERS AND BUYERS OF UGANDA'S COFFEE

Ugacof (U) Ltd	Abaco international
Kyagalanyi Coffee Ltd.	Olam International
Olam (U) Ltd	Sucafina
Kawacom (U) Ltd	Ecom Agro industrial
Ibero (U) Ltd	Bernhard Rothfos
Savannah Commodities Ltd.	Volcafe
Job Coffee Ltd.	Coex Coffee
Kampala Domestic Stores	Aldwami
Great Lakes (U) Ltd.	Icona Café
Panafric Impex	Tata Coffee
Nakana Coffee Factory	Strauss Commodities
Penform Trading company Ltd	Socadec
Kamba Petroleum	Coffee Services
Armajaro Coffee Exporters Ltd	Armajaro
Kitasha Coffee Buyers Ltd	Decotrade
Lakeland Holdings Ltd.	Bercher
Ankole Coffee Producers Coop	Supremo
Risala Ltd.	Africa Tea and Coffee
LD Commodities	Louis Dreyfus
Mbale Importers & Exporters	Guzman
Gumutindo	Hamburg Coffee
Wabulungu Multi-purpose	
Kaweri Coffee Plantation Ltd	
Bakwanye Trading Company Ltd	
Coffee Services Ltd	
Ankole Coffee Processors Ltd.	
Bukonzo Joint Cooperative	
Gatto Estates	
Gatto Estates	



"At trading level, local traders (popularly known as middlemen and/ or assemblers) purchase from individual farmers and farmer groups. Most of these traders sell to other big traders in major trading towns. However, traders often fail to get the required amount and quality of coffee"





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