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Country Coffee Profile: Uganda

Background

In accordance with the objectives of the International Coffee Agreement 2007, the International Coffee Organization is required to act as a centre for the promotion, collection, dissemination and publication of economic, technical and scientific information, statistics and studies, as well as the results of research and development relating to coffee matters. With regard to those provisions, the Secretariat has supported the Uganda Coffee Development Authority in the production of this Country Coffee Profile for Uganda.

Action

The International Coffee Council is requested to note this document.



COUNTRY COFFEE PROFILE UGANDA



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ASSP	Agriculture Sector Strategic Plan
BCTB	Black Coffee Twig Borer
CAGR	Compound Annual Growth Rate
CBD	Coffee Berry Disease
CIF	Cost Insurance and Freight
CLR	Coffee Leaf Rust
CWDR	Coffee Wilt Disease Resistant
CY	Coffee year
EPRC	Economic Policy Research Centre
FOB	Free on Board
FOT	Free on Truck
GDP	Gross Domestic Product
GHA	Gender Household Approach
IACO	Interafrican Coffee Organization
ICC	International Coffee Council
ICO	International Coffee Organization
LDC	Least Developed Country
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MoU	Memorandum of Understanding
NaCORI	National Coffee Research Institute
NARO	National Agricultural Research Centre
NCP	National Coffee Policy
NCS	National Coffee Strategy
NSC	National Steering Committee
SCA	Specialty Coffee Association
UCF	Uganda Coffee Federation
UCDA	Uganda Coffee Development Authority
UCP	Uganda Coffee Platform
UNBS	Uganda National Bureau of Standards

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PREFACE

Despite recurrent fluctuations in world prices and the subsequent reduction in coffee production in many African countries, Uganda has successively managed to maintain coffee as the main engine of the national economy, exporting on average four million 60-kg bags per year. This is a demonstration that coffee remains the most important crop in Uganda, the birthplace of Robusta coffee. It's worth remembering that coffee has played a role in Ugandan cultural practices, since it was traditionally used as a sign of friendship and hospitality. Sound liberalization and privatization policies undertaken by the Government in early 1990s has boosted the coffee sector through strong support to coffee growers as well as improving the business environment. I was therefore particularly pleased to receive a request from the Uganda Coffee Development Authority (UCDA) to prepare this country profile for Uganda.

The publication of a series of country profiles is one of the objectives of the International Coffee Agreement 2007, specifically collecting, disseminating and publishing economic, technical and scientific information, statistics and studies, as well as the results of research development in coffee matters. These objectives have been reinforced by the Five-year Action Plan approved by the International Coffee Council during its 120th Session held in Yamoussoukro (Côte d'Ivoire) in September 2017.

In this regard, Member countries have been provided with guidelines to be used as a framework for a comprehensive report on the coffee sector in specific countries. Therefore, these profiles are extremely important in improving the visibility of the world coffee economy and identifying key trade flows. They should also serve as a reference point from which policy can develop and further analysis can be undertaken.

I would like to thank Mr Perez S. Bukumunhe, Chairman of the Board of Directors of UCDA, and his technical staff for the preparation of this report. Thanks are also due to Dr Emmanuel L. Niyibigira, Managing Director of UCDA, for his continued and invaluable support to the work of the International Coffee Organization. It is my sincere hope that this profile will provide Members and other stakeholders with relevant information on the vibrant coffee sector of Uganda. Finally, the ICO Secretariat and I welcome any observations and suggestions that will contribute to improving future publications.

José Sette

Executive Director
International Coffee Organization

FOREWORD

Global coffee production has seen a consistent growth in excess of 2% since the 1960s. Unfortunately, the consistent global growth has not been duplicated in the African region, where at a continental level production has been declining steadily at a rate averaging 2%, leading to Africa's loss of global market share to close to 19% today. Globally, in terms of regional exports, the highest growth was in Asia, where exports tripled in the last 20 years. On the African continent, Uganda has experienced growth in the coffee industry, making it the largest exporter of coffee by volumes. Uganda is also the leading producer of Robusta and second largest producer of Arabica coffee, after Ethiopia, in Africa.

Uganda grows 2 types of coffee: Robusta and Arabica in the ratio of 4:1. Arabica is grown at altitudes ranging between 1,300-2,300m above sea level; while Robusta is grown at altitudes ranging from 900-1,500m above sea level making Ugandan coffee to possess very good intrinsic qualities due to high altitude, soils and farming systems not easily found elsewhere in the world. Ugandan Robusta has a remarkably impressive cup when wet processed. It is commonly deemed to be of exceptional quality and retains its flavour qualities very well, which cannot always be said of other washed Robusta coffee. The variety of Wild Robusta Coffee still growing today in Uganda's rain forests is thought to be some of the rarest examples of naturally occurring coffee trees anywhere in the world.

In Uganda, coffee remains among the traditional cash crops and is one of the foremost foreign exchange earners and the most important agricultural export, with a contribution of 19.1% to the total national formal export value in 2017.

There is a huge opportunity for commercial coffee farming and other value addition opportunities in the coffee industry. Foreign investors can lease land for a period up to 99 years. Uganda, a natural habitat for coffee growing, offers a real opportunity for large-scale coffee production.

A recently published report by IMARC Group forecasts the global instant coffee market as having grown at a CAGR of 3.6% during 2009-2016, worth US\$9.9 billion, and it is expected to reach a value of US\$13.1 billion by 2022, growing at a CAGR of 5% during the 2017-2022 period. The bulk of soluble coffee is derived from Robusta coffee, and Uganda is a large Robusta producer without its own soluble industry. Uganda is the only country in Africa with abundant raw materials: Robusta and Arabica coffee beans locally available throughout the year. Prevailing export prices offer enough margin to the soluble coffee plant to cover major costs for any intending investor in Uganda.

This coffee profile is the result of coordinated work from a multidisciplinary team consisting of the public sector, institutional stakeholders of the coffee sector and coffee growers. It sets out to describe the economic and institutional underpinning of our coffee sector and was produced through cooperation between the sector's various stakeholders in Uganda and the International Coffee Organization. It presents a description of the economic and institutional structure of our coffee sector and provides an overview of the sector in accordance with the country profile guidelines approved by the International Coffee Council (ICC) during its 116th Session in March 2016 in Addis Ababa, Ethiopia.

In conclusion, I am happy and proud to note that this profile on the coffee sector of Uganda will be available to industry players both locally and at the international scene to grow the Uganda coffee value chain. Finally, on behalf of the Uganda Coffee Development Authority, I register my appreciation and gratitude to the Executive Director of the International Coffee Organization and his staff, as well as to all those who worked tirelessly to realise this publication. Any feedback on this maiden issue will enrich the publication of subsequent editions of this profile.

Perez Bukumunhe

Chairman, Board of Directors

Uganda Coffee Development Authority

SUMMARY

Uganda, located in East Africa, lies across the Equator, about 800 kilometres inland from the Indian Ocean. It lies between 10 29' South and 40 12' North latitude, 290 34' and 350 0' East longitude. It has a total area of 241,551km², of which 200,523 km² is covered by land. The population of Uganda is currently estimated at 40,227,785 inhabitants.

Uganda is sunny most of the year with temperatures rarely rising above 29° Celsius (84° Fahrenheit). The average annual temperature is about 26° Celsius (78° Fahrenheit). The rainy seasons are from March till May and October till November.

Coffee accounts for the bulk of export revenues, contributing 15% of total goods exports. Uganda produces two types of coffee (Robusta and Arabica) in a ratio of 4:1. For Robusta, there are two varieties, *Nganda* and *Erecta*. High-yielding Clonal Robusta, which has yields almost four times greater than traditional varieties, is being planted to replace old diseased trees. For Arabica, there are a number of varieties, including SL 28 (high altitude), SL 14 (medium altitude), KP 423 (medium) and the traditional Nyasaland grown in the Mountain Elgon region, the Rwenzori Region and in the mountains of Zeu, in Zombo District (North-Western sub-Region).

In Uganda, it is estimated that 1.7 million households grow coffee with a mean plot size of less than one acre. The proportion of female-headed coffee households is about 40%¹ (680,000 females). The average yield is 232kg of clean coffee/acre for Traditional² Robusta Coffee (573.3 kg/ha), 505kg/acre for improved³ farmers (1.2MT/ha) and 841kg/acre (2.1MT/ha) for Recommended⁴ farmers. The yield for Coffee Estates is 1,080 kg/acre⁵ (3.7 MT/ha).

The initial cost of establishing one hectare of Robusta coffee is UGX2.3 million (US\$627 at the current exchange rate) in year 1, UGX568,492 (US\$427.5) in year 2, UGX3,010,430 (US\$820.6) in year 3, UGX3,977,424 (US\$1,084) in year 4 and UGX4,201,640 (US\$1,145) in year 5. This translates into a total cost of UGX15,601,378 (US\$4,252.5) over five years. The total revenue in the 3rd, 4th and 5th year is UGX20,853,000 (US\$5,684) giving a net income of UGX5.25 million (US\$1,431.1).

¹ Quoted from unpublished report on the Pilot Coffee Farmers Registration exercise in Mukono and Buikwe Districts (2017).

² A farmer who carries out basic agronomic practices exclusively use family labour and does not apply fertilizers (whether organic or inorganic) and neither uses any pest and disease management practices.

³ A farmer who significantly adopts recommended GAPs and also applies fertilizers as well as proper canopy management and effective pest and disease management.

⁴ Recommended farmer is one who adopts most GAPs and applies recommended amount of fertilizers (both inorganic and organic) and also carries out canopy management and pest and disease management.

⁵ Mugoya Tony (2017 Study Report "Establishing the Financial Viability of coffee farming in Uganda December 2017") email:tonymugoya@gmail.com.

The major actors in the coffee value chain range between researchers-seed suppliers-nursery operators-farmers (farmer organizations⁶)-traders-processors (processor & traders association⁷)-exporters (exporter association⁸) to Buyers Abroad-retail markets.

In terms of market channels, some farmers sell to small middlemen while others sell directly to coffee-buying storemen. Farmer organizations/cooperatives sell directly to exporters. However, many farmer organizations have become exporters themselves.

Agricultural research in Uganda is undertaken by the National Agricultural Research Organization (NARO) which is mandated to develop and release all new technologies, including coffee planting material. Under NARO, a National Coffee Research Institute (NaCORI) is responsible for biological research while socio-economic and policy research is conducted by the UCDA and the Economic Policy Research Centre (EPRC) respectively.

Pests and diseases remain the main threats to coffee production in Uganda. Between 1997 and 2007, coffee wilt disease severely affected Robusta coffee trees in many producing areas in the country, causing accumulated losses estimated at US\$580 million in ten years. An ICO-sponsored project amounting to US\$8.9 million, which was implemented in seven African countries, contributed to alleviating the disease's previous negative impact⁹. Through the project, considerable progress was made towards developing Robusta coffee varieties resistant to coffee wilt disease. However, the propagation and dissemination of these varieties to Robusta-growing regions remains a challenge

⁶ Major ones are NUCAFE (National Union of Coffee Agribusinesses and Farm Enterprises) and UCFA (Uganda Coffee Farmers Alliance).

⁷ Uganda Quality Coffee Processors and Traders Association (UQCPTA).

⁸ Uganda Coffee Federation (UCF), whose membership also includes banks, insurance companies, forwarders and shippers.

⁹ Following a request made by Uganda and other African countries affected, the ICO sent a consultant to assess the situation that resulted to a project proposal of US\$8.9 million for seven countries (Uganda, Cameroon, Cote d'Ivoire, Democratic Republic of Congo, Ethiopia, Tanzania and Rwanda) over the period from October 2000 to December 2007.

1. BACKGROUND

1.1 Geographical setting of the country

Uganda is located in East Africa and lies across the Equator, about 800 kilometres inland from the Indian Ocean. It lies between 10 29' South and 40 12' North latitude, and 290 34', East and 350 0' East longitude. The country is landlocked and bordered by Kenya in the East; South Sudan in the North; Democratic Republic of Congo in the West; Tanzania in the South; and Rwanda in South West. It has a total area of 241,551km², of which the land area covers 200,523km². The population of Uganda is currently 40,227,785 people. Children below the age of 18 years constitute 55% of the population, youths (18-30 years old) constitute a further 23% and the Age Dependency Ratio is 103%¹⁰.

Uganda is sunny most of the year with temperatures rarely rising above 29° Celsius (84° Fahrenheit). The average annual temperature is about 26° Celsius (78° Fahrenheit). The rainy season is from March till May and October till November. Light rain season falls in November and December. Dry seasons are from December to February and June to August. Most of the areas receive between 750mm and 2,100mm of rain annually. The country has loamy soils with varying proportions of sand and clay. In addition, it has a varied vegetation, with tropical rain forest vegetation in the South and savannah woodlands and semi-arid vegetation in the North. Typically, the harvesting seasons for coffee vary according to the region (see section 2.3 below).

1.2 Economic setting

Uganda has substantial natural resources, including fertile soils, regular rainfall, small deposits of copper, gold and other minerals, and recently discovered oil. Agriculture is the most important sector of the economy contributing 42% to GDP (MAAIF ASSP) and employing over two-thirds of Ugandans. Coffee accounts for the bulk of export revenues, contributing 15% to the country's total exports. Though coffee farming is still dominated by small-scale producers, the government's intention is to transform the economy from its current level to a middle income status by 2040 through agricultural transformation in what is termed as Uganda's Vision 2040. The domestic currency in Uganda is the Uganda Shilling and was trading at Sh. 3,676 per dollar at the end of February 2019.

¹⁰ *National Population and Housing Census 2014.*

1.3 History of coffee in the country

Coffee is the oldest, most significant commercial agricultural commodity and major foreign exchange earner, contributing an annual average of 15%¹¹ to Uganda's total export revenue in the last ten years. Uganda is the fourth largest Robusta producer in the world, after Vietnam, Brazil and Indonesia. Some Arabica is also grown in different highland areas of the country, most notably on the slopes of Mount Elgon on the border with Kenya and on the slopes of the Mount Rwenzori, popularly known as the 'Mountains of the Moon', on the border with the Democratic Republic of the Congo. Some Arabica coffee is also grown in the West Nile region in the northwestern part of the country. Uganda is the origin of Robusta coffee, which was cultivated along the Lake Victoria crescent. While the milder Arabica varieties originated in Ethiopia, the Robusta species are indigenous to the *Nganda* regions of Uganda. Wild varieties are still found in the foothills of the Rwenzori Mountains in western Uganda, where they are harvested as a specialty ECO coffee and marketed as the "Kibaale wild". Robusta makes up 80% (by weight) of the coffee exported by Uganda.

Arabicas came late to East Africa, introduced from Malawi (then Nyasaland) in the early 1920s, long after they had become an established crop in Central and South America. In the equatorial heat, Arabica coffee requires cool, moist and higher altitudes, so the bushes thrive on Uganda's mountain fringes, on Mount Elgon in the East and on the Rwenzoris and West Nile (Nebbi and Okoro Districts) on the border with Congo. The main varieties are SL14, SL28, KP162, KP423 and the Bugisu local. Arabica is from Bugisu, on the western slopes of Mount Elgon region, where it was first introduced in 1912. It grows as high as 2,300 metres. There are plans to extend Arabicas into the lowland Robusta areas using newly developed varieties. Robusta, which is native to the humid rainforests on the Western borders of Uganda, is grown at altitudes of 1,200 to 1,500 meters above sea level throughout the country. As a result of the high altitudes at which it is grown, it is often classed amongst the world's finest Robusta coffees.

By 1914, European and Asian farmers had established 135 plantations, occupying 58,000 acres of land, but the crop was abandoned when prices fell in the 1920s. It was left to African smallholders to continue growing coffee, though at first the acreage was insignificant. By 1931, only 17,000 acres were under cultivation. The Coffee Board was set up in 1929, later becoming the Coffee Industry Board in 1943 and then the Coffee Marketing Board in 1959. The colonial government, eager to see the development of a cash crop economy, divided the country into agro-ecological zones, each specializing in particular

¹¹ *Statistics Department, Bank of Uganda* (https://www.bou.or.ug/bou/rates_statistics/Statistics_overview.html).

crops: tobacco in Acholi (Kitgum and Gulu), cotton in West Nile and coffee in the central region. In the 1950s, extension workers promoted a coffee-planting campaign that saw production reach two million 60-kg bags by the early 1960s, and more than three million by 1969/70.

The subsequent years of civil strife in Uganda saw economic life stagnate and coffee production fall back. The National Resistance Movement (NRM) government returned some stability to the country after taking power in 1986, but the collapse of the International Coffee Agreement three years later prompted world prices to crash to a little more than half their previous level.

Prices recovered briefly following the frost in June 1994, which destroyed much of the Brazilian crop for that and the following year. Ugandan production increased in response to higher prices, with exports reaching four million bags in 1995-96 and 1996-97. In the 2013/14 coffee year, 3.6 million bags of coffee were exported. Current levels of production place Uganda about 8th in total world production of coffee and 3rd, after Vietnam and Indonesia, in Robusta exports.

1.4 Geographic distribution of coffee production

Coffee is grown in five areas: the Central, Western, South-Western, Northern and Eastern regions. The last one comprises Busoga regions (Robusta) and Mountain Elgon region (Arabica). The Northern Region comprises the Mid-North (Robusta) and North-Western region (Arabica & Robusta). The South-western and Western regions produce both Robusta and Arabica (Figure 1). For Robusta, there are two varieties, *Nganda* and *Erecta*. High-yielding Clonal Robusta Coffee, which yields almost four times as much as traditional varieties, is being planted to replace old and diseased trees. For Arabica, there are a number of varieties, SL 28 (high altitude), SL 14 (medium altitude), KP 423 (medium) and the traditional Nyasaland grown in Mountain Elgon region, Rwenzori Region and in the mountains of Zeu in Zombo District.

2. Coffee production

Coffee is produced by an estimated 1.7 million coffee farmers from 108 districts. The altitude ranges from 800 to 1,400 meters above sea level for Robusta and 2,300 to 6,000 metres above sea level for Arabica. The high altitude, especially for Ugandan Robusta, makes it very unique and characterised by intrinsic quality characteristics/attributes. Sustainable and specialty¹² coffees are being sold to niche markets at high premiums compared to conventional grades.

2.1 Types of coffee and of coffee-growing areas

There are two types of coffee grown in Uganda, Robusta and Arabica, in the ratio of 4:1. Table 1 shows coffee acreage, number of trees and number of coffee households by region. By 2014, the total tree stock was 295 million trees covering an acreage of 353,907ha. Uganda is in the process of carrying out a coffee farmers' registration that will ascertain the actual acreage under coffee and the tree density.

Table 1: Coffee production by region

Region	Area in ha	Number of trees	Trees in production	Number of households (hh)	Trees/hh	Percentage
Western	79,773	94,155,423	61,342,735	265,144	231	23%
Eastern	77,709	86,332,784	73,305,543	486,079	151	22%
Northern	19,886	27,498,178	20,519,580	92,336	222	6%
Central	136,247	151,082,141	109,993,307	611,782	180	38%
South-West	40,292	49,549,569	29,430,081	258,182	114	11%
Total	353,907	408,618,095	294,591,246	1,713,523	238	100%

Source: UCDA

2.2 Production Systems

In Uganda, apart from a few coffee plantations which are monocrop, the rest of the farms are mixed where coffee is intercropped with bananas and beans in what is referred to as the coffee banana zone. A very small proportion (0.1%) of farms use irrigation. Shade-grown coffee is being promoted under the Rainforest Alliance initiative spearheaded by Kyagalanyi Coffee Ltd, a member of the Volcafe Group.

¹² Specialty coffee premium is based on the cup quality as assessed by the SCA scale.

2.3 Coffee seasons

Planting is normally between March and May (first rains) and September to November (second rains). In Northern Uganda, the region experiences one long rainy season from March to August. The harvesting seasons alternate as main and minor harvest depending on whether the region is in the Northern or Southern hemisphere (see Table 2).

Table 2: Harvesting seasons for coffee in Uganda, by region.

Regions	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
Central		Main crop (Robusta)						Fly crop (Robusta)				
Masaka	Fly crop (robusta)							Main crop (Robusta)				
Eastern		Main crop (Robusta)						Fly crop (Robusta)				
Bugisu/sebei		Main crop (Arabica)						Fly crop (Arabica)				
Western	Fly crop (Robusta)							Main crop (Robusta)				
	Fly crop (Arabica)							Main crop (Arabica)				
West Nile		Main crop (Arabica)						Fly crop (Arabica)				

Source: UCDA website (www.ugandacoffee.go.ug)

2.4 Smallholdings

In Uganda, it is estimated that 1.7 million households grow coffee with a mean plot size of less than one acre. The proportion of female headed coffee households is about 40%¹³ (680,000 females).

2.5 Estate farms

Uganda boasts of a number of estate farms led by the Kaweri Coffee Plantation in Mubende District, which has an area of 2,500ha under Robusta coffee. Others include Dr Ian Clark's farm in Kabarole District, with 320 acres of Robusta. Estate farms are estimated to account for about 5% of the total area under coffee.

¹³ Quoted from unpublished report on the Pilot Coffee Farmers Registration exercise in Mukono and Buikwe Districts (2017).

2.6 Company farms

Kaweri Coffee Plantation is a Neumann Foundation investment. It has created 200 permanent jobs.

2.7 Yields

The average yield is 232kg of clean coffee/acre for traditional¹⁴ Robusta coffee (573.3 kg/ha), 505kg/acre for improved¹⁵ farmers (1.2 MT/ha) and 841kg/acre (2.1MT/ha) for Recommended¹⁶ farmers . The yield for coffee estates is 1,080kg/acre¹⁷[3.7 MT/ha].

2.8 Other characteristics of coffee growing

Inorganic fertilizer use is extremely low, although use of organic fertilizers (farmyard manure) is relatively higher. This justifies the increasing number of farmers who are certified as organic or Fairtrade farmers. Nonetheless, the proportion of farmers who are using inorganic fertilizers is changing.

2.9 Volume of Production

Coffee procurement i.e. coffee that is procured by exporters and graded into exportable green coffee, is used as a proxy for production. Annex I shows the monthly coffee procurement by exporters. There is an increase of 29% from 3.9 million 60-kg bags procured in crop year 2012/13 to 5.0 million bags in crop Year 2016/17. This was on account of coffee that was planted in crop year 2013/14 and started yielding in 2016/17, coupled with favourable weather during the year.

2.10 Gender Gap

Most Ugandan farmers are 'bibanja' holders i.e. they have land holdings that basically belonging to a landlord and are obligated to pay a small rental fee to the latter. Some households have started using the Gender Household Approach (GHA) which addresses gender equity at the household level. This is however practiced in a few districts and has not

¹⁴ A farmer who carries out basic agronomic practices exclusively use family labour and does not apply fertilizers (whether organic or inorganic) and neither uses any pest and disease management practices.

¹⁵ A farmer who significantly adopts recommended GAPs and also applies fertilizers as well as proper canopy management and effective pest and disease management.

¹⁶ Recommended farmer is one who adopts most GAPs and applies recommended amount of fertilizers (both inorganic and organic) and also carries out canopy management and pest and disease management.

¹⁷ Mugoya Tony Study Report "Establishing the Financial Viability of coffee farming in Uganda (December 2017)" email:tonymugoya@gmail.com.

yet been rolled out in other coffee-growing areas. Due to the government's intervention, females are also receiving coffee seedlings and now own their coffee plots, as recorded in the pilot districts of Mukono and Buikwe.

3.0 Production costs during the last five years

3.1 Establishment costs/initial investment

Appendix 2 shows the cost of production of Robusta coffee. The initial cost of establishing 1 hectare of Robusta coffee is UGX2.3 million (US\$627 at the current exchange rate) in year 1, UGX568,492 (US\$427.5) in year 2, UGX3,010,430 (US\$820.6) in year 3, UGX3,977,424 (US\$1,084) in year 4 and UGX4,201,640 (US\$1,145) in year 5. This translates into a total cost of UGX15,601,378 (US\$4,252.5) over five years. The total revenue in the 3rd, 4th and 5th year is UGX20,853,000 (US\$5,684), giving a net income of UGX5.25 million (US\$1,431.1). The next five-year production cycle's costs will be lower, since only maintenance costs and application of agro-inputs will be borne by the farmer. In the 7th year, the trees would be stumped and will start yielding again in the 9th year. For Arabica, the costs and margins are shown in Appendix 3. Detailed annual production costs are shown in Appendices 2 and 3.

3.2 Crop losses due to pests and diseases

Pests and diseases remain the main threats to coffee production in Uganda. Between 1997 and 2007 coffee wilt disease severely affected Robusta coffee trees in many producing areas in the country, causing accumulated losses estimated at US\$580 million. The ICO-sponsored project with total value of US\$8.9 million implemented in seven African countries contributed to alleviating the previous negative impact of the disease¹⁸. Through the project, considerable progress was made towards developing Robusta coffee varieties resistant to coffee wilt disease. However, the propagation and dissemination of these varieties to the Robusta-growing regions remain a challenge.

Black coffee twig borer is another threat to coffee production in Uganda as its incidence has been registered at 8.6% of coffee farms, causing a loss of 40% in affected areas. Financial losses were estimated at US\$40.1 million in 2014. Following a concern expressed by the head of the Ugandan delegation regarding the outbreak of the black coffee twig borer, the International Coffee Council approved Resolution Number 453 at its 111th Session in September 2013, which calls on members of the international community, through relevant

¹⁸ Following a request made by Uganda and other African countries affected, the ICO sent a consultant to assess the situation that resulted in a project proposal of US\$8.9 million dollar for seven countries, namely Uganda, Cameroon, Cote d'Ivoire, Democratic Republic of the Congo, Ethiopia, Tanzania and, Rwanda over the period from October 2000 to December 2007.

cooperation mechanisms, to offer assistance to the affected countries by, among other things, technical knowledge, exchange of information, best practices and management of the pest.

3.3 Crop losses due to adverse weather

The major manifestation of adverse weather is drought, which affects yields and farm incomes and leads to an increase in poverty levels. For example, the poverty levels of subsistence farmers who reported farming as a major source of income increased from 23% in the 2012/13 to 36% in 2016/17 on account of severe drought and associated pests like army worms. Recent report indicates that the pest is devastating food crops in many coffee-producing countries in Africa, including Malawi, Uganda, Kenya, Tanzania and Angola¹⁹.

4. Farmer's income

4.1 Farmgate prices

Table 3: Annual farmgate prices and percentage share of FOT/R²⁰ price

Month	Annual average exchange rate UGX/US\$	Robusta Kiboko (US\$/Kilo)	Robusta FAQ (US\$/Kg)	Arabica Parchment (US\$/Kg)	Robusta weighted export price (US\$/Kg)	Arabica weighted export price (US\$/Kg)	Percentage of farm gate price to FOB (export) price	
							Robusta	Arabica ²¹
CY 2009/10	2,076.23	0.57	1.14	1.79	1.39	2.42	75	74
CY 2010/11	2,436.93	0.77	1.58	3.05	1.98	3.86	71	79
CY 2011/12	2,502.32	0.74	1.58	2.38	1.96	3.42	69	70
CY 2012/13	2,612.33	0.79	1.58	1.66	1.9	2.39	76	69
CY 2013/14	2,548.63	0.65	1.47	1.98	1.74	2.36	68	84
CY 2014/15	3,053.62	0.71	1.41	2.03	1.77	2.78	73	73
CY-2015/16	3,406.20	0.65	1.30	1.51	1.53	1.95	77	77
CY-2016/17	3,589.29	0.65	1.39	1.73	1.86	2.36	64	73
CY 2017/18	3,699.41	0.58	1.31	1.52	1.68	2.49	63	77

Source: Computed from data from UCDA database and Bank of Uganda

¹⁹ FAO, Sustainable management of the fall Army worm in Africa, 2017.

²⁰ FOT/R-Free on Truck/Rail Kampala/Mbale (Inland ports).

²¹ To obtain the clean coffee equivalent, the parchment price for Arabica is divided by 0.8 (out-turn from dry parchment to clean coffee and for Robusta, the Kiboko (unprocessed coffee) is divided by 0.55 (the average outturn from Kiboko coffee) to FAQ.

4.2 Net income by farm type

Net income is UGX5.25 million for Clonal Robusta per hectare (after five years) and UGX1.78 million/ha for Arabica (also after five years). Refer to Annex II and III.

5. Research and Extension

Agricultural research in Uganda is undertaken by the National Agricultural Research Organization (NARO), which is mandated to develop and release all new technologies, including coffee planting material.

5.1 Institutions responsible for research

The National Coffee Research Institute (NaCORI) under NARO is responsible for biological research, while socio-economic and policy research is conducted by the UCDA and the Economic Policy Research Centre (EPRC). NaCORI has developed ten Coffee Wilt Disease Resistant (CWDr) lines that have been released to be multiplied by specific farmers under the supervision of the UCDA and NaCORI. During the CWDr mapping exercise carried out in October 2017, the mother gardens established which had started yielding were 167. The number of established CWDR mother gardens is more than 400 currently.

Research programmes include:

- Enhancing availability of planting materials-establishment of a coffee tissue culture and molecular laboratory.
- Variety development-expansion of CWDr-mother garden at NaCORI, Kituza; expanding capacity to generate Arabica seeds and seedlings; determination of molecular characteristics of CWDr lines; determination of morphological diversity of close to 300 Robusta coffee germplasm materials; development and promotion of Arabica coffee varieties with desired quality and resistance to Coffee Leaf Rust (CLR) and Coffee Berry Disease (CBD) .
- Pests and Disease management-profiling Black Coffee Twig Borer (BCTB) infestation by altitude and slope orientation; BCTB infestation in nurseries; determination of optimum application rates and frequencies of selected pesticides for managing BCTB and other coffee pests.
- Promotion of technologies and Innovations-BCTB IPM package; availing extension materials to clients; training lead farmers and provision of Coffee Season Management Calendar in different regions.
- Evaluation of competitiveness of coffee enterprises in the mid-eastern (Busoga) region.

5.2 Research on climate change and coffee

- Quantifying the effect of shade tree species on soil fertility and coffee yield
- UCDA, in conjunction with Makerere University, commissioned a study on the effect of drought on coffee mortality in 2016. A number of recommendations to address climatic change effects were made.
- UCDA and other stakeholders carried out a quick appraisal on newly planted coffee seedlings survivability in two seasons (August 2016 Report)

5.3 Organization of extension services

The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) is responsible for agricultural extension services guided by the Agricultural Extension Policy and Strategy. UCDA has five regional offices and 55 field extension workers providing coffee-specific extension services.

6. Coffee processing

6.1 Field processing

Types of coffee processing methods (wet or dry), processing on farm or in factories.

6.2 Quality control

Quality measures at farm level, grading and cup-tasting.

7. Stakeholders in the coffee sector

7.1 Farmers' associations/cooperatives

The number of coffee associations/cooperatives and community-based organizations is estimated at 1,600, according to the Uganda Coffee Alliance.

7.2 National Coffee Authority

Uganda Coffee Development Authority (UCDA) is mandated by the UCDA Statute 1991 (amended in 1994) to oversee the development, regulation and promotion of the coffee industry in Uganda. It is an agency under the Ministry of Agriculture, Animal Industry and

Fisheries. Its vision is “A sustainable coffee industry with high stakeholder value for social economic transformation”. Its mission is “To facilitate increase in quality coffee production, productivity, and consumption”. Its core values are:

- Leadership
- Integrity
- Teamwork
- Client Focus
- Accountability
- Professionalism

The statutory objectives of the Authority are to:

1. Promote, improve and monitor marketing of coffee to optimize foreign exchange and farmers’ earnings;
2. Guarantee that the quality of coffee exports meets international standards;
3. Develop and promote the coffee and other related industries through research and extension arrangements;
4. Promote the marketing of coffee as a value added product;
5. Promote domestic consumption of Uganda coffee;
6. Harmonize activities of coffee sub-sector associations in line with industry objectives; and
7. Formulate policies related to the coffee industry
8. Monitor and evaluate coffee projects and programmes in the sub-sector

UCDA clients are:

- Farmers
- Processors
- Exporters
- Roasters
- Consumers
- International agencies
- Government
- Media
- Academia

7.3 Other government involvement

As per the National Coffee Policy 2013, UCDA collaborates with a number of government agencies, including the Ministry of Agriculture, Animal Industry and Fisheries; Ministry of Trade, Industry and Cooperatives; Ministry of Finance, Planning and Economic Development; Ministry of Water for Environment; Ministry of Tourism and Antiquities; National Planning Authority; and academia in public and private universities.

7.4 The private sector

Number of coffee farmers: 1.7 million households (estimate)

Number of primary processors: 537

Number of exporters: 72

Number of roasters: 17

Number of cafés: Over 100

7.5 Financial institutions

Commercial banks offer letters of credit to exporters. Some commercial banks execute export performance bonds with Ugandan exporters. The majority of exporters execute export performance bonds with insurance companies. Development banks, such as the Uganda Development Bank (UDB), offer medium-term credit to coffee businessmen and women at very low interest rates (12% compared to those offered by commercial banks). UCDA has signed an MOU with UDB to update this. The Bank of Uganda (central bank) also has an Agricultural Credit Facility (ACF) where SMEs can access credit facilities at an interest rate of 12%. This facility has however benefitted mostly large companies.

8. Marketing structure

The major actors in the coffee value chain range from researchers-seed suppliers-nursery operators-farmers (farmer organizations²²)-traders-processors (processor & traders association²³)- exporters (exporter association²⁴)- Buyers Abroad-retail markets- consumers. Local roasters and numerous cafes also exist. Other service providers include agro-inputs suppliers, banks, insurance companies, transporters, forwarders and shippers who undertake value adding activities to make Uganda more competitive globally.

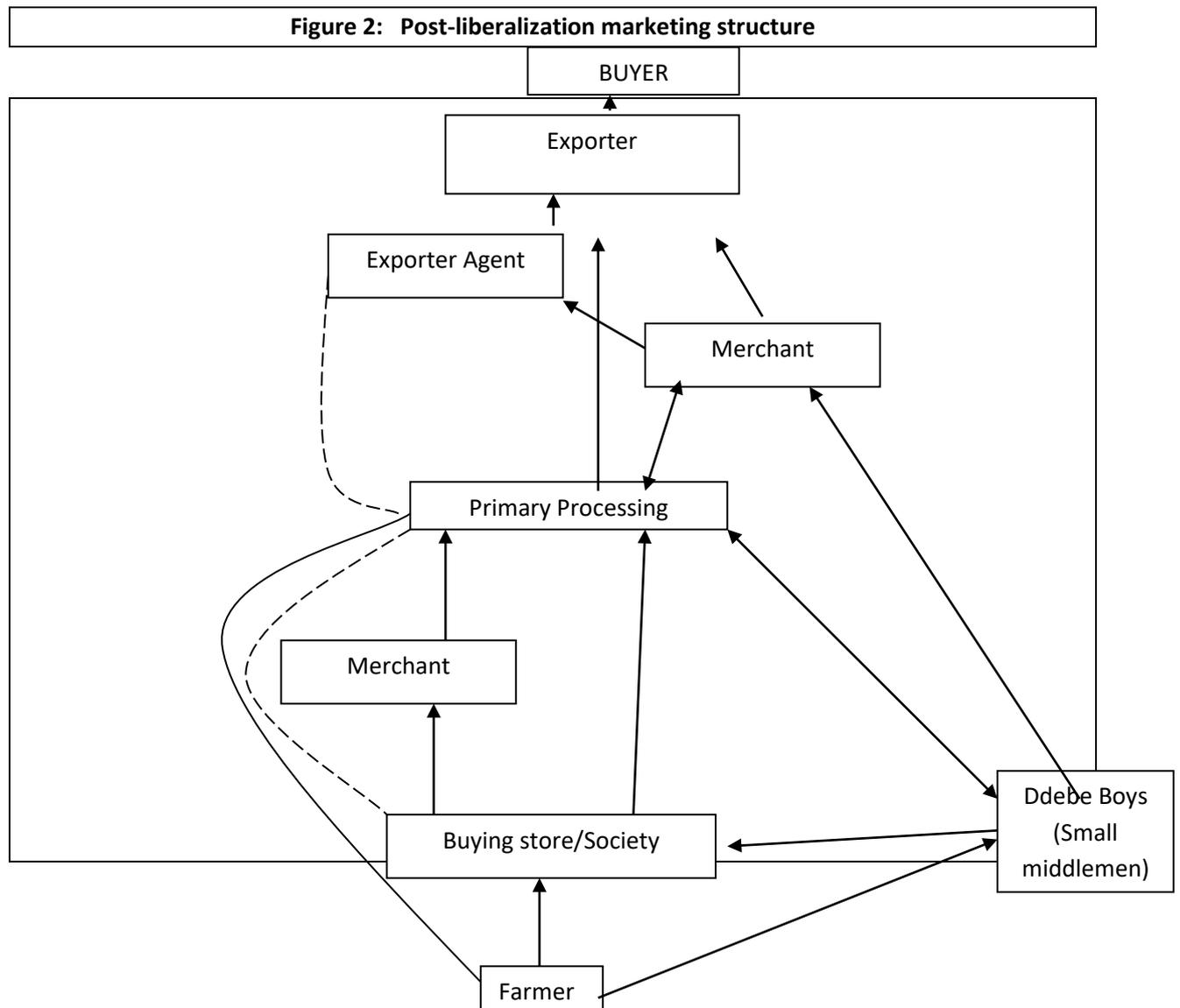
²² Major ones are NUCAFE (National Union of Coffee Agribusinesses and Farm Enterprises) and UCFA (Uganda Coffee Farmers Alliance).

²³ Uganda Quality Coffee Processors and Traders Association (UQCPTA).

²⁴ Uganda Coffee Federation (UCF) whose membership also includes banks, insurance companies, forwarders and shippers.

8.1 Marketing channels

Figure 2 shows the different marketing channels of the Ugandan coffee sector. Some farmers sell to small middlemen while others sell directly to coffee-buying storemen. Farmer organizations sell directly to exporters while 120 other farmer organizations have integrated upwards and are exporters.



Export marketing certification requirements

Coffee exporter requirement	Time spent in acquiring the same
An export licence	5 working days
Register a coffee sale	30 minutes
Phytosanitary certificate	1 day
Obtain a quality certificate	1 day
Obtain International Coffee Organization Certificate of Origin	1 day

Other regulatory requirements to comply with:

In order to qualify for the export of coffee, traders are required to meet the following guidelines:

1. Provide full name of applicant and physical address.
2. Company profile indicating Memorandum and Articles of Association, Shareholders and Management set-up.
3. Provide a performance bond in Uganda shillings equivalent to US\$25,000 (not cash).
4. Provide evidence of access to a reprocessing factory capable of producing export grades.
5. Pay registration/license fee of UGX 1.5m per annum (US\$405)

Means of exporting Ugandan coffee

Coffee can be exported through different means, including:

1. By air.
2. FOT (Free on Truck)-Kampala or Mbale is the commonly used pricing where the transport, insurance and freight costs are borne by export coffee to any destination
3. FOB (Free on Board)-Mombasa.
4. CIF (Cost Insurance and Freight).

8.2 Farmers' associations/cooperatives exporting coffee

The number of farmer associations/cooperatives exporting coffee is estimated at 11 as shown in the table 4 below with their exports in Coffee Year 2016/17.

**Table 4: Coffee exports by associations/cooperatives
Coffee year 2016/17 (60-kg bags)**

Exporter	Robusta	Arabica	Total
Ankole Coffee Processors Cooperative Society	45,846	1,780	47,626
Ankole Coffee Producers Coop Union	45,424	613	46,037
Banyankole Kweterana Cooperative Union	10,712	1,780	12,492
Kibinge Coffee Farmers' Cooperative Society	5,920		5,920
Bukonzo Joint Cooperative Union		5,680	5,680
Bugisu Cooperative Union		640	640
National Union of Coffee Agribusinesses and Farm Enterprises (NUCAFE) Ltd	3,492	1,134	4,626
United Organic		1,250	1,250
Nsangi Coffee Farmers Association	988		988
Nile Highlands Arabica Coffee Farmers Association		700	700
Bukonzo Organic		154	154
Total Cooperatives	112,382	13,731	126,113
Grand Total Exports for CY 2016/17	3,618,631	986,527	4,605,158
%age Market share			3

Table 5: Specification of coffee grades and indicative premiums or discounts

	(Natural)	(Natural)	(Natural)	Washed	Sustainable Robusta
Robusta grades	Screen 18	Screen 15	Screen 12	Robusta	(Certified: UTZ, RFA, Organic, Fairtrade)
Screen size & Max. defects (%age)	18/64=92%	17/64=7%	14/64=13%	Ungraded	Ungraded
Moisture content <12.5%	17/64=7%	15/64=90%	12/64=85%	Def. count 10%	Def. count 10%
	<17/64=1%	<15/64=3%	<12/64=2%	10%	
	Def. count 7%	Def. count 12%	Def. count 15%		
Indicative price premiums/discounts	1.99	1.91	1.81	2.14	2.23
	0	-0.08	-0.18	0.15	0.24
Washed Arabica graded (Bugisu) Moisture content <12.5%	AA	A	B	PB	C
Screen size & Max. defects %age	17/64=90%	16/64=90%	15/64=90%	15/64=80%	14/64=90%
	16/64=8%	15/64=8%	14/64=8%	14/64=15%	13/64=8%
	15/64=2%	12/64=2%	12/64=2%	12/64=5%	12/64=2%
	Def. count 5%	Def. count 7%	Def. count 10%	Def. count 12%	Def. count 10%
Indicative premiums discounts	2.67	2.32	2.42	2.82	-
	0	-0.35	-0.25	0.15	-
Washed Arabica	Dry/Natural Arabica	Drugar (Kasese, Ibanda) Ungraded			
		2.30 (-0.05)			
Mt. Rwenzori Organic Okoro ungraded (Wugar)	2.35				
Organic Drugar		2.30 (-0.56)			
	2.86				
		2.30 (-0.14)			
	2.44				
	2.72	2.30 (0.28)			
Screen size & Max. defects %age	Def. count 10%	-	Def. count 10%		

Note. Prices are in US\$/kilo

8.3 Export taxes and duties levied on coffee

Uganda coffee exports are not taxed, however a 1% CESS (export tax) is collected monthly from export proceeds and is used to fund coffee development activities.

9. Coffee roasting and domestic coffee consumption

9.1 Roasters and market size

Local processing is carried out by 18 roasters with a total market size estimated at 216 tonnes (3,600 bags) of roasted coffee per year.

9.1.1 Distribution channels

Distribution channels includes supermarkets and direct to cafes and hotels.

9.3 Domestic coffee consumption

Table 6: Domestic consumption (2010-2017) in 60-kg bags

Coffee Year	Robusta	Arabica	Total
2009/10	147,900	40,800	188,700
2010/11	159,120	44,880	204,000
2010/12	164,400	45,600	210,000
2012/13	168,000	48,000	216,000
2013/14	171,600	49,200	220,800
2014/15	175,200	54,000	229,200
2015/16	178,800	57,600	236,400
2016/17	180,000	60,000	240,000
2017/18	183,600	61,200	244,800

Source: UCDA

10. Coffee exports performance

10.1 Volume and value of exports

Table 7 shows Uganda's coffee exports over the last 10 years.

Table 7: Volume and value of exports (60-kg bags and US\$)

Coffee Year	Robusta		Arabica		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
2008/09	2,405,137	212,848,980	648,551	78,912,759	3,053,688	291,761,739
2009/10	1,957,400	163,484,690	711,571	103,230,931	2,668,971	266,715,621
2010/11	2,484,013	294,606,045	665,410	154,284,625	3,149,423	448,890,669
2011/12	1,904,176	223,976,023	822,073	168,722,105	2,726,249	392,698,138
2012/13	2,781,478	317,728,861	801,151	114,965,197	3,582,629	432,694,059
2013/14	2,735,020	285,614,846	764,809	108,307,489	3,499,829	393,922,335
2014/15	2,722,636	288,389,791	733,216	122,160,149	3,455,852	410,549,941
2015/16	2,435,160	223,655,972	880,407	103,020,278	3,315,567	326,676,251
2016/17	3,618,631	404,858,546	986,527	139,729,082	4,605,158	544,587,628
2017/18	3,202,881	325,032,630	1,102,716	137,796,277	4,305,597	462,828,907

10.2 Exports by destination

The majority of Uganda's Coffee is destined for the European Union, followed by Sudan. See Annex IV for details.

10.3 Shipping

A minimum of 45 days are required to transport coffee from Kampala/Mbale inland port to any port in Europe, by road/rail to Mombasa and sea thereafter.

10.4 Exports of certified coffees

Appendix 5 provides the details of sustainable coffees (including washed Robusta) for the last ten years.

10.5 Stocks

Table 8: Uganda's closing stocks (60-kg bags)

Coffee Year	Robusta	Arabica	Total
2008/09	399,923	76,110	476,033
2009/10	371,180	141,058	512,238
2010/11	350,427	74,953	425,380
2011/12	506,153	97,341	603,494
2012/13	561,438	156,299	717,737
2013/14	563,649	166,326	729,975
2014/15	409,952	181,029	590,981
2015/16	561,537	149,198	710,735
2016/17	664,439	243,100	907,539

Source: UCDA Annual Reports

11. Export Regulations

11.1 Regulations related to quality standards

Uganda's coffee marketing is guided by the 1994 Coffee Regulations and the UCDA Statute 1991 (amended in 1994). At roaster level, coffee is certified under the East African Standard on Roast and Ground Coffee in line with the Uganda National Bureau of Standards (UNBS).

11.2 Export duty and taxes

In Uganda, no export tax is levied on coffee exports. The only levy is a 1% tax of total export value charged to exporters on a monthly basis.

11.3 Other levies

1% withholding tax on all coffee transactions which are UGX 1 million and above. This tax started to be levied in 2018. Its effect on the profitability of coffee has not yet been ascertained.

12. Macro-economic aspects

12.1 Coffee and trade balance

For the last 10 years, coffee has contributed a percentage of exports goods ranging from 12% to 19% (Table 9 and Annex VI for details).

Table 9: Percentage of coffee exports in total exports value (calendar years)

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
18	12	13	19	13	15	15	15	13	17

Source: Computed from Exports Data from Bank of Uganda Statistics Department

12.2 Share of coffee in Gross Domestic Product

Coffee exports contribute 1.5% to Gross Domestic Product. It is estimated that 45% of dry Robusta (*Kiboko*) coffee is transformed into coffee husks, which are either taken back to farms for use as mulch or sold to brickette manufacturers.

12.3 Employment generated by the coffee sector

Active population generated by the coffee sector is indicated in table 10 below:

Table 10: Estimated number of jobs created in coffee sector

Category	Estimated number (CY 2017/18)	Total estimated number of people depending on coffee
Seed suppliers ²⁵	21 (2 Permanent ²⁶ ; 3 casual)	105
Nursery operators	2,546 (2 Permanent ²⁷ ; 5 casual)	17,822
Farmers	1,700,000 (3 permanent ²⁸ & 4 casuals per farmer)	11,900,000
Store men	715 (3 per store)	2,145
Washing stations	22 (5 per washing station)	110
Primary processors	537 (5 permanent ²⁹ & 4 casual factory)	4,833
Exporters	72 (10 permanent ³⁰ & 210 casual workers)	151,200
Roasters	17 (5 per roaster)	85
Cafes/coffee shops	120 (10 per café)	1,200
Total		12,077,500

Source: Derived from field interviews with coffee value chain actors.

²⁵ 12 Robusta Seed gardens & 9 Arabica seed gardens.

²⁶ Permanent: owner & pruning; Casual: weeding.

²⁷ Permanent: owner & watering; Casual: potting.

²⁸ Permanent: Farmer, Wife, one permanent staff Casual: 4.

²⁹ Permanent: Owner/Director, machine operators, Accountant/cashier & security guard Casual: off loaders).

³⁰ Permanent: General Manager, Asst. General Manager, Procurement Manager, Export Manager, quality analysts, Security man, Accountant/cashier & receptionist, casual: Gang boys (offload, weighing and stuck at the hopper) and hand pickers.

13. Environmental challenges

Environmental challenges of coffee sector include drought³¹, erratic rainfall, soil erosion and deforestation. Increased incidences of pests and diseases are caused by rising temperatures. It should also be noted frequent flooding and mudslides occur across the country.

13.1 Impact of coffee production on the environment

Coffee has a positive impact on environmental conservation, especially when it is grown under shade. In Uganda, coffee is intercropped with bananas which has a positive effect on the soil nutrients, especially when cover crops such as beans or pulses are intercropped as well. Research carried out in Uganda by the International Institute of Tropical Agriculture (IITA) (*Piet, 2016*) showed that bananas, besides providing additional income to farmers, act as a provider of shade when the coffee is still young. Coffee yields under this system are almost the same as in a monocrop.

13.2 Contribution to carbon footprint

In Uganda the contribution of coffee to Green House Gases (GHG) has not yet been ascertained. However, literature from other countries, such as Costa Rica, indicates that it does so and significantly too.

13.3 Environmentally sustainable coffee production

The National Coffee Policy (NCP) and National Coffee Strategy (NCS) emphasize sustainable coffee production. The NCS's Strategy 1.18: Promote and support climatic change adaptation and environmentally responsible practices.

Strategy 1.1.8: Promote and support climate change adaptation and environmentally responsible.

The related activities are:

- (a) Develop and implement reward systems for farmers who practice good conservation practices.
- (b) Promote climate and environmentally SMART agriculture (use of shade trees, mulching, water management, etc.)

³¹ Bagamba F, "Drought and Mortality Assessment in the Coffee Sub-sector", Report commissioned by Uganda Coffee Development Authority, March 2016 (unpublished).

- (c) Promote use of alternative energy sources that reduce pressure on trees.
- (d) Strengthen the dissemination mechanism for weather forecast information to reach the farmers.
- (e) Assess and document the use of indigenous knowledge and early warning signals.

14. Prospects for coffee production

In addition to oil exploration and production, which would benefit Uganda substantially, the Ugandan coffee industry is very vibrant with government and development partners treating it as a priority and major driver of the country's transformation from a Least Developed Country (LDC) to a Middle Income one by 2040. A number of policies and strategies have been developed to transform this into reality. These include the Uganda Vision 2040 and its framework: National Development Plan 2 (2015/16-2019/20); the National Agriculture Policy and its implementation framework-the Agriculture Sector Strategic Plan (ASSP) 2015/16-2019/20; the National Coffee Policy 2013 and its Implementation Framework-National Coffee Strategy 2015/16-2019/20; and, more recently, the Coffee Roadmap. These three frameworks are spearheaded by the National Planning Authority, the Ministry of Agriculture, Animal Industry and Fisheries and the Uganda Coffee Development Authority respectively. Government has invested and continues to invest in coffee production through provision of clean planting material and rehabilitation of old trees through stumping. This is also supported by increments in farmer outreach and the provision of agro-inputs, such as fertilizers (both inorganic and organic), pesticides, herbicides and insecticides. An e-voucher system is being piloted to ensure timely delivery of inputs to farmers. This is also supported by investment in rainwater harvesting technologies and irrigation systems.

The Uganda Coffee Platform (UCP) was established in 2006 to champion the Coffee Production Campaign 2006-2015 to revamp coffee exports, which had hitherto declined from over 4.2 million 60-kg bags in coffee year 2006/07 to just 2 million bags in 2005/06 to 4.5 million bags by 2015. This target was achieved. Within the GCP, the public and the private sectors as well as the development partners and the National Coffee Research Institute (NaCORI) identified four thematic areas to revamp production: Research; Extension; Inputs and Credit; and Farmer Organizations. A 3-months intensive programme was undertaken with a series of meetings to identify the critical success factors in the four thematic areas, the lead agency and associated budget. This was spearheaded by UCDA and Café Africa. A National Steering Committee (NSC), chaired by UCDA and having Café Africa as Secretariat, was constituted. The NSC informs the Uganda Coffee Platform (UCP) and was (and is still) charged with ensuring that the activities identified by the UCP are ably undertaken. District Coffee Platforms or District Steering Committees were later established which fed into the National Steering Committee.

The Uganda Coffee Platform has been instrumental in producing harmonized coffee extension materials, including You-tubes videos and DVDs to enhance accessibility, held District Coffee Extension Pilot training with 180 agronomists, 180 community-based facilitators and 60 youth model farmers who have acted as change agents in ensuring the adoption of Good Agricultural Practices by farmers. The National Coffee Platform also supported the Ministry of Agriculture, Animal Industry and Fisheries in the development of the Agricultural Extension Policy and Strategy.

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8. Uganda National Household Survey 2016/17
9. Uganda Population and Housing Census 2014 Report, Uganda Bureau of Statistics, March 2016

Marketed production (coffee procurement) coffee year 2012/13 to 2016/17, by type, by month (60-kg bags)

Month	CY 2012/13			CY 2013/14			CY 2014/15			CY 2015/16			CY 2016/17			
	ROBUSTA	ARABICA	TOTAL	ROBUSTA	ARABICA	TOTAL										
OCT	151,243	42,400	193,643	139,070	61,005	200,075	120,402	50,112	170,514	180,102	75,000	255,102	199,295	91,461	290,756	
NOV	180,116	60,252	240,368	179,072	86,258	265,330	161,141	72,009	233,150	182,459	85,006	267,465	325,310	94,180	419,490	
DEC	190,258	63,015	253,273	233,812	81,214	315,026	180,095	75,001	255,096	290,194	83,005	373,199	398,993	114,510	513,503	
JAN	280,415	85,102	365,517	225,023	75,219	300,242	250,136	78,084	328,220	297,890	85,009	382,899	393,867	94,627	488,494	
FEB	260,219	75,200	335,419	290,234	72,816	363,050	245,016	65,055	310,071	277,457	85,047	362,504	350,866	94,191	445,057	
MAR	240,005	71,018	311,023	325,123	60,217	385,340	220,147	60,144	280,291	202,819	82,037	284,856	341,754	89,209	430,963	
APR	201,505	60,002	261,507	200,429	52,014	252,443	180,706	61,056	241,762	214,005	80,113	294,118	243,897	72,992	316,889	
MAY	300,104	90,102	390,206	304,103	76,201	380,304	195,429	65,159	260,588	210,853	89,200	300,053	312,600	106,449	419,049	
JUN	310,184	87,106	397,290	293,100	76,650	369,750	295,125	70,058	365,183	230,004	75,002	305,006	373,303	109,368	482,671	
JUL	330,014	109,010	439,024	250,176	60,146	310,322	385,182	75,237	460,419	235,009	50,148	285,157	352,212	91,808	444,020	
AUG	300,147	89,100	389,247	215,975	65,235	281,210	342,059	75,004	417,063	242,313	48,555	290,868	309,211	96,915	406,126	
SEP	260,553	75,802	336,355	175,474	54,301	229,775	268,701	55,000	323,701	202,106	68,054	270,160	300,099	84,719	384,818	
TOTAL	3,004,763	908,109	3,912,872	2,831,591	821,276	3,652,867	2,844,139	801,919	3,646,058	2,765,211	906,176	3,671,387	3,901,409	1,140,429	5,041,837	

Cost of production and margins per hectare of Robusta coffee (Ugandan shillings)

ACTIVITY	Sub activity	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTALS
Establishment	Bush Clearing, Land Opening						
	Digging holes	550,000					550,000
	Planting into holes	220,000					220,000
	Manure	300,000	300,000	300,000	300,000	300,000	1,500,000
	Cost of seedlings	330,000					330,000
	Fertigation trenches	200,000	50,000	50,000	50,000	50,000	400,000
	Mulching	-	-	300,000	300,000	300,000	900,000
	Tools (hoes, pangas etc)	400,000			400,000		800,000
	Sub total	2,000,000	350,000	650,000	1,050,000	650,000	4,700,000
Maintenance	Weeding, training, pruning, applications	360,000	720,000	720,000	720,000	720,000	3,240,000
	Sub total	360,000	720,000	720,000	720,000	720,000	3,240,000
Inputs	Fertilizer	287,892	287,892	479,820	575,784	1,200,000	2,831,388
	Pesticides		50,000	100,000	100,000	100,000	350,000
	Herbicides		72,000	72,000	72,000	72,000	288,000
	Sub total	287,892	409,892	651,820	747,784	1,372,000	3,469,388
Harvesting	Labour			432,000	924,000	924,000	2,280,000
	Tarpaulins			225,000	225,000	225,000	675,000
	Drying			180,000	360,000	360,000	900,000
	Sub Total			837,000	1,284,000	1,284,000	3,855,000
Contingencies		195,500	88,600	151,610	175,640	175,640	786,990
TOTAL COSTS		2,843,392	1,568,492	3,010,430	3,977,424	4,201,640	15,601,378
PRODUCTION	Yield (Kg/ha)			3,000	3,300	3,630	
	Av. farm gate Price (Kiboko)			2,100	2,100	2,100	
GROSS INCOME		0	0	6,300,000	6,930,000	7,623,000	20,853,000
NET INCOME (UGX)		-2,843,392	-1,568,492	3,289,570	2,952,576	3,421,360	5,251,622

Source: UCDA

Cost of production and margins per hectare of Arabica coffee (Ugandan shillings)

ACTIVITY	Sub activity	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTALS
Establishment	Bush Clearing, Land Opening	550,000					550,000
	Digging holes	820,000					820,000
	Planting into holes	328,000					328,000
	Manure	300,000	300,000	300,000	300,000	300,000	1,500,000
	Cost of seedlings	492,000					492,000
	Fertigation trenches	200,000	50,000	50,000	50,000	50,000	400,000
	Mulching	-	-	300,000	300,000	300,000	900,000
	Tools (hoes, pangas etc)	150,000	20,000	20,000	20,000	20,000	230,000
	Sub total		2,840,000	370,000	670,000	670,000	670,000
Maintenance	Weeding, training, pruning, applications	360,000	720,000	720,000	720,000	720,000	3,240,000
	Sub total	360,000	720,000	720,000	720,000	720,000	3,240,000
Inputs	Fertilizer	-	-	480,000	480,000	480,000	1,440,000
	Pesticides	200,000	200,000	200,000	200,000	200,000	1,000,000
	Herbicides		72,000	72,000	72,000	72,000	288,000
	Sub total	200,000	272,000	752,000	752,000	752,000	2,728,000
Harvesting	Labour			432,000	924,000	924,000	2,280,000
	Tarpaulins			225,000			225,000
	Pulping and Drying			180,000	360,000	360,000	900,000
	Sub Total	0	0	837,000	1,284,000	1,284,000	3,405,000
Contingencies		170,000	68,100	148,950	171,300	171,300	729,650
TOTAL COSTS		3,570,000	1,430,100	3,127,950	3,597,300	3,597,300	15,322,650
PRODUCTION	Yield -Parchment(Kg/ha)	-	-	600	1,200	1,200	
	Av. farm gate Price			5,700	5,700	5,700	
GROSS INCOME		0	0	3,420,000	6,840,000	6,840,000	17,100,000
NET INCOME		-3,570,000	-1,430,100	292,050	3,242,700	3,242,700	1,777,350

*Arabica Coffee profitability is highly price sensitive since the cost of production is higher than that of Robusta. Profitability will be ensured in the next production cycle

Source: UCDA

Coffee exports by destination – Coffee years 2007/08 to 2017/18 (60-kg bags)

Destinations	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EU	2,498,397	2,312,104	1,939,235	2,365,159	1,828,300	2,468,890	2,373,392	2,403,547	2,254,512	2,846,675	2,725,085
Sudan	440,834	429,981	499,755	460,032	427,573	454,007	577,348	508,506	455,970	663,816	597,714
Switzerland	73,089	16,525	98,626	119,797	42,130	33,903	58,952	55,767	22,108	71,282	29,723
USA	27,065	90,455	79,485	95,168	106,489	195,561	77,105	106,939	117,985	152,821	178,605
India	70,560	50,104	-	-	72,868	90,080	99,604	94,720	131,532	233,072	222,956
Russia	-	-	5,186	26,280	34,101	22,148	20,891	32,192	32,710	28,975	30,777
UAE							1,313	2,240		654	836
Israel	14,170	12,640	22,650	23,741	20,347	12,858	18,279	18,650	25,609	21,764	36,319
Egypt	2,569	3,735	670	10,476	8,973	-	960	320	2,580	320	1,298
Australia	4,770	3,820	4,480	9,370	7,040	5,130	8,998	8,417	4,380	7,003	9,047
Eritrea	3,436	-	-	-	-	-	1,380				
China	3,349	-	-	0	7,815	4,710	10,696	20,968	13,227	18,205	15,910
Algeria	4,676	-	-	9,352	7,988	2,280	1,670		6,065	99,551	85,993
Kenya	-	1,628	320	8,561	17,584	1,364	2,652	2,490	660	2,937	8,438
Morocco	9,998	4,730	4,614	7,900	-	36,112	61,475	34,590	44,197	134,663	132,471
Japan	26,678	7,920	2,890	5,937	7,059	19,130	24,032	42,685	19,980	39,955	21,356
Canada	-	1,787	5,450	5,382	-	1,470	1,490	5,470	1,606	30,854	22,213
Norway	-	-	-	960		-					
Singapore	27,708	9,018	5,610	668	1,540	24,241	25,274	35,639	9,708	9,120	2,577
Hong-Kong	-	-	-	640	320	320	320		660		640
Syria	-	10,606	-	-	-	1,280				1,934	
Ecuador	-	2,560	-	-	65,291	44,052	30,090				
South-Africa	-	1,278	-	-	18,931	5,610	18,425	26,425	26,421	32,808	30,747
Vietnam	-	-	-	-	17,974	960			7,323	1,600	6,183
Middle East	-	-	-	-	15,559	2,240					
Mexico	-	-	-	-	960		1,280	6,080	35,200	15,053	15,400
UK									10,760	10,872	32,601
Taiwan	-	-	-	-	2,800	1,340	3,000	2,400	3,900	3,965	7,070
S. Korea	-	-	-	-	-	18,118	63,507	32,833	40,819	19,965	23,704
Tunisia	-	-	-	-	14,607	125,814			36,550	133,210	
New Zealand							890	11,736	4,130	13,734	648
Ukraine								2,240			6,634
Madagascar											43,924
Turkey									889	6,299	3,432
Cape Verde									1,600	1,280	2,560
Others	3,304	94,797				11,011	16,806	3,238	2,246	2,771	10,736
Grand-Total	3,210,603	3,053,688	2,668,971	3,149,423	2,726,249	3,582,629	3,499,829	3,455,852	3,315,567	4,605,158	4,305,597

Uganda's certified/sustainable coffee exports by coffee year, by type (60-kg bags)

GRADE	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Robusta										
Organic	6,505	5,657	10,264	5,480	6,770	5,494	6,780	21,428	8,230	13,545
Organic Robusta Utz							950			13,545
Robusta Utz					990	2,310	1,670		700	1,050
Washed	17,330	13,495	19,709	14,247	10,239	25,730	29,715	21,500	18,956	21,946
SC 15 Utz						990	1,440			
Robusta TOTAL	23,835	19,152	29,973	19,727	17,999	34,524	40,555	42,928	27,886	50,086
Arabica										
Mt. Elgon A+ Utz							2,100			
Mt. Elgon Utz								640		
Mt. Elgon A+						12,361	37,161	2,395	20,288	12,851
Mt. Elgon A						1,630	2,650	25,305	9,834	43,194
Mt Elgon AA								150	690	2,007
Mt. Elgon CPB									700	
Mt. Elgon						16,019	2,840	1,110	700	
Rwenzori AA									586	333
Rwenzori A+									3	10
Rwenzori						1,020	320		21	360
Rwenzori A									4,536	2,440
Kisoro PB										4
Bugisu UTZ										1,770
ORGANIC	31,951	21,426								
Sipi Falls						3,536	4,780	9,055	6,610	9,121
White Nile										2,570
Organic Bugisu			13,500	18,740	33,854	1,280	4,160	17,361	11,780	11,193
Bugisu RFA						1,120				
Organic Okoro			10,585	19,408	3,414	17,810	8,200	12,480	9,120	7,180
Okoro RFA						320				
Organic Drugar					6,478	4,910	4,360	1,340	11,233	5,094
Organic Wugar					2,448		2,398	1,031	2,880	2,430
Arabica Total	31,951	21,426	24,085	38,148	46,194	60,006	68,969	70,867	78,981	100,557
GRAND TOTAL	55,786	40,578	54,058	57,875	64,193	94,530	109,524	113,795	106,867	150,643

* Washed Robusta is taken as a sustainable coffee

Value of exports of merchandise (US\$ millions), by calendar year

Tradables	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Exports (in US\$ million)										
1. Coffee (Value)	398.12	280.21	284.64	466.66	372.50	425.41	407.40	402.63	371.65	555.44
Volume ('000,000 60-Kg bags)	3.31	3.02	2.66	3.14	2.69	3.69	3.45	3.60	3.54	4.78
Av. unit value	2.00	1.54	1.78	2.48	2.31	1.91	1.99	1.86	1.75	1.94
2. Non-Coffee formal exports	1,255.42	1,242.81	1,351.00	1,696.63	1,984.25	1,982.05	1,902.79	1,865.43	2,130.36	2,245.44
Electricity	11.66	13.13	12.53	16.32	15.62	17.28	34.20	17.03	21.32	56.10
Gold	50.27	23.07	30.08	7.54	7.82	3.25	0.24	35.75	339.54	317.93
Cotton	17.53	19.64	21.19	85.88	76.00	31.42	21.83	20.57	31.43	50.70
Tea	47.35	58.61	68.26	71.81	73.90	85.62	84.70	69.94	71.58	79.72
Tobacco	72.73	61.70	69.35	54.52	61.59	114.94	65.27	73.13	61.73	46.22
Fish & its prod. (excl. regional)	131.14	113.03	133.82	142.47	121.30	106.99	134.09	117.56	121.80	137.07
Hides & skins	13.01	6.17	17.15	33.05	41.41	63.75	73.34	62.71	51.66	53.22
Simsim	14.15	11.50	12.87	17.28	11.56	28.61	55.11	52.20	14.52	17.27
Maize	18.12	26.54	35.42	27.34	59.16	42.09	47.26	90.97	70.17	95.91
Beans	12.78	10.87	7.96	18.86	12.68	16.02	25.12	53.88	38.26	84.21
Flowers	46.48	46.90	46.55	52.48	52.67	56.80	57.49	51.44	51.65	57.72
Oil re-exports	54.17	102.77	106.97	106.86	132.96	136.77	149.11	131.25	119.86	129.37
Cobalt	20.23	15.43	16.75	17.64	14.24	10.11	0.00	0.00	0.00	0.00
Others	745.80	733.47	772.13	1,044.58	1,303.34	1,268.39	1,155.02	1,089.00	1,136.84	1,120.00

Source: Bank of Uganda Statistics Department