MINISTRY OF AGRICULTURE, ANIMAL
INDUSTRY AND FISHERIES

Uganda Coffee Development Authority

ANNUAL REPORT

VOLUME 23

OCTOBER 01, 2013 – SEPTEMBER 30, 2014

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

FOREWORD

Once again the Coffee sub sector registered a growth and robustness during the year despite the continuation of challenges spilling from the previous year(s). These included creeping enduring climate change and pernicious coffee diseases and pests. 2013/14 tested the capacity of Uganda Coffee Development Authority to perform our national obligations and we were not found wanting. We were well positioned to take full advantage of opportunities that came our way as we took on the challenges. UCDA fully and quickly embraced Government's clear efforts to increase production through the 3 year 100 million coffee seedlings (for planting) per year Programme. We are also happy with the results of efforts during the period, to encourage women and youth to get somewhere and anywhere onto the coffee value chain.

The operationalization of the National Coffee strategy subsequent to the launch in August 2014 by the Minister of State for Animal Industry, Hon. Bright Rwamirama, of the National Agricultural policy, tied in very well with the Seedlings Plan and set the stage for coordinated action to the benefit of, among others, the UCDA and the general coffee sub-sector. A foundation was laid and a direction to follow indicated by these Government initiatives.

In house, UCDA continued to give emphasis to the following areas: Productivity and Production, Quality Improvement, Research and Information dissemination. Coffee-road shows spearheaded by the Uganda Coffee Federation were (at) the vanguard of promotion of domestic consumption of local coffee (not just any coffee). The campaign was associated with the National Development Plan (NDP) and the Development Strategy and Investment Plan (DSIP) of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)

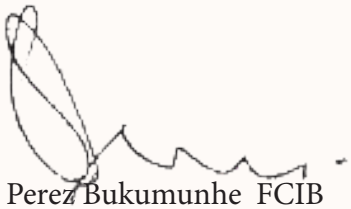
Coffee Year 2013/14, returned a slight drop in Uganda's exports to 3.5 million 60-kilo bags valued at US$ 394 million from 3.58 million 60-kilo bags worth US$ 433 million exported in Coffee Year 2012/13. Uganda had exported 2.73 million bags worth US$ 393 million in Coffee Year 2011/12. The drop was to a larger extent on account of the drought which affected some major coffee growing areas particularly south of the equator. Indeed the problem of changing weather patterns and resulting persistent/prolonged draught periods needs urgent attention. This is so particularly because while the trees are starving for lack of water, pests and diseases on the other hand appear to increase more dramatically, worsening the situation.

While UCDA made commendable steps to support some farmers by providing water harvesting and retention facilities, it is clear that the enormity of investment required is much more than UCDA can ordinarily muster. Irrigation accounts for just about 2% so far nationwide. A water-smart national agriculture policy is urgently

needed to support all water dependant sectors of the economy. Research may eventually provide partial answers through development of disease and or harsh weather resistant varieties of coffee (and indeed some of these have been developed for UCDA) but that cannot be the complete solution to the conundrum; certainly not in the short term as in any case multiplication takes time and or can be very expensive.

UCDA was (and continues to be) a beneficiary of critical support from stakeholders and various development partners and friends. Government continued to assist us deliver and the newly created voluntary Parliamentary Coffee Platform provided needed encouragement to the Authority. UCDA also received very useful support and corroboration from various sources including USAID, aBI Trust, The Uganda National Coffee Platform, The World Bank & International Monetory Fund (IMF), International Coffee Organisation (ICO), and DANIDA. We are grateful to them all and trust they will respectively stay with us for many years to come.

The current Board of Directors was installed two and five months respectively before close to the end of the fiscal and coffee years. The directors worked hard to clear the back log of work inherited and I am grateful to them for their commitment. Management and staff stayed the professional course and continued to do their best. They were (and to some degree remain) stretched in numbers but they pushed on to ensure that the Authority remained relevant to the nation as a whole not just the Coffee sub-sector. I thank them too most sincerely.



Perez Bukumunhe FCIB
UCDA Board Chairman

ACRONYMS

4Cs	Common Code for Coffee Communities
ABC	Africa Barista Championship
ACSS	African Crop Science Society
AFCA	African Fine Coffees Association
ATAAS	Agricultural Technology and Agribusiness Advisory Services
AGT	Agro Technology Laboratory
ACA	Africa Coffee Academy
BCCCL	Beijing Chenao Coffee Company Limited
BCTB	Black Coffee Twig Borer
BCU	Bugisu Co-operative Union
BOD	Board of Directors
CB	Colombian Lines
CBD	Coffee Berry Disease
CBN	Community Based Nurseries
CCTV	Closed-Circuit Television
CLR	Coffee Leaf Rust
CORE	Centre For Robusta Excellence
COREC	Coffee Research Centre
COSASE	Committee on Statutory Authorities and State Enterprises
CQI	Coffee Quality Institute
CWD	Coffee Wilt Disease
DFI	District Farm Institute
DSIP	Development Strategy and Investment Plan
EU	European Union
EEA	Enabling Environment For Agriculture Activity
FAQ	Fair Average Quality
FUE	Federation of Uganda Employers
GAPs	Good Agricultural Practices
GHPs	Good Handling Practices
GMPs	Good Manufacturing Practices
HR	Human Resource
IACO	Inter-Africa Coffee Organization
ICA	International Coffee Agreement
ICC	International Coffee Council
ICO	International Coffee Organization
ICGU	Institute of Corporate Governance Uganda
IITA	International Institute of Tropical Agriculture
IPM	Integrated Pest Management
IRD	Institute for Development Research
JCRC	Joint Clinical Research Center
KARI	Kawanda Agricultural Research Institute
KIU	Kampala International University

KYU	Kyambogo University
MAAIF	Ministry of Agriculture, Animal Industry & Fisheries
MAS	Marker Assisted Selection
MASL	Meters Above Sea Level
MC	Moisture Content
MoFPED	Ministry of Finance, Planning and Economic Development
MoLG	Ministry of Local Government
MUK	Makerere University Kampala
NAADS	National Agricultural Advisory Services
NaCORI	National Coffee Research Institute
NARO	National Agriculture Research Organization
NES	National Export Strategy
NDP	National Development Plan
NGOs	Non-Governmental Organisations
NTOH	National Taste of Harvest
NUCAFE	National Union of Coffee Agribusinesses and Farm Enterprises
NSC	National Steering Committee
OT	Out-turn
OWC	Operation Wealth Creation
PFA	Prosperity For All
PMU	Privatization Monitoring Unit
PPDA	Public Procurement and Disposal of Asserts Authority
RFA	Rain Forest Alliance
RCBD	Randomised Complete Block Design
SCAA	Specialty Coffee Association of America
SCAE	Specialty Coffee Association of Europe
SCAJ	Specialty Coffee Association of Japan
SSR	Simple Sequence Repeat
UCDA	Uganda Coffee Development Authority
UCTF	Uganda Coffee Trade Federation
UMA	Uganda Manufacturers Association
UNAA	Ugandan North American Association
UNADA	Uganda National Agro-Input Dealers Association
UNCC	Uganda National Cup-Tasters Competition
USAID	United States Agency for International Development
USDA	United States Development of Agriculture
UF	University of Florida
WBC	World Barista Championship
WTO	World Trade Organization
ZARDI	Zonal Agricultural Research Development Institute

EXECUTIVE SUMMARY

In the Coffee Year (CY) 2013/2014, Uganda Coffee Development Authority (UCDA) implemented coffee development programs taking into account the current Government plans, namely: Development Strategy and Investment Plan (DSIP) of the Ministry of Agriculture Animal Industry and Fisheries (MAAIF), the National Development Plan (NDP) and the National Coffee Policy. The strategic objectives the Authority pursued were:

- *Production of planting materials, especially for 7 CWD resistant lines using tissue culture and nodal cuttings propagation methods.*
- *Containment and management of pests and diseases.*
- *Support to coffee research.*
- *Promotion of coffee replanting and rehabilitation*
- *Support to coffee development in Northern Uganda*
- *Promotion of sustainable coffee production initiatives*
- *Quality improvement through Technical Extension Service and collaboration with stakeholders*
- *Quality Assurance, Value Addition for domestic consumption and generic promotion*

COFFEE MARKET PERFORMANCE

In the coffee year 2013/14, a total of 3.50 million 60-kilo bags (210,000 tonnes) worth US $ 393.92 million were exported to various destinations. This represent a percentage decline in volume of 2% and a 9 % decline in value compared to the CY 2012/13. By coffee type, this comprised 2.74 million bags of Robusta (164,267 tonnes) valued at $ 285.62 million and 0.76 million bags (45,723 tonnes) of Arabica valued at $ 108.30 million.

The weighted average price at export level stood at US $ 1.88 per kilo 13 cents below what was realized in the previous year. The weighted average price for Arabica stood at $ 2.36 per kilo, 3 cents lower than $2.39 per kilo realized in the previous year. Robusta's weighted price was $ 1.74 per kilo, 16 cents lower than $1.90 per kilo realized in 2012/13 year. The drop in realized export prices was in tandem with the global scenario, which was characterized by high stocks in importing countries and frontloading in key export countries.

69% of total exports were shipped to European Union (EU) compared to 71% last year. Coffee exported to Sudan was 13% compared to 16% exported in the previous year 2011/12.

A total of 54 exporting companies were registered during the year and 48 performed compared to 42 in the previous year. The best 10 companies had a market share of 73% compared to 81% the previous year reflecting reduced concentration at the exporter level during the year. At post-harvest level, 495 industry players were registered in the Coffee Year compared to 394 in the previous year.

QUALITY AND REGULATORY SERVICES

In quality improvement program, the quality of coffee in the field was evaluated in terms of Out-Turn (OT), Moisture Content (MC) and screen size distribution. The results indicates that the quality of both Arabica and Robusta coffee at the primary processing level improved especially in moisture and bean size compared to the previous coffee year.

At the exporter level, 840 FAQ coffee samples (671 Robusta, 158 Drugar and 11 Wugar) were analyzed using the export grading Form 5. There was a high

performance that was achieved through increased inspection of FAQ deliveries at exporter level. The moisture content, screen retention above screen 15 and out turn were 13.16%, 71.5%, 81.78% respectively for Robusta export delivery samples. While, the moisture content, screen retention above screen 16, out turn and defects were 13.04%, 73.2% and 80.3% respectively for Drugar samples. Wugar samples had the moisture content, screen retention above screen 16 and out turn were 12.2% and 71.9% and 89% respectively. The washed Arabica coffees performed better in all parameters compared to all the other coffees.

In the field of quality assurance, a slight decrease in clean cups was registered. Washed and certified Arabica coffee recorded the best cup largely attributed to establishment and strict observance of post-harvest procedures in addition to certification process prescribing ethical, health and environmental standards. The work on the review of Robusta coffee protocols/standards was continued. These protocols have made it possible for Uganda to differentiate the coffee and sell the high quality lots in the specialty/ fine markets after qualifying in the annual Taste of Harvest Competitions.

There was an increase in the volume of coffee referred for re-processing from 33,579 bags in 2012/13 to 51,229 bags in 2013/14. The referrals were due to high moisture content, low screen retention, withered and float. The low screen retention was as a result of poor machine setting while withered and floats occurred due to drought at bean formation. The high occurrence of rejections was mainly due to low screen retention, which will be rectified by the training of machine operators.

A number of training programs were undertaken including training in Basic Quality Control; Barista training; training of coffee roasters and brewers; training of trainers in Robusta-R and Arabica –Q graders; farmers; and certification of Robusta and Arabica graders.

On promotion of domestic coffee consumption, UCDA participated in local trade fairs and exhibitions to promote Uganda coffee. UCDA supported formation of university coffee clubs to attract the youth to participate in coffee activities such as barista championships and enhance coffee consumption.

UCDA promoted Uganda coffee on the global market through participation in international trade fairs, exhibitions and maintaining promotional center in China for the Asia-Pacific region.

PRODUCTION

Promotion of Planting Material Production

UCDA promoted planting material production by distributing 34.2 MT of Elite Robusta and Arabica seed to private nursery operators through field officers, Local leaders, Political leaders, organized farmer Associations and Exporter based farmer groups. This potentially raised 68.4 million seedlings. Under multiplication of CWD – Resistant lines at the National Coffee Research Institute (NaCORI), 60 Nursery operators were allocated 25,000 plantlets to establish mother gardens for subsequent generation of clones for expansion of the mother gardens. This brings the cumulative number of nursery operators to 143, with a total of 60,100 mother bushes established. Tissue Culture – Weaning and hardening of the Tissue culture plantlets supplied by AGT 50,200 carried out at NARL – Kawanda.

Supported Buginyanaya (Sironko District), Zombo (Zombo District) Arabica seed gardens. This is to ensure a sustainable source of clean and certified seed. These sites generated 3,620 Kgs of seed. To ensure sustainability of programmes in the new coffee growing areas, especially in Northern and North Eastern Uganda, support was provided to the

seed gardens at Ngetta ZARDI (Lira District) and Serere ZARDI (Serere District). These sites produced 450 Kgs of Elite Robusta seed.

Management of Diseases and Pests

This was mitigated through Spraying against the Black Twig Borer in all regions. A total of 34 Districts were sprayed. A total of 2,410 liters of chemical was used covering 4,121 acres. This intervention benefitted 2,367 households.

Promotion of Coffee Replanting

A total of 37.41 million seedlings were planted under various initiatives benefiting a total of 226,859 households. 0.62 million seedlings were planted by 38 commercial farmers.

Coffee Rehabilitation

The Authority established 250 demonstration plots in order to demonstrate the benefits of rehabilitating old coffee trees to farmers. These demonstration acted as centers of training and knowledge acquisition. This was complemented with farmer's competition. Out of this initiative, 1,071 farms (518.05 acres) of coffee across the country were rehabilitated.

Support to Coffee Development in Northern Uganda

A total of 89 community based nurseries were formed and registered with capacity to generate 1.8 million seedlings. The cumulative number of community based nurseries is 239 with a cumulative capacity of generating 4.8 million seedlings in the region. There has been a continued improvement in the survival rates of seedlings to over 85%, except in periods of prolonged dry spells.

Raised 2.626 million coffee seedlings in collaboration with Community based nursery operators, and 1,826,992 seedlings were planted together with 36,600 shade trees, all benefitting 4,300 households.

Facilitated 39 Farmer Field School (FFS) sessions with 722 participants. And established 20 Technology Development Sites (TDS), and 13 old ones supported to act as training and demonstration sites on new technologies. These sites are also used as multiplication fields for banana suckers distributed to farmers for intercropping with coffee. In this regard, 6,000 banana suckers were distributed benefiting 120 households. This, together with cover crops, provides early incomes to coffee farmers besides catering for food security.

A total of 170.3 MT of Kiboko sold by farmers at average price of shs. 1500 per Kg lower than the previous price of Sh. 1,800/= per kilo.

Promotion of Sustainable Coffee Production Initiatives

10 Farmer groups were trained on Organic and Fairtrade production practices in Zombo (2), Bushenyi (2) Kapchorwa (2), Kween, Sironko, Kisoro and Kasese (2). The training covered all aspects in sustainable coffee production systems.

Carried out soil analysis in collaboration with University of Florida (UF). The report, highlighted soil nutrient status. The major finding were that Soil deficiencies with respect to nutrients, PH vary across the coffee growing areas, there is a substantial difference in nutrient requirement in Robusta and Arabica growing areas and that nutrient requirement varies with age of the coffee plant.

Farmer Training and Extension Liaison

Conducted 27 Coffee shows in 27 districts. The main purpose of the coffee shows is to showcase better practices along the coffee value chain and create interaction between farmers and other stakeholders, especially input suppliers. It was done in collaboration with other stakeholders under the coffee production campaign.

Carried out 384 Seminars, with 39,387 farmers (12,532 or 32% were women) in all coffee growing districts. These trainings address all aspects of coffee production, quality improvement and enforcement of coffee regulations. These were supplemented with 2,700 minutes of radio messages.

COFFEE RESEARCH

UCDA support to coffee research during the year was directed towards the development and promotion of new technologies for effective and sustainable management of Coffee Wilt Disease (CWD) and the Black Coffee Twig Borer (BCTB) on Robusta coffee, and Coffee Leaf Rust (CLR) and Coffee Berry Disease (CBD) on Arabica coffee. Further efforts was directed towards enhancing availability of adequate planting material through both direct provision of mother plants and giving support to nursery operators. Socioeconomic studies to support the uptake of the technologies was undertaken.

The three program research areas undertaken focused on coffee variety and seed systems improvement, Coffee Integrated Pest Management and Coffee Production Systems Program that involved development and promotion of improved coffee cropping systems for enhanced productivity in different agro-ecologies of Uganda.

FINANCE AND ADMINISTRATION

Uganda participated in the 112th and 113th Council Sessions of the International Coffee Council (ICO) and the 53rd Inter-Africa Coffee Organization (IACO) Annual General Assembly. At the November 2013 meeting, Uganda was selected to host the 54th Annual General Assembly and the 2nd African Coffee Symposium.

UCDA continued to enhance its corporate social responsibility by partnering with institutions and supporting community causes that are for the common good. This was demonstrated through providing internship opportunities to university students, participation in charity events, provision of seedlings to special interest groups and subscriptions to various institutions.

UCDA together with the Parliamentary Committee on Agriculture conducted field visits to Western, South Western and Central Regions. The Committees appreciated the coffee programmes but noted pest and disease prevalence, and the impact of climate change on coffee production.

Hon. Tress Bucyanayandi
Minister of Agriculture, Animal Industry & Fisheries

Hon. Dr Zerubabbel Nyiira
Minister of State for Agriculture

UCDA BOARD OF DIRECTORS

Mr. Perez Bukumunhe
Board Chairman

Hon. Gerald Ssendaula
Representative of Coffee Farmers

Mr. Hannington Karuhanga
Representative of Coffee Exporters

Mr. Valentine Okot Otanu
Representative of Coffee Farmers

Mr. Robert Waggwa Nsibirwa
Representative of Coffee Exporters

Hajj Ayub K. Kalule
Representative of Processors

Mrs. Rose Kato
Representative of Coffee Processors

Mr. Silver Ojakol
Commissioner, External Trade Representative of MTIC

Dr. Albert Musisi
Assistant Commissioner, Budget Representative of MFPED

Beatrice Byarugaba
Commissioner, Crop Production & Marketing

Mr. Fred Luzinda
Board Secretary/Head of Finance & Administration UCDA

Mr. Henry Ngabirano
Managing Director

UCDA - Senior Staff

Mr. Henry Ngabirano
Managing Director

Mr. Fred Luzinda
Board Secretary/Head of Finance & Administration UCDA

Mr. Norman Mutekanga,
Manager Strategy and Business Development

Mr. Edmund Kananura,
Quality & Regulatory Service Manager

Mr. Francis Chesang,
Production Manager

Mr. James Kizito-Mayanja,
Principal Information Officer

Mr. Edward Lutakome Ssentamu,
Principal Development Officer, Central

Ms. Angelita Musimenta,
Principal Human Resource Officer

Ms. Nina Nassuna
Principal Accountat

Mr. Frederick Sewaya,
Principal Development Officer, Eastern

Mr. Samuel Samson Omwa,
Principal Business Development Officer

Mr. Appollo Kamugisha,
Principal Developement Officer, South Western

Mr. William Rugadya
Principal Internal Auditor

Mr. Jimmy Baluku,
Principal Development Officer, Western

Ms. Doreen Rweihangwe,
Principal Quality Controler

Mr. Mike Maliro,
Principal Development Officer, Northern

Mr. Eliot Ainomugisha
Head, Procurement & Disposal Unit (PDU)

CHAPTER ONE:
COFFEE MARKET PERFORMANCE

1.1 General Performance

For the coffee year ended September 30, 2014, a total of 3.50 million 60-kilo bags (210,000 tonnes) worth US $ 393.92 million were exported to various destinations. This comprised 2.74 million bags of Robusta (164,267 tonnes) valued at $ 285.62 million and 0.76 million bags (45,723 tonnes) of Arabica valued at $ 108.30 million.

Nearly 70% of total exports were imported by European countries, 19% went to Africa, Asia took 8% and the rest went to America and Australia.

The weighted average price at export level stood at US $ 1.88 per kilo 13 cents below what was realized in the previous year. The weighted average price for Arabica stood at $ 2.36 per kilo, 3 cents lower than $2.39 per kilo realized in the previous year. Robusta's weighted price was $ 1.74 per kilo, 16 cents lower than $1.90 per kilo realized in 2012/13 year. The drop in realized export prices was in tandem with the global scenario, which was characterized by high stocks in importing countries and frontloading in key export countries.

1.2 Coffee Procurement

Marketed coffee production stood at 3.65 million bags (219.0 tonnes), a 6.6% drop compared to 3.91 million bags (234.6 m/tonnes) realised in 2012/13. The drop cut across the two types of coffee. Robusta fell by 5.8% from 3.00 million bags in 2012/13 to 2.83 million bags; and Arabica dropped by 9.6% to 0.82 million bags down from 0.91 million bags in 2012/13. The decline was explained by the off-year cycle characteristic of Arabica production while that of Robusta was more to the Black Coffee Twig Borer.

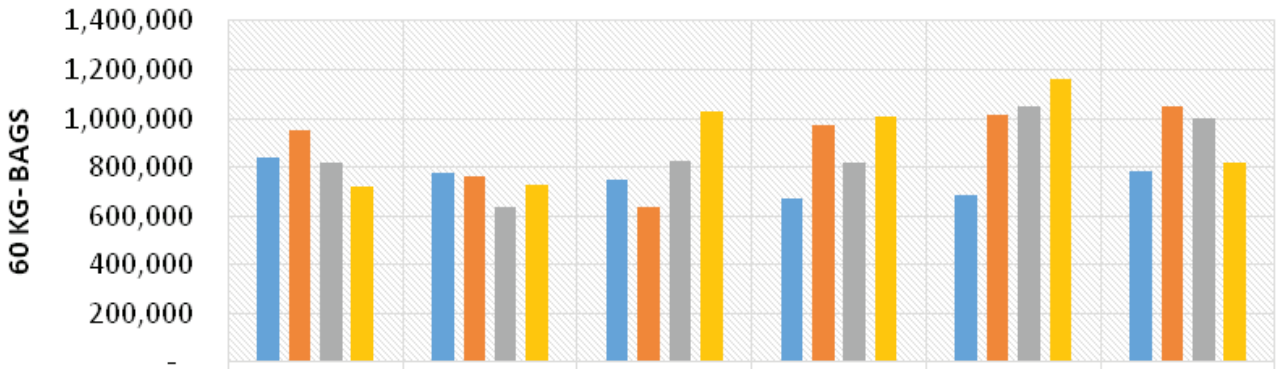
Table 1.2.1 represents marketed coffee (FAQ and Arabica parchment) to the export grading factories in the last five years while Figure 1.1 shows the quarterly coffee procurement trends in the past 6 years. Although coffee procurement had registered the highest volumes during the last quarter (July-September), the main harvesting and marketing season for Masaka and the South-Western regions during the previous three years (2010/11, 2011/12 and 2012/13), it was not so in coffee year 2013/14 in line with the earlier years (2008/09 and 2009/10) where most coffee was procured in the second quarter.

Table 1.2.1 Coffee Procurment by Type 2009/10-2013/14 in 60 kg Bags

Coffee Year	Coffee Type		TOTAL	%-Age Change Over Pwrevious Yr
	Robusta	Arabica		
Average	2,551,919	816,190	3,368,109	-
2013/14	2,828,831	824,036	3,652,867	-6.64
2012/13	3,004,763	908,109	3,912,872	25.64
2011/12	2,224,302	890,061	3,114,363	-4.66
2010/11	2,622,380	644,185	3,266,565	12.88
2009/10	2,076,557	817,319	2,893,876	-14.08

A severe drought hit Masaka and the South-Western regions affecting the main crop at the critical stage of bean development. Nonetheless, the quality of the coffee was reportedly good as reflected in the next chapter.

Figure 1.1 Comparative Quarterly Coffee Procurement Figures 60 Kilo Bags



	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14
Q1	838,461	773,876	746,480	669,564	687,284	780,431
Q2	953,451	762,227	637,704	975,312	1,011,959	1,048,632
Q3	819,406	632,645	826,785	814,676	1,049,003	1,002,497
Q4	720,849	725,128	1,027,129	1,004,811	1,164,626	821,307

1.3 Closing Stocks

Table 1.3.1 shows Uganda's coffee balance as at the close of the coffee year Oct/Sept 2013/14. A total of 649,975 bags of coffee (Robusta - 483,649 bags and Arabica – 166,326 bags) were in stock at various levels within the supply chain, with 95% held at exporter level in various grades. The high stocks especially for Arabica was ascribed to low global prices due to adequate supply, especially from Brazil, a good harvest from Vietnam and a number of other major origins. The year experienced a slowing demand from the traditional markets especially in Europe, which experienced an economic meltdown and Brazil whose consumption growth was reduced during the year.

Table 1.3.1 Closing Stocks as on September 30, 2014

Oct 2013-Sep 2014	Coffee Type – 60Kg Bags		Total
	Robusta	Arabica	
Opening Stock Oct 01, 2013	561,438	156,299	717,737
Total Production	2,828,831	824,036	3,652,867
Availability	3,390,269	980,335	4,370,604
Domestic Coffee Consumption	171,600	49,200	220,800
Exports	2,735,020	764,809	3,499,829
Closing Stock Sept 30, 2014	483,649	166,326	649,975

1.4 External Market

1.4.1 Coffee Export Performance

A total of 3,499,829 60-kilogram bags (Approx 210,000 tonnes) worth US $ 393.92 were exported to various destinations during the year; a drop in both quantity and value of 2.31% and 8.96%, respectively compared to the previous year.

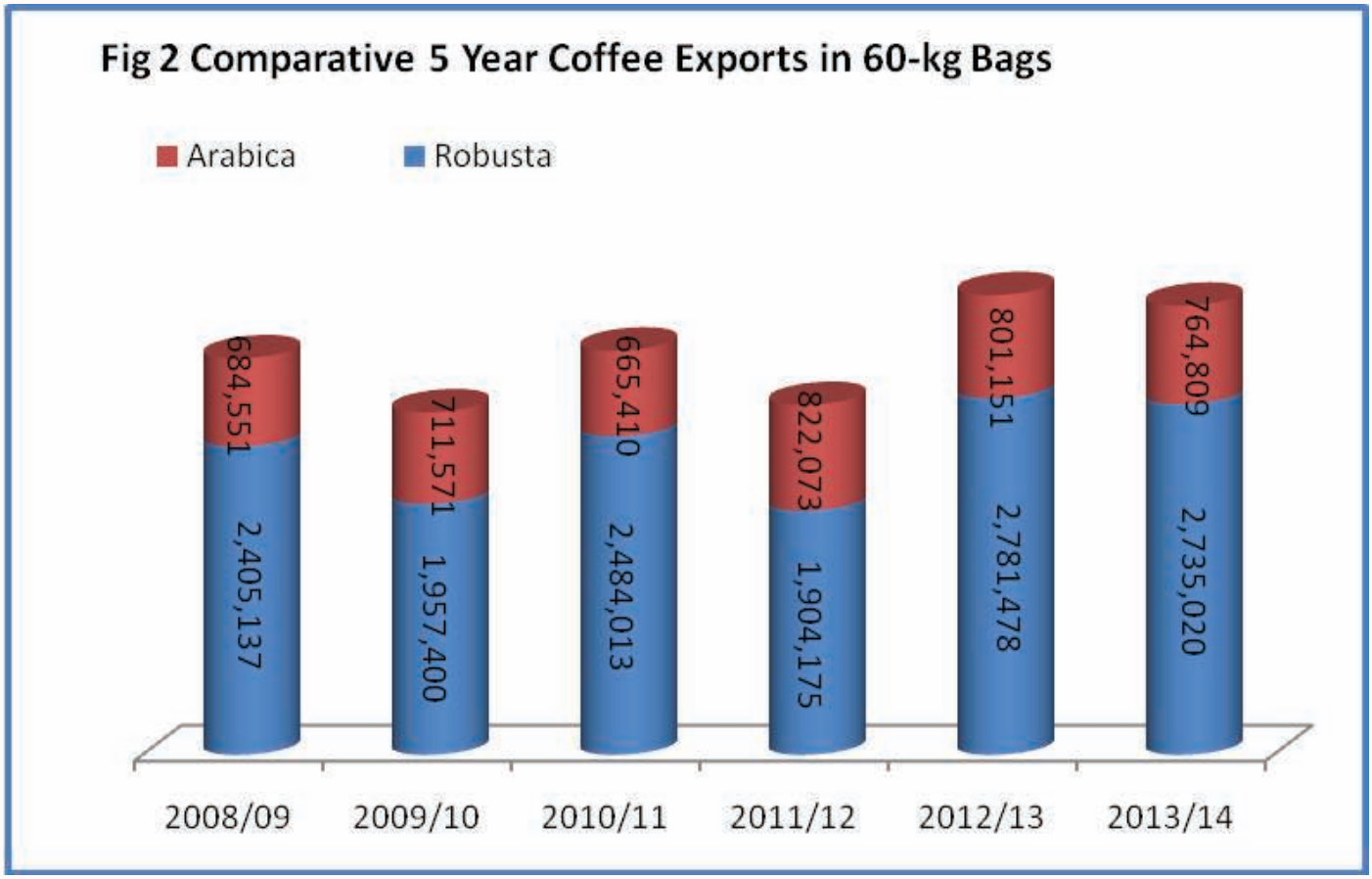
Table 1.4.1 represents Uganda's coffee export performance on a monthly and quarterly basis in terms of quantity and value during the year in comparison to last year. The second quarter registered the highest volume and value of export in absolute terms.

Table 1.4.1 Monthly and Quarterly Coffee Exports in 60 Kilo Bags and US$

MONTHS	2013/14		2012/13		%-Age Change	
	Qty	Value $			Qty	Value $
G/ Total	**3,499,829**	**393,922,335**	**3,582,629**	**432,694,059**	**-2.31**	**-8.96**
October	210,552	22,738,119	178,024	23,495,286	18.27	-3.22
November	263,733	26,649,752	224,396	28,966,727	17.53	-8.00
December	257,386	25,217,747	243,181	30,464,232	5.84	-17.22
Qtr - 1	**731,671**	**74,605,617**	**645,601**	**82,926,245**	**13.33**	**-10.03**
January	391,092	38,846,691	345,114	42,564,818	13.32	-8.74
February	355,449	35,511,412	343,130	42,106,104	3.59	-15.66
March	347,663	38,772,433	309,190	37,804,890	12.44	2.56
Qtr - 2	**1,094,204**	**113,130,536**	**997,434**	**122,475,812**	**9.7**	**-7.63**
April	332,635	40,486,180	247,429	30,326,868	34.44	33.50
May	286,448	35,844,953	392,385	42,824,531	-27.00	-16.30
June	264,611	32,823,086	361,521	44,535,652	-26.81	-26.30
Qtr - 3	**883,694**	**109,154,219**	**970,753**	**117,687,052**	**-8.97**	**-7.25**
July	314,304	37,862,273	395,564	48,671,697	-20.54	-22.21
August	268,033	32,469,005	318,394	35,942,943	-15.82	-9.67
September	207,923	26,700,684	224,301	24,990,309	-7.30	6.84
Qtr - 4	**790,260**	**97,031,963**	**968,841**	**109,604,950**	**-18.43**	**-11.47**

Figure 1.2 below, illustrates annual coffee export quantities by type – Robusta and Arabica in 60-Kg bags in the past five (5) years. Robusta exports decreased during coffee year 2013/14 compared to the previous year while Arabica exports reduced slightly on account of lower global prices, which led to stockpiling and holdbacks in anticipation of high prices in the future. This was also supported by a high stock level at the close of the season especially for Arabica.

Figure 1.2 Comparative 5 Year Coffee Exports in 60 Kilo Bags



1.4.2 Coffee Exports by Type and Grade

Table 1.4.2 illustrates coffee exports by type (Robusta and Arabica), grade and average realised prices for each during Coffee year 2013/14 in comparison to 2012/13. The table shows increased price differentials especially of Arabica coffee with distinct price premiums between Specialty/Sustainable and conventional coffees. In Robusta, Organic Robusta Utz fetched $ 2.16 per kilo and Washed Robusta fetched $ 2.02 per kilo, a premium of 26 and 12 cents respectively over Screen 18. In Arabica, Mt. Elgon Utz fetched the highest price of $ 3.38 per kilo, a premium of 96 cents over Bugisu AA in the conventional market, which was sold at $ 2.42 a kilo while Sipi Falls, which had fetched the highest price of $ 3.62 per kilo the previous year dropped to an average of $ 2.55 a kilo had a premium of only 13 cents over Bugisu AA in line with global price trend during the year.

The percentage of speciality/sustainable coffee exports increased from 2% in CY 2012/13 to 4% in CY 2013/14. This could be attributed to the sustainable coffee production promotion efforts that has been implemented over the years.

Table 1.4.2 Comparative Coffee Export Grades and Unit Prices

Coffee Type/Grade	2013/14			2012/13		
	Quantity	Value	Unit/Kg	Quantity	Value	Unit/Kg
TOTAL	**3,499,829**	**393,922,335**	**1.88**	**3,582,629**	**432,694,059**	**2.01**
ROBUSTA	**2,735,020**	**285,614,846**	**1.74**	**2,781,478**	**317,728,861**	**1.90**
Organic Robusta	6,790	881,737	2.16	5,494	784,848	2.38
Washed Robusta	29,715	3,602,634	2.02	25,730	3,533,330	2.29
Utz Robusta	1,990	195,256	1.64	2,310	264,873	2.23
Screen 15 Utz	1,440	144,210	1.67	990	114,154	1.92
Screen 18	235,160	26,870,132	1.90	295,061	36,499,544	2.06
Screen 17	126,775	13,821,556	1.82	104,346	12,604,626	2.01
Screen 15	1,322,618	143,178,217	1.80	1,516,428	178,315,267	1.96
Screen 14	3,210	315,690	1.64	2,720	286,592	1.76
Screen 13	-	-	-	360	51,472	2.38
Screen 12	656,869	67,560,392	1.71	530,403	59,304,584	1.86
BHP 1199	202,039	15,989,550	1.32	170,682	14,162,708	1.38
Other Robusta	148,114	13,055,472	1.47	126,954	11,806,863	1.55
ARABICA	**764,809**	**108,307,489**	**2.36**	**801,151**	**114,965,197**	**2.39**
Organic Okoro	8,200	1,112,071	2.26	17,810	2,609,242	2.44
Organic Bugisu	3,580	531,326	2.47	1,280	235,007	3.06
Mt. Elgon Utz	2,100	425,929	3.38	-	-	-
Mt. Elgon	2,840	364,935	2.14	16,019	2,788,190	2.81
Mt. Elgon A	2,650	458,072	2.88	1,630	263,848	2.70
Mt. Elgon C	1,280	237,039	3.09	-	-	-
Mt. Elgon A+	37,161	6,571,254	2.95	12,361	1,986,453	2.68
Bugisu A+	12,745	1,963,156	2.57	23,460	3,757,255	2.67
Sips Falls	4,780	732,042	2.55	3,536	765,117	3.62
Organic Bugisu Utz	580	63,678	1.83			
Arabica RFA				1,440	267,092	3.09
Rwenzori	320	47,729	2.49	1,020	163,790	2.68
Organic Wugar	2,398	381,078	2.65	-	-	-
Organic Drugar	4,360	514,158	1.97	4,910	755,732	2.57
Bugisu AA	79,498	11,530,397	2.42	96,116	16,317,235	2.83
Bugisu A	13,444	2,312,317	2.87	13,893	2,302,764	2.76
Bugisu PB	3,690	527,288	2.38	5,254	821,341	2.61
Bugisu AB	56,217	8,302,967	2.46	66,261	10,350,470	2.60
Bugisu CPB	9,214	1,155,629	2.09	17,660	2,466,042	2.33
Bugisu B	244	30,662	2.09	1,297	179,007	2.30
Bugisu C	1,320	152,699	1.93	1,518	197,732	2.17
Wugar	73,,313	9,688,895	2.20	54,093	7,825,804	2.41
Drugar	364,394	53,598,043	2.45	384,823	53,513,841	2.32
Mixed Arabica	4,440	533,760	2.00	4,360	525,347	2.01
Other Arabica	149,354	7,072,365	0.79	72,410	6,873,886	1.58

[1]*Organic Robusta included Organic Robusta Utz 630 bags valued at $ 80,755*
[2]*Arabica RFA comprised Bugisu RFA 1,120 bags worth US $ 207,832 & Okoro RFA 320 bags valued at $ 59,260*
[3]*Organic Wugar Comprised Organic Wugar 2,078 bags ($ 330,284), and Queen of the Nile 320 bags ($50,794)*

1.4.3 Realized Prices at Export Level

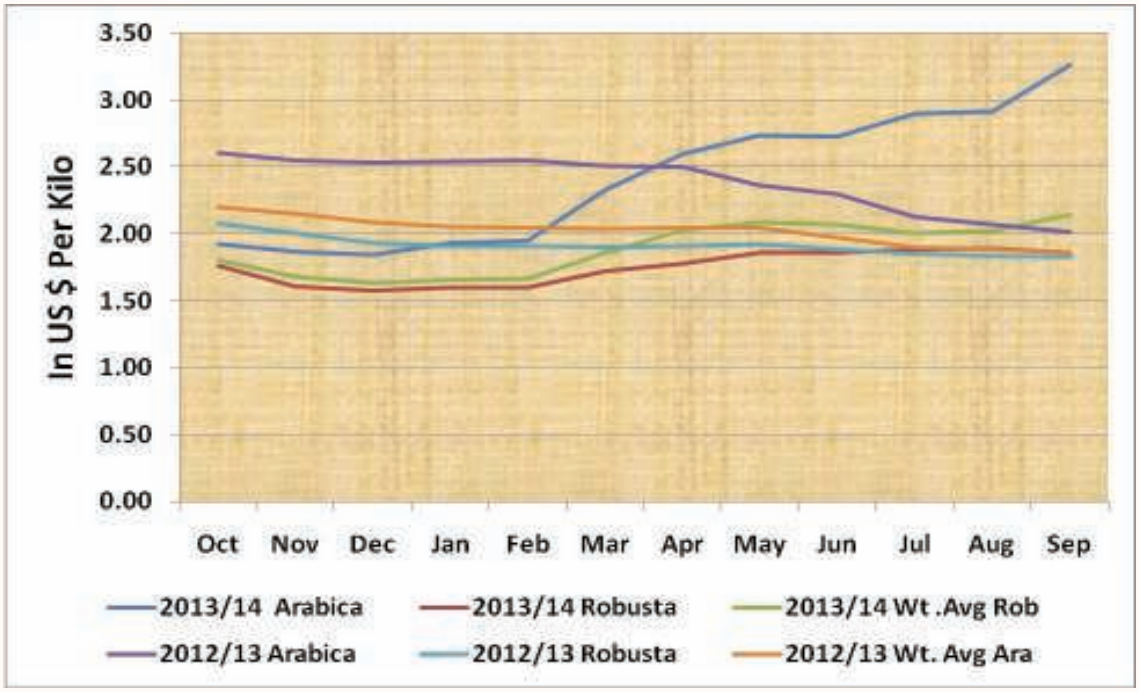
The weighted average price for the year stood at $ 1.88 per kilo, 13 US cents below $ 2.01 per kilo realised in the previous year. This was far lower than $ 2.40 per kilo in Coffee Year 2011/12. The general negative price trend was exhibited throughout the year in tandem with the International Coffee Organization (ICO) composite indicator price. Arabica export prices averaged $ 2.36 per kilo, 3 cents lower than $ 2.39 per kilo last year and $3.42 in 2011/12. Robusta prices averaged $ 1.74 per Kilo, 16 cents down compared to $ 1.90 realised in the previous year; and 22 cents down over $ 1.96 recorded in coffee year 2011/12.

Figure 1.3 illustrates the comparison of monthly average prices for each type of coffee – Arabica and Robusta for Coffee Years 2012/13 and 2013/14. Arabica weighted monthly unit price exhibited a positive trend in 2013/14 whereas it had exhibited a negative trend in the previous year. This was on account of an anticipated big on-year production in Brazil at the beginning which was later affected by drought conditions in January and February 2014 impacting negatively on the yield, quality of the crop and hence production. Increase in global supply was attributed to production from major origins: The marginal increase in global output is on account of a recovery in Colombia. Coffee production is still low in Mexico and Central America on account of the coffee leaf rust (roya).

The highest weighted average price for Arabica was realized in September 2014 at US$ 2.26 per kilo compared to the highest in 2012/13 of US $ 2.68. The lowest was in November 2013 (US$ 1.87). The highest price for Robusta was recorded in August 2014 at US$ 1.89 per kilo and lowest in January, February and November 2013 at US $ 1.60 per kilo. The price differential between Robusta and Arabica which had narrowed in Coffee Year 2012/13 widened during Coffee year 2013/14 as evidenced in Figure 1.3.

The highest weighted monthly average price was US $ 2.14 per kilo in September 2014 and the lowest was in December 2013 at US $ 1.63 per kilo.

Figure 1.3 Monthly Average Unit Prices by Type in CY 2012/13 and 2013/14



1.4.4 Export Performance by Individual Companies

Of the 54 coffee exporting companies registered, only 48 performed; and the best 10 handled 71% of the year's coffee exports, a drop from 81% registered in the previous year and 80% in 2010/11. This represents a reduced concentration at the exporter level.

Table 1.4.3 shows the export performance of each company in terms of quantity (Robusta and Arabica), percentage share and cumulative market shares. The best performer was Ugacof (U) Ltd with a market share of 17% compared to 16% in 2012/13. This was followed by Kyagalanyi Coffee Ltd. with 11 percent (14%); Olam (U) Ltd- 8 percent (12%); Export Trading Company – 7% (0.1%) Kawacom - 6 percent (9%); Ibero (U) Ltd. - 6 percent (9%); Ideal Commodities – 5 percent , Kampala Domestic Store - 5 percent (5%); Besmark Coffee Co. Ltd-4 percent, Great Lakes Ltd - 4 percent (4%).

Table 1.4.3 Coffee Exports by Individual Companies CY 2013/14

	Exporting Company	Quantity – 60 kg Bags			%-age Market Share	
		Robusta	Arabica	Total	Individual	Cumulative
	Grand Total	2,735,020	764,809	3,499,829	100.00	
1	Ugacof (U) Ltd	540,732	53,529	594,261	16.98	16.98
2	Kyagalanyi Coffee Ltd	250,482	124,354	374,836	10.71	27.69
3	Olam (U) Ltd	212,012	22,671	234,683	6.71	34.40
4	Export Trading Company	227,986	-	227,986	6.51	40.91
5	Kawacom (U) Ltd	136,843	80,882	217,725	6.22	47.13
6	Ibero (U) Ltd	188,290	21,240	209,530	5.99	53.12
7	Ideal Commodities	154,771	19,556	174,027	4.97	58.09
8	Kampala Domestic Store	155,845	3,000	158,845	4.54	62.63
9	BESMARK Coffee Co. Ltd	84,028	64,920	148,948	4.26	66.88
10	Great Lakes Ltd	39,806	92,781	132,587	3.79	70.67
11	LD Commodities	75,232	37,271	112,503	3.21	73.89
12	Savannah Commodities	60,006	31,423	91,429	2.61	76.50
13	Commodity Solutions	70,272	14,517	84,789	2.42	78.92
14	Armajaro (U) Ltd.	46,017	37,160	83,177	2.38	81.30
15	Coffee World Ltd.	59,275	15,768	75,043	2.14	83.44
16	Kamba Petroleum	52,900	16,500	69,400	1.98	85.43
17	Job Coffee Ltd.	34,280	34,819	69,099	1.97	87.40
18	Risala (U) Ltd	55,100	9,600	64,700	1.85	89.25
19	Nakana Coffee Factory	62,746	-	62,746	1.79	91.04
20	Ishaka Quality Commodities Ltd	61,041	-	61,041	1.74	92.79
21	Mbale Importers & Exporters	6,958	42,634	49,592	1.42	94.20
22	Lakeland Holdings Ltd.	28,396	-	28,396	0.81	95.01
23	Kaweri Coffee Plantation	26,305	-	26,305	0.75	95.77
24	KARAZ Coffee Factory	21,665	990	22,655	0.65	96.41
25	Ankole Coffee Producers	20,630	715	21,345	0.61	97.01
26	Wabulungu Multipurpose	18,334	640	18,974	0.54	97.57
27	Ankole Coffee Processors	14,862	3,900	18,762	0.53	98.10
28	Bakwanye Trading Co.	334	14,420	14,754	0.42	98.52
29	Banyankole Kweterana	11,204	-	11,204	0.32	98.84
30	Gumutindo Cooperative	-	10,003	10,003	0.29	99.13
	Others	18,968	11,516	30,484	0.87	100.00

1.4.5 Individual Coffee Buyers' Performance

Table 1.4.4 represents the performance of buyers of Uganda coffee during coffee year 2013/14 in terms of quantity and market share. The ten top buyers held a market share of 59% almost similar to that of last year, 60%. This reflects stability at the buyers' level and an assurance of Uganda as a reliable origin. As in the previous year, Sucafina had the highest market share of 17% up from 16% in 2012/13. This was followed by Olam International with a market share of 8% similar to the previous year. Altasheel was third with a market share of 6% compared to 3% the previous year. Bernhard Rothfos was fourth with a market share of close to 6% compared to 5% last year followed by Iconacafé with a market share of 5% compared to 4% the previous year. Ecom Agro Industrial had a market share of close to 5% compared to 6% during the previous year. This was followed by Aldwami with a 4% market share same as the previous year.

Table 1.4.4 Performance of Individual Coffee Buyers Companies in CY 2013/14

		Quantity	%-age Market Share	
	Buyers	**60-Kilo Bags**	**Individual**	**Cumulative**
	Grand Total	**3,499,829**	**100.00**	-
1	Sucafina	581,817	16.62	16.62
2	Olam International	270,757	7.74	24.36
3	Altasheel	207,566	5.93	30.29
4	Bemhard.Rothfos	201,330	5.75	36.04
5	Icona Café	174,800	4.99	41.04
6	Ecom Agro Industrial	167,443	4.78	45.82
7	Aldwami	133,290	3.81	49.63
8	Bercher Coffee Consulting	116,070	3.32	52.95
9	Socadec	112,171	3.21	56.15
10	Strauss Commodities	109,968	3.14	59.29
11	Abaco International	101,685	2.91	62.20
12	Louis Dreyfus	82,668	2.36	64.56
13	Armajaro	77,932	2.23	66.79
14	Koninkilij	75,916	2.17	68.96
15	Cofftea Trading	69,391	1.98	70.94
16	Abu Asma	64,175	1.83	72.77
17	Volcafe	61,535	1.76	74.53
18	Gebr West	58,304	1.67	76.20
19	Luigi Lavazza	48,256	1.38	77.57
20	Coex Coffee	45,893	1.31	78.89
21	Guzman Global	45,478	1.30	80.19
22	Hamburg Coffee	44,907	1.28	81.47
23	CCL Products	41,787	1.19	82.66
24	Falcon Commodities	31,190	0.89	83.55
25	Coffee Services	29,988	0.86	84.41
26	Vahyan	28,640	0.82	85.23
27	Others	516,972	14.77	100.00

1.4.6 Coffee Exports by Destination

European Union continues to be the leading export destination for Uganda coffee. Table 1.4.5 represents Uganda's coffee exports by destination by type during coffee year 2013/14 in terms of quantity and relative market shares. Close to 2.4 million bags (68%) was exported to European Union (EU) countries compared to 2.5 million bags (69%) the previous year. Sudan imported 0.58 million bags (17%) compared to 0.45 million bags (13%) compared to last year, 2012/13. India was the third with a 2.85% market share almost the same as last year, followed by USA with a 2.20% market share and so on as illustrated in Table 1.4.5.

Table 1.4.5 Main Destinations of Uganda Coffee in CY 2013/14

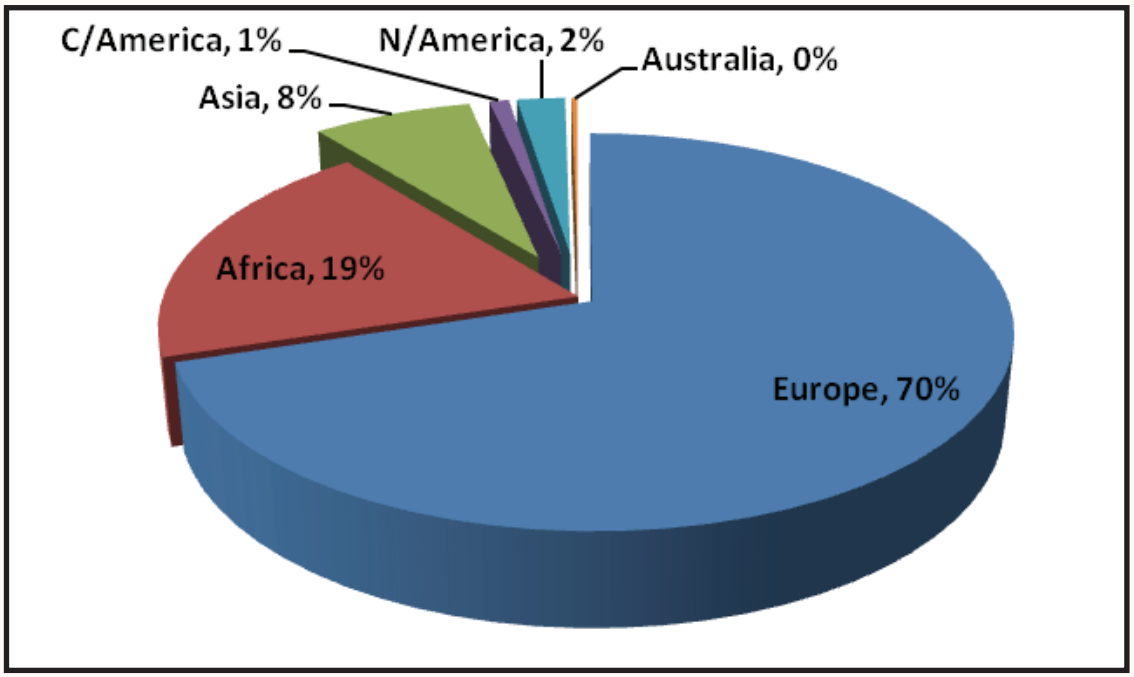
	Destination	**Quantity in 60-Kilo bags**			**%-age Market Share**	
		Robusta	Arabica	Total	Individual	Cumulative
	Grand Total	**2,735,020**	**764,809**	**3,499,829**	**100.00**	-
1	EU	1,836,330	534,710	2,371,040	67.75	67.75
2	Sudan	565,811	11,537	577,348	16.50	84.24
3	India	64,850	34,754	99,604	2.85	87.09
4	USA	18,801	58,304	77,106	2.20	89.29
5	Korea	1,890	65,167	67,057	1.92	91.21
6	Morocco	60,795	680	61,475	1.76	92.97
7	Switzerland	39,978	18,974	58,952	1.68	94.65
8	Ecuador	30,090		30,090	0.86	95.51
9	Singapore	22,632	2,642	25,274	0.72	96.23
10	Japan	17,296	6,736	24,032	0.69	96.92
11	Russia	13,345	7,546	20,891	0.60	97.52
12	South Africa	14,605	3,820	18,425	0.53	98.04
13	Israel	18,279		18,279	0.52	98.56
14	China	6,776	3,920	10,696	0.31	98.87
15	Australia	3,158	5,840	8,998	0.26	99.13
16	Others	20,684	9,879	30,563	0.87	100.00

The exports to China, Russia and Far East were 435,805 bags (26,148.3tons) compared to 87,627 bags (5,257.62 tons) in 2013/14. The highest growing market in this region is the Republic of Korea. The exports to this region are expected to continue increasing mainly due to the promotional efforts of the promotional centre in Guangzhou. Exports to Korea were 67,057 bags; Singapore-25,274 bags and China- 10,396 bags.

Coffee exports to Sudan were 680,723 bags claiming a market share of 19.4% of total exports. The total exports to the Arab world were 700,115 bags (42,007 tons) as a result of coffee promotions in this region.

Figure 1.4 illustrates the market share of importers of Uganda coffee by continent in terms of percentage market share. In spite of economic meltdown, Europe continues to dominate Uganda's coffee exports.

Figure 1.4 Export Destinations by Region in 60 Kilo Bags CY 2013/14



1.5 Internal Marketing

1.5.1 Registered Post-harvest Industry Players

A total of 462 post-harvest industry players was registered in the Coffee Year 2013/14, a 6.7% drop compared to 495 recorded in the previous year. The drop was in primary processing (hulleries), ***refer to table 1.5.1.***

Table 1.5.1 Registered Post-harvest Industry Players in CY 2013/14

Industry Players	2013/14	2012/13	2011/12	2010/11	2009/10
Exporters	54	54	42	40	42
Export grading plants	34	32	30	32	19
Hulleries	363	395	308	327	300
Roasters	11	14	14	8	8
Total	462	495	394	407	369

1.5.2 Price Movements

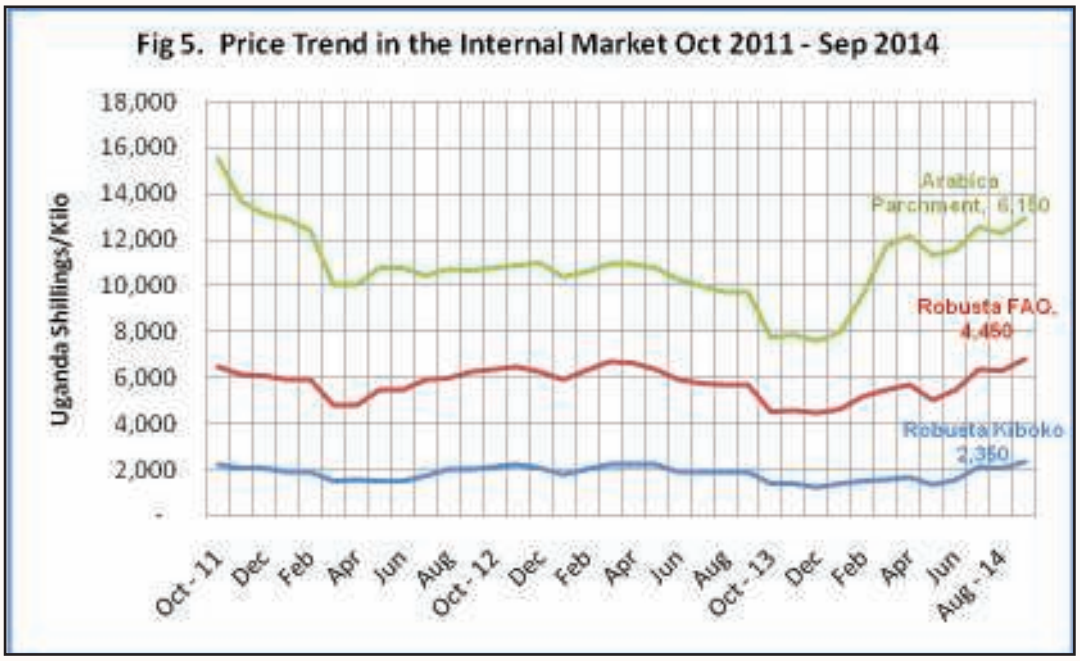
The farm-gate prices for Kiboko (dry Robusta cherries), Robusta FAQ and Arabica Parchment averaged Shs. 1,650, Shs. 3,740 and Shs 5,060 per Kilogram as shown in Table 1.5.2. Although slightly lower than last year, as per Figure 1.5 they exhibited a positive trend throughout the year.

Table 1.5.2 Realized Monthly Farm-gate Prices UGX/Kilo

2013/14	Robusta Kiboko	Robusta FAQ	Arabica Parchment
Oct – 2013	1,400	3,150	3,200
Nov	1,400	3,200	3250
Dec	1,250	3,200	3,150
Jan – 2014	1,400	3,270	3,300
Feb	1,550	3,650	4,450
Mar	1,600	3,900	6,250
Apr	1,700	4,000	6,450
May – 2014	1,350	3,700	6,300
Jun	1,600	3,900	6,050
Jul	2,150	4,250	6,150
Aug	2,100	4,200	6,000
Sep – 2014	2,350	4,450	6,150
Average	1,650	3,740	5,060

The positive trend is explained by the 0.7% reduction in world coffee production in 2013/14 (146.6 million bags) down from 147.6 million bags recorded in the previous year. The drop was more in Arabica coffee hence a marked price differential between Arabica and Robusta. However, African producers' production was up by 6% to 17.2 million bags.

Figure 1.5 Price Trend in the Internal Market Oct 2011-Sep 2014



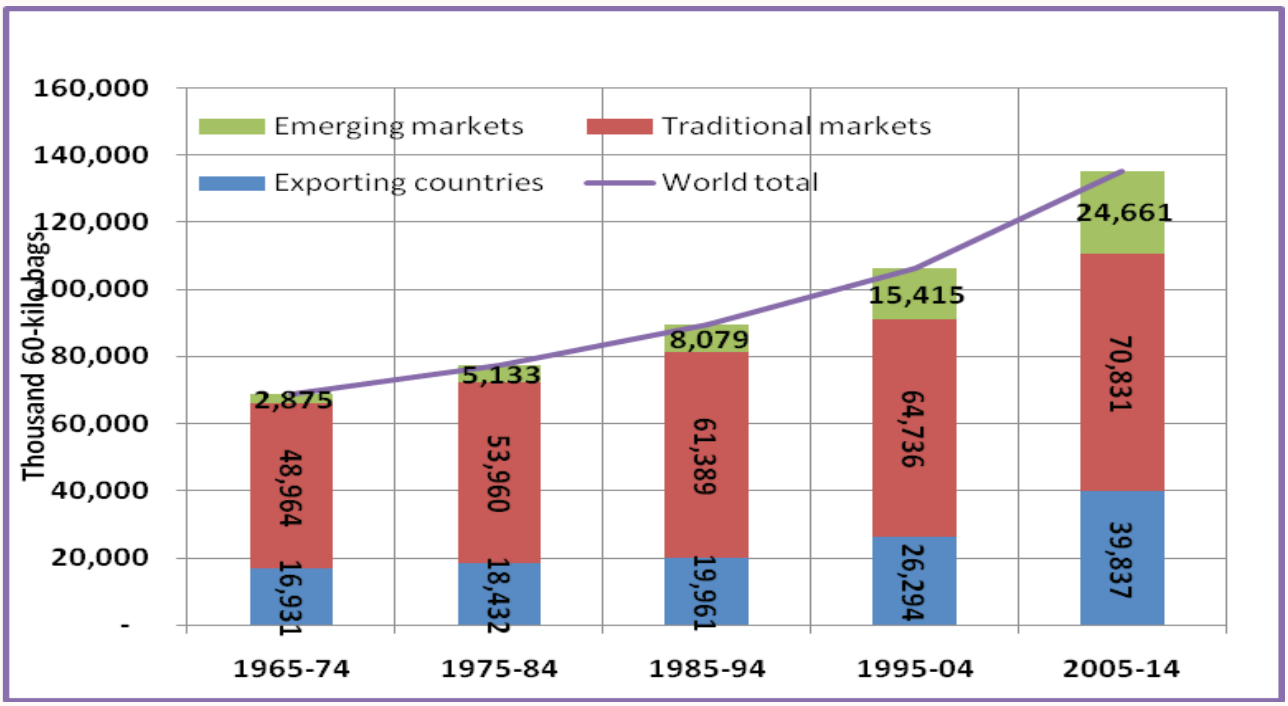
1.5.3 Global Outlook

Coffee prices in 2014/15 are envisaged to be a bit volatile due to the effect of drought on the Brazilian crop; bad weather in Vietnamese; and Coffee leaf rust (roya) in Mexico and Central America. Nonetheless, Colombia's production is likely to recover from the 4-year poor performance. The recovery in Colombia's production is on the account of good weather and ongoing replanting campaign some of which is already bearing fruits.

On the supply side, global production in 2014/15 is estimated at 142 million bags, a drop of 3.14% compared to 146.9 million bags in 2013/14. Both Arabica and Robusta are envisaged to be down by 2.8% and 3.7%, respectively. Key players' performance in 2014/15 is estimated as follows: Brazil 45.3 million bags; Vietnam 27.6 million bags, Indonesia 9.0 million bags, Colombian 12.5, Central American countries 16.9 million bags, India 5.5 million bags Peru 3.5 million bags, Africa 17.4 million bags, and the balance to come from the rest.

On the demand side, there is a buoyant growth in global consumption estimated at 1.8% per year and put consumption in calendar year 2014 at 149 million bags. At this rate, there is likely to be a supply deficit in 2015 and 2016. Although consumption growth is more pronounced in the traditional markets (USA-2.5%; Japan-2.4%; Canada-3.1%), there potential for consumption growth eminent in the emerging markets and producing countries. This is glaringly evident in Figure 1.6 which illustrates average consumption the Mid 60s -Mid-70s, Mid 70s - Mid 80s, Mid 80s - Mid-90s, Mid 90s - Mid 2000s and Mid 2000s to Mid 2010s. Average annual consumption has increased from slightly above 60 million bags during the Mid 70s to 136 million bags in the recent decade (2005-2014). Global consumption is estimated to reach over 170 million bags by 2020.

Figure 1.6 10-Year Average World Coffee Consumption



Source: ICO

Global opening stocks for 2014/15 are estimated to be lower both in producing and importing countries on account of high exports especially from Brazil in Coffee Year 2013/14.

CHAPTER TWO:
QUALITY AND REGULATORY SERVICES

2.1 Introduction

In implementation of its mandate, UCDA executed programs of quality improvement and assurance, training and skills development, value addition, generic promotion, and promotion of domestic coffee consumption.

In quality improvement program, the quality of coffee in the field was evaluated in terms of out-turn (OT), moisture content (MC) and screen size distribution and the information was disseminated to the stakeholders. The quality of both Arabica and Robusta coffee at the primary processing level improved especially in moisture and bean size compared to the previous coffee year.

At the exporter level, 840 FAQ coffee samples (671 Robusta, 158 Drugar and 11 Wugar) were analyzed using the export grading form 5. There was a high performance that was achieved through increased inspection of FAQ deliveries at exporter level. The moisture content, screen retention above screen 15 and out-turn were 13.16%, 71.5%, 81.78% respectively for Robusta export delivery samples. While, the moisture content, screen retention above screen 16, out-turn and defects were 13.04%, 73.2% and 80.3% respectively for Drugar samples. Wugar samples had the moisture content, screen retention above screen 16 and out-turn were 12.2% and 71.9% and 89% respectively. The washed Arabica coffees performed better in all parameters compared to all the other coffees.

Evaluation of the coffees in the field reflected good out-turn for both Arabica and Robusta and the moisture content was maintained below the 14% limit there is still a need to intensify sensitization on proper drying techniques.

The department continued to train industry players at post-harvest level in best handling and manufacturing practices, machine maintenance and best hygiene practices.

In the field of quality assurance, a slight decrease in clean cups was registered. Washed and certified Arabica coffee recorded the best cup largely attributed to establishment and strict observance of post-harvest procedures in addition to certification process prescribing ethical, health and environmental standards. The work on the review of Robusta coffee protocols/standards was continued. These protocols have made it possible for Uganda to differentiate the coffee and sell the high quality lots in the specialty/ fine markets after qualifying in the annual Taste of Harvest Competitions.

There was an increase in the volume of coffee referred for re-processing from 33,579 bags in 2012/13 to 51,229 bags in 2013/14. The referrals were due to high moisture content, low screen retention, withered and float. The low screen retention was as a result of poor machine setting while withered and floats occurred due to drought at bean formation. The high occurrence of rejections was mainly due to low screen retention, which will be rectified by the training of machine operators.

A number of training programs were undertaken including training in Basic Quality Control; Barista training; training of coffee roasters and brewers; training of trainers in Robusta-R and Arabica –Q graders; farmers; and certification of Robusta and Arabica graders.

On promotion of domestic coffee consumption, UCDA continued to participate in local trade fairs and exhibitions to promote Uganda coffee. UCDA

supported formation of university coffee clubs to attract the youth to participate in coffee activities such as barista championships and enhance coffee consumption.

UCDA continued with the promotion of coffee on the global market through participation in international trade fairs, exhibitions and maintaining promotional center in China for the Asia-Pacific region.

2.2 Quality Improvement

Trained 878 Local Government officials, farmers, traders and processors on coffee regulations, good harvest and post-harvest practices. Sensitization meetings on coffee regulations and Post-Harvest Practices were held in Iganga, Jinja, Mityana, Mubende, Mpigi, Luwero, Wakiso, Kayunga, Masaka, Lwengo, Rakai, and Paidha for farmer groups, traders, exporters, Local government officials, NAADS officials and Regional Coffee Extension officers. These trainings continue to be demanded for by local people as means of exchanging of best post harvest information.

Evaluated 267 samples comprising 185 Robusta and 82 Arabica. The moisture content, screen retention above screen 15 and out-turn were 12.5%, 77.4% and 85.8% respectively for Robust field samples. The moisture content, screen retention above screen 16 and out-turn was 13.0%, 75.5%, and 79.3% respectively for Drugar field samples. While the Moisture content, screen retention above screen 16, out-turn and defects were 12.2%, 73.1% and 83.9% respectively for Wugar field samples.

Licensed 54 exporters, 363 primary processors, and 11 roasters were registered under the program of inspection and registration of all players at post-harvest level. 41 exporters were renewals while two new operators joined the trade namely: Kato Company Ltd and Bugisu Farmers AA Coffee Ltd.

In a bid to enforce Coffee Regulations, UCDA carried out five task forces in Central, Eastern, Western and Northern regions. Thirty Four primary processing factories and 35 store operators were penalized due to malpractices and non- conformance to the Coffee Regulations. Frequent taskforces will curb poor coffee handling and improve compliance to Coffee Regulations. 12 Coffee Quality evaluation reports with information on coffee quality across the value chain were disseminated to stakeholders.

Field compliance checks were carried out on regulations, practices and hygiene in all regions, Operations of 4 Export companies were suspended (3) for operating with no license & (1) adulteration practices. 2 Export company & 12 traders were warned for failure to comply with regulations (handling wet coffee & with ex-matter)

Information on the coffee regulations was disseminated during 16 workshops for traders, farmers, Local Governments (LGs), and District Agricultural Officers (DAOs).

The Centre for Robusta Excellence (CORE) project commenced work in November 2014. The project opened an office at Coffee House and two other centres in Iganga and Bushenyi. The three year project is funded by UCDA and aBi- Trust.

2.3 Quality Assurance

2.3.1 Overall cup performance

There has been a slight variation in the annual percentage of clean cups in the last five (5) years from 97.3% in 2009/10 to 98.2% 2012/13 and 97.5% in 2013/14. But there was a slight decline in cup quality in 2013/14 as indicated in Table 2.1 below. The slight decline in cup quality was due to drought which caused floats and chalky white that led to occurrence of tainted cups.

Table 2.3.1 below gives the percentage of clean cups for each type of coffee and grade. The Bugisu Arabica continues to show a high percentage of clean cups of an average 99.1%. Bugisu AB scored the least (98.6%) while Bugisu AA scored the highest (99.6%) followed by Bugisu PB at 99.2% and Wugar at 98.4%. The cup quality of Natural Arabica, Drugar, was 97.3% compared to 98.0% in 2012/13.

Table 2.3.1 Comparative Percentage of Clean Cups 2009/10-2013/14

TYPE	GRADE	2013/14	2012/13	2011/12	2010/11	2009/10
Arabica	AA	99.6	99.6	99.2	100	100
	A	99.0	99.1	97.1	98.3	98.4
	AB	98.6	98.4	96.3	96.9	96.8
	PB	99.2	98.9	94.7	96.0	95.6
Other Arabica	Wugar	98.4	99.0	96.5	100	100
	Drugar	97.3	98.0	95.0	95.4	95.1
Natural Robusta	Sc 18	97.4	98.1	95.2	95.9	95.7
	Sc 17	97.3	97.2	95.7	96.7	96.5
	Sc 15	95.2	96.9	95.7	98.5	98.2
	Sc 14	95.1	96.7	93.2	95.4	90.3
	Sc 13	94.3	96.2	95.5	94.3	94.1
	Sc 12	94.0	96.0	95.2	97.5	97.4
Washed Robusta	Ungraded	98.0	98.6	98.1	98.3	97.9
Organic Coffee	Bugisu Arabica	99.3	100	100	100	100
	Okoro Arabica	98.3	98.3	94.8	100	100
	Robusta	99.0	100	95.1	100	100
Annual Average	97.5	98.2	96.1	97.7	97.3	

The organic coffees, Okoro Arabica scored 98.3% and Robusta 99%. This was a slight decline in cup quality compared to 2012/13 for organic Robusta. The weather conditions continue to pose a threat to coffee quality by affecting the coffee quality.

2.3.2 Coffee Referred For Reprocessing

In the year 2013/14, 51,229 bags that did not conform to the standards were referred for reprocessing compared to 33,579 bags (2012/13). This was a high figure compared to the previous year, coffee referrals went up due to high speed grading and erratic weather conditions. The highest quantity of coffee referred was due to low screen retention (48.4%) which affected Screens 18, 15 &17. The affected companies were sensitized on how to improve coffee grading.

Table 2.3.2 Coffee Rejections 60-Kilo Bags 2009/10-2013/14

DEFECTS	2009/10	2010/11	2011/12	2012/13	2013/14	% Defects
1.Wetness	13,962	4,268	9,016	9,369	19,365	37.8
2.Discoloured/Blacks	3,070	3,500	7,607	4,201	3,740	7.3
3. Poor Retention	10,318	16,617	31,498	18,166	24,795	48.4
4.Floats/BHP	2,052	1,582	3,775	1,200	1,844	3.6
5. Pods	2,709	1,503	2,761	450	1,281	2.5
6. Extraneous matter	1,234	984	1,690	193	249	0.4
TOTAL	**33,345**	**28,454**	**56,347**	**33,579**	**51,229**	**100**

2.4 Training progammes

In 2013/14, 47 participants from the coffee and private sectors were trained consisting of 18 from the coffee industry and 29 from tertiary institutions of learning. The training covered defects' identification, moisture determination, roasting profiles and techniques, flavor profiles, and liquoring. There was a slight increase in the enrollment of this course compared to 40 participants in 2012/13 due to the high enthusiasm to gain coffee knowledge. 151 field based quality controllers were trained in Bukomansimbi, Sembabule, Kayunga and Mt. Elgon area. We recorded an increase in attendance of this course compared to 99 participants in 2012/13 due to the increase in development of the primary processing stage.

The department trained 21 roasters in green coffee classification, roast identification, roasting, grinding, cupping, blending and packaging.

A total of 46 baristas from cafes, hotels and restaurants were trained in coffee preparation and service skills in preparation for the 7th Uganda National Barista Championship. The international trainer, Mr. Brydon Price headed a team of judges at the 7th Barista championship where he calibrated 22 barista judges.

Four university coffee clubs were supported to participate in the barista trainings, Inter University Barista Championship and the 7th National Barista Championship. There has been a marked improvement of coffee knowledge among the youth. In order to promote coffee consumption among the youth, UCDA participated in three university events at Kampala International University (KIU), Kyambogo University (KYU), Cavendish University and Makerere University (MAK).

Trained 62 participants on production and processing methods in the districts of Mubende and Iganga. These courses will go a long way in improving the production and primary processing techniques of coffee.

878 farmers, police officers, traders, processors, local government officials undertook training in post harvest handling, physical grading, defect identification / causes, wet and dry processing techniques and introductory cup-tasting. These trainings took place in the districts of Iganga, Jinja, Arua, Zombo, Mityana, Mubende, Mpigi, Luwero, Wakiso, Kayunga, Lwengo and Rakai. These trainings will enhance the quality of coffee and thus improve the livelihoods of the growers.

UCDA management held a consultative meeting with the Right Honorable Speaker of Parliament Ms. Rebecca Kadaga and Board Chairman Mr. Perez Bukumunhe about the current status of the coffee quality in Busoga region. The meeting that was attended by the LC 5, RDCs, MPs and coffee

stakeholders discussed improvement of coffee quality and production in Busoga region.
The undertakings in training are geared towards building capacity of the coffee sub-sector to handle matters of coffee quality improvement across the value chain.

2.5 Generic promotion, Value addition and Promotion of Domestic Coffee Consumption

2.5.1 Promotion of Domestic Coffee Consumption

UCDA participated in local trade fairs and exhibitions in order to sensitize the public about coffee related information ranging from production to value addition.

Uganda coffee was promoted at 2 Uganda Manufacturers Association Trade Fairs in Mbarara and Lugogo where over 700 participants visited our stand and were sensitized about coffee sub-sector programs.

UCDA promoted coffee at the Annual Jinja Agricultural Trade Fair themed "Take it to the farmers". The show was well attended by farmers and other stakeholders where they were given information ranging from coffee agronomy, post harvest handling, and opportunities available for investment in the coffee subsector.

We continued to participate in corporate league matches by playing games and operating a coffee bazaar.

This year's International World Food Day was held in Soroti where UCDA provided coffee related information and promoted coffee consumption.
We promoted coffee at the National Agricultural Policy Exhibition at Speke Resort Munyonyo which attracted over 1000 guests from Ministry of Agriculture Animal Industry and Fisheries (MAAIF), Local Governments, Farmer organizations, and civil society organizations.
In a bid to promote coffee consumption, UCDA continued to participate in the district coffee shows. We participated in shows in Hoima, Kayunga, Ntungamo, Mityana, and Kamwenge where we sensitized the public about the benefits of drinking coffee .

Furthermore, under the road shows themed "Coffee on the Road" we promoted coffee consumption in Kamuli, Iganga, Mukono, Wakiso, Kiruhura, Lyantonde, Bushenyi, Ishaka, Sheema, Kumi, Soroti and Mitooma. These shows attracted 1120 participants who were sensitized on health benefits of drinking coffee .

Under the Coffee and Youth program, we held a coffee essay competition which attracted 30 students from higher institutions of learning located in the districts of Kampala, Mbale, Mityana, and Kasese. The topic for the quiz was "What are the major drivers and inhibitors of domestic coffee consumption in Uganda? How can the youth work on these to increase consumption?" In a comparable activity, we conducted a coffee quiz that attracted 18 participants. The winner was Mr. Eric Oteba (Kyambogo University), while the first and second runners up were Mr. Emmanuel Wamazembe (Kyambogo University) and Mr. Kikora Masereka (Mountains of the Moon University).

UCDA promoted coffee during the university bazaars held at Kampala International University, Uganda Christian University, and Kyambogo University. This created awareness about the health benefits of coffee consumption and other coffee related training opportunities vailable for the youth.

University barista competitions were held under the flagship of Inter-University barista championship aimed at interesting the youth in coffee activities. 29 participants were trained out of whom, 6 participated

in the 3rd Inter-University Barista Championship held at Kampala International University.

The 2nd Uganda National Cup-Tasters Competition (UNCC) was held at Serena Kampala Hotel where the winner was Mr. Emma Tumwesigye. The first runner up was Ms. Faith Asaaji of African Fine Coffees Association (AFCA). The champion was to represent Uganda at the World 2014 cupper's championship in Australia.

2.5.2 Participation in International Trade Fairs & Exhibitions

UCDA continued to showcase Uganda coffee in international fairs. Coffee was exhibited at the 26th Specialty Coffee Association of America (SCAA) exposition in Seattle, Washington, USA. Coffees from Uganda were exhibited, information on specialty and fine coffee disseminated, in addition to three cupping sessions with buyers. The three cupping sessions were held that attracted roasters, buyers and consumers from United Kingdom, USA, Belgium, Russia, China, Brazil, Jamaica, France, Yemen to mention but a few. Uganda Coffee was appreciated and exports to USA and South America have increased.

Coffee tasting at the 26th Specialty Coffee Association of America Conference.

UCDA's joint venture in China promoted coffee at the 114th and 115th Canton Fairs, China Coffee Expo 2013, Guangdong International Volunteer Expatriate Services (GIVES), 3-in-1 Soluble Coffee Commodities Practicum, 2nd Africa Uganda Coffee tasting 2014 seminar. Beijing Chenao Coffee Company Limited (BCCCL) took part in the 51st Independence anniversary at Hilton Hotel, Guangzhou and hosted the Parliamentary Committee on Commissions, Statutory Authorities and State enterprises (COSASE) where they highlighted the promotional activities In China. BCCCL continued to support the coffee shops that exclusively serve Uganda Coffee that is Uganda Coffee Migratory Bird Café (Beijing) and Ling Nan Vocational University canteen (Guangdong).

UCDA promoted coffee at the 11th African Fine Coffee Association (AFCA) exhibition in Bujumbura, Burundi which attracted more than 500 attendees. We operated a coffee bazaar and an information centre providing specialty and fine coffees in addition to the relevant information. At the AFCA, Taste of Harvest Pavilion, Uganda's top five Robusta and Arabica Coffees were cupped by roasters and prospective buyers.

Uganda Coffee was promoted at the Specialty Coffee Association of Europe (SCAE) Exhibition in Rimini Italy where information was circulated and specialty coffee cuppings were conducted.

UCDA promoted coffee at the Uganda North American Association (UNAA) convention at the 2014 San Diego conference. In the conference UCDA participated in the trade and Investment forum themed "Destination Uganda" and gave out souvenirs with marketing information on Uganda coffee. The Authority also Partnered with Crop to Cup (Coffee buyers) to provide an opportunity to attendees to taste the different types of Uganda coffee-Brewed, Iced, and Espresso. The Authority got support from the Uganda Diaspora including the Uganda ambassador to the USA who expressed their interest in supporting Uganda coffee on the American market.

UCDA continued to promote coffee in the Specialty Coffee Association of Japan (SCAJ) held at the Big Sight in Tokyo, Japan under the theme "Surprise".

During the promotion a coffee tasting exercise of brewed coffee for Robusta and Arabica was conducted. Supported and worked with Crystal coffee(Nagoya based company specialising in Uganda coffee). Showcased the different exportable grades and gave samples to buyers. Explained to attendees information on Uganda coffee, trade and export process. Gave out brochures with information on Uganda coffee and list of exporters. The Japanese appreciated the unique taste of the Uganda Robusta coffees and Uganda coffee has a big potential in this market.

The exports to China, Russia and Far East were 435,805 bags (26,148.3tons) compared to 87,627 bags (5,257.62 tons) in 2013/14. The highest growing market in this region is the Republic of Korea. The exports to this region are expected to continue increasing mainly due to the promotional efforts of the promotional centre in Guangzhou.

Coffee exports to Sudan were 680,723 bags claiming a market share of 19.4% of total exports. The total exports to the Arab world were 700,115bags (42,007tons) as a result of coffee promotions in this region.

2.5.3 Joint Ventures

The Joint Venture in China was supported in terms of technical assistance and top up on staff salaries.

2.5.4 Barista Championships

Uganda held the 7th Barista Championship at the Kampala Serena Hotel, where the winner and the runner up were Mr. Godfrey Batte of Africa Coffee Academy and Mr. Mark Okuta of Royal Suites respectively. This course continues to attract high participation due to the high demand of baristas in the employment market.

Mr. Godfrey Batte presenting at the 7th National Barista Championship

Mr. Mark Okuta presenting at the 7th National Barista Championship

Four Baristas were supported to participate in the 5th Africa Barista challenge in Bujumbura, Burundi where 2 Ugandans volunteered as judges. Uganda emerged the winner in the first and second positions with Mr. Mark Okuta (526.5) and Mr. Simon Ochen(574) points respectively. The South African Barista emerged 3rd with 463 points.

Barista competitors at Hotel Du Lac in Bujumbura Burundi 2014

Uganda's Baristas after presentation of the winning trophies at the 5th Africa Barista Championship

The Uganda Barista champion participated in the World Barista Championship competition in Italy where he emerged 36th with 459.9 points down from 42nd with 419 points in 2012/13. Uganda has continued to fair well in Barista championships which has motivated the youth to get involved in this activity.

2.6 Development of protocols for the Fine Robusta Coffees for the specialty market

UCDA undertook workshops to train the stakeholders in Robusta Fine coffee grading techniques. The R-Grading Certification trainings attracted 19 participants out of which, 17 were certified as Star cuppers and 2 as R-Graders. One staff assisted in the R-Graders course. UCDA is continuing to build capacity to handle Robusta ® and Arabica (A) certification courses in the country.

For the first time, 19 coffee lots were graded and certified as Q (13 Arabica) and R (6 Robusta) and posted to the Coffee Quality Institute website for marketing purposes. This was a major breakthrough for Uganda coffees to be marketed using the specialty and fine coffee protocols.

70 samples of finished products were tested against the EAS 105:1999 standards out which 14 passed the test. UCDA has undertaken training with the owners of the sub-standard products in order to improve their products ***(See Appendix 9)***.

Domestic Consumption

Table 2.6.2 Chemical Analysis of finished Coffee products Samples

Table 2.5: Chemical analysis of finished coffee products samples			
	Passed	Failed	Samples of Failed Brands
Water Soluble Content	26	4	Star Café, Bugisu Gold(Whole beans and Fresh ground Coffee), Ngumu Kahawa Coffee & Safari coffee
Total Ash Content	22	8	Everbest Arabica coffee, Nguvu factory fresh coffee, Nguvu Kahawa coffee, Star Café White mountain, Ngumu Kahawa coffee, Safari coffee, Nvumu Kahawa coffee & Crane coffee blend
Water Soluble Ash	21	9	Gayaza factory fresh coffee, Super coffee, Everbest coffee, Nguvu factory fresh coffee, Nguvu kahawa coffee, Ngumu Kahawa coffee, Safari coffee, Nvumu Kahawa coffee & Crane coffee blend
Alkalinity of Water	25	5	Elgonia coffee, Super coffee, Star café white mountain, Nvumu kahawa coffee & Crane coffee blend
Acid Insoluble Ash	25	5	Everbest coffee, Nguvu factory fresh coffee, Nguvu kahawa coffee, Ngumu Kahawa coffee & Safari coffee

2.7 Development of a Uganda Specialty Coffee Profile

UCDA has continued with the profiling program that involves the mapping out coffee production areas and describing their distinctive characteristics according to altitude, rainfall and soil type . In this program, 154 samples (100 Arabica and 54 Robusta) samples drawn from Kapchorwa, Bulambuli, Zombo, Kasese, Sironko, Masaka, Ibanda and Kamuli were analyzed. The provisional cup analysis results were as follows:

- 5 Unique coffee qualities linked areas of production for 58 samples.
- Kasese - coffee with winey, fruity & roasted flavour note
- Kisoro- spicy , nutty & roasted notes
- Masaka- coffee with spicy and resinous notes
- Kapchorwa- coffee with citrus, spicy & nutty notes
- Kamuli- coffee with herbal spicy & nutty notes

Table 2.7.1 Partial Interpretation of the Coffee Profiles Developed

Profiles	Location	Interpretation
Kasese coffee	Grown along the slopes of Mt Ruwenzori at an altitude 1734-2140 m above sea level	Very good fragrance/aroma, body and lingering acidity, and strong aftertaste. Its fragrance, aroma and flavours are dominated by chocolate, caramel, roasted nuts, fruity and winey notes
Kisoro coffee	Grown on the volcanic soils of Mt Muhavura at an altitude 1600-1996 m above sea level	Strong pronounced mouth feel, fragrance/aroma and sweetness with a salt/acid complex. Its flavour, fragrance and aroma are dominated by chocolate, caramel, nutty, herbal, spicy and roasted nuts notes
Masaka coffee	Grown on the plains of central Uganda corridor at an altitude 1212-1303 m above sea level	Strong flavour and fragrance with a smooth body and lingering aftertaste. The flavour is dominated by the chocolate, nutty, caramel, spicy and resinous
Kapchorwa coffee	Grown on the slopes of Mt Elgon at an altitude of 1654-2011m above sea level	Strong fragrance, flavour and lingering acidity, very good body and balanced cup. The flavour are dominated by citrus acidity, caramel, chocolate, spicy and nutty notes.
Kamuli coffee	Grown on the flat lands at an altitude 1100-1210 m above sea level.	Well balanced with a strong mouth feel, sweet-bitter balance. Its fragrance and flavour is dominated by herbal, chocolate, caramel, nutty and spicy notes.

72 soil samples (3rd round 2013/14) were collected from locations in Kasese, Ibanda, (Sironko, Bududa & Kapchorwa , Zombo, Bulumbuli & Kamuli districts. 58 soil samples of the 2nd round, analysis completed & data compiled. PH was within the limit range for all districts, Organic matter was deficient in Mbarara, Nitrogen sufficient in all districts & Phosphorus adequate in Kisoro , critical in Masaka & deficient in the rest.

Table 2.7.2 Analysis of 58 Soil Samples

LOCATION	NUMBER	PH	OM (%)	N (%)	P (ppm)
Kisoro	10	6.3	4		
Masaka	26	5.4	7	8	6
Mbarara	3	6.4	1	1	0
Ntungamo	8	6.1	7	4	2
Rukungiri	11	6.4	6	7	2
Limit		4.5-7	3+	0.2+	5-15+

Five provisional profiles of 2012/13 CY coffee samples for 4 regions developed

- (Kasese have marked acidity, very good fragrance/aroma,aroma with a lingering finish.
- Kisoro -elegant well balanced with a rich aroma
- Kapchorwa - delightful aromatic with a bright citrus acidity and a medium body Masaka- pronouncing acidity and good mouth feel
- Kamuli - bright and persistent acidity with a defined body

Table 2.7.3 Provional Profiles for Regional Coffee Samples

Location	**Type/Variety**	**Processing Method**	**Analysis results**
Kasese	Arabica/SL14	Natural	Strong fragrance, medium acidity, body and flavour dominated by caramel, chocolate, peanut and fruity notes
Kisoro	Arabica	Washed	Balanced with medium acidity, body and flavour with complex notes. Dominated by chocolate, caramel, citrus, nutty, dried fruits and vegetable notes.
Kapchorwa	Arabica	Washed	Strong Fragrance with High acidity, Light body and fair complex flavour with citrus, caramel chocolate, spicy, nutty, resinous, tropical fruit notes and a smooth fading aftertaste. tropical fruit notes and a smooth fading aftertaste.
Masaka	Robusta	Natural	Balanced with creamy mouth feel, strong fragrance, medium flavour dominated by caramel, chocolate, fruity and herbal notes with a fading aftertaste.
Kamuli	Robusta	Natural	Medium Fragrance, mouth feel and flavour with pronounced caramel and chocolate, nutty, herbal and spicy notes.

Table 2.8.3 shows that Mt Elgon Arabica has a strong fragrance and high acidity as compared to the medium acidity found in Kasese Drugar and Kisoro Wugar; Robustas had a spicy aroma, herbal flavor with fading aftertaste. The profiling project has developed four regional profiles will further refine the descriptors to identify the unique coffee flavors from various regions.

Uganda hosted the national taste of harvest (NTOH) competition where Robusta and Arabica samples are evaluated using the Specialty Coffee Association of America scale. Bugisu Arabicas have continued to excel with Kabum Specialty Coffee from Chebonet group scoring 85.29% followed by Kawacom Sipi organic, UTZ and RFA certified (84.96%) and Kyagalanyi Mt. Elgon A (84.43%)

The winning Robusta coffee was from Ugacof (Masaka) with 82.94% and the runner up was Ugacof Washed Robusta from Iganga (82.41%). The winning samples were promoted at international events.
The proposal for UCDA to host the Robusta Centre of Excellence was accepted and the centre is to begin in 2013/14.

2.8 Centre For Robusta Excellence (CORE) Project

The Project aims at developing a sustainable Coffee Value Chain through development of technology, innovations and promotion of best practices along the coffee value chain, through exploring best practices in coffee, conducting specific research to provide accurate information and carry out demonstration activities with the view of improving house hold income, creating a coffee culture and ultimately become a point of reference for Robusta coffee. In this regard, a number of achievements were registered:

- Recruited 12 staff i.e. coordinator, 9 field officers and a driver.
- Baseline survey completed
- Established offices & laboratories in Kampala, Bushenyi and Iganga for regional center.
- Procurement of analytical instruments and demo equipment ongoing
- 6 Meetings with farmers and farmer groups held on establishment/host Micro centers in Eastern region: Kabum coffee, Kawacom in Kapchorwa branch, Ugacof Luuka branch, Armajaro coffee-Iganga South western region: Ankole producers & Central Region: Kibinge
- Established 16 micro centers in Western (Kyenjojo, Kabarole, Sheema, Rukungiri and Kanungu), Eastern (Mayuge, Iganga, Luuka, Kamuli, Buyende and Kaliro) and Central region (Bukomansimbi, Rakai, Mpigi, Luwero and Mubende)

In order to improve the quality of Robusta coffee by ensuring best practices with respect to Sanitary and Phytosanitary (SPS) and food safety principles and application of standards, the following were achieved:

- Collected 114 Coffee samples and 96 soil samples and respective GPS information
- Potential speciality coffee producers in south western region(Kanungu, Ntungamo and Rukungiri) sensitized on the production methods and briefed on the CORE project
- Carried out 2 training sessions for potential farmer groups that can host CORE Micro centres in Ishaka & Bukomansimbi districts on specialty & Fine coffee production
- Held a meeting with Makerere University to establish relationship on research & technology
- Discussions with MUK and NaCORI on going to collaborate on research and technology design

In order to promote the production of Robusta through introduction of technology, carrying out research and development, and deliberate promotion of Robusta growing, the following were achieved:

- Identified 48 farmers/ farms to host demo plots
- Developed the research agenda

In order to strengthen promotion of marketing of Uganda Robusta through information sharing and exchange, education and training as well as communication so as to market the available coffee varieties, the Centre of Robusta Excelence (CORE) project achieved the following:

- Promoted CORE at AFCA Burundi, SCAA and Inter African Coffee Organization (IACO) Annual General Assembly and 2nd Coffee Symposium where the project objectives were explained to delegates
- Participated in the coffee Expo and World Food Day (October 16, 2014) in NaCCRI where the project activities were explained to farmers
- Engaged a Coffee Quality Institute (CQI) Consultant to promote Robusta coffee at international level
- Initiated development of the Website
- Developed draft manuals on good practices, traceability and CORE brochure.

Drying practices

CHAPTER THREE:

COFFEE PRODUCTION PROGRAMMES

3.1 Introduction

Successes continue to be registered through initiatives developed under the coffee production campaign, with the target of 4.5 million bags by 2018. These programs are aimed at increasing coffee production through generation of clean planting material, promotion of the re-planting program and yield improvements of existing old coffee trees. These programs include;

- Support generation and production of clean planting material through tissue culture, seed sourcing, and support to Clonal propagation of the Coffee Wilt Resistant lines for mass multiplication and distribution to farmers.
- Support to coffee replanting through private commercial nurseries; and direct provision of seedlings to various farmer groups and special interest groups.
- Productivity improvements through Rehabilitation of the old coffee trees by supporting specific lead farmers with demonstrations at various community locations for purposes of training; and direct support to willing farmers in rehabilitation through pruning, stumping and soil amelioration.
- Promote Coffee production in new areas especially Northern Uganda by integration of commercial coffee and banana production into the farming system.
- Promotion of Sustainable Coffee Production Initiatives through Good Agricultural Practices and certification, so as to increase the unit value of coffee at farm - gate level.
- Continued deliberate support and strengthening of Coffee Research by provision of financial, technical and material support.
- Support to collaborative participatory coffee Extension with other stakeholders.
- Provision of technical extension services in an effort to improve quality at post- harvest and ensure enforcement of the coffee regulations.
- Strengthening the functions and visibility of the Regional offices so as to provide better service to the Coffee stakeholders.
- Coordination and implementation of key activities under the coffee production campaign together with other stakeholders.

3.2 Promotion of Planting Material Production

The objective under this program is to create a sustainable demand driven initiative in production of coffee planting materials using elite seed and vegetatively propagated cuttings. This involves provision of clean certified seed to various farmer groups and private commercial nursery operators, support to nursery proprietors involved in vegetative propagation of clonal tree coffee cuttings and sourcing Biotechnology services for mass multiplication of clonal material through tissue culture. Key achievements under this programme included;

- Distributed 34.2 MT of Elite Robusta and Arabica seed to certified private nursery operators through field officers, Local leaders, Political leaders, organized farmer Associations and Exporter based farmer groups. This potentially raised 68.4 million seedlings.
- Under multiplication of CWD – Resistant lines at the National Coffee Research Institute (NaCORI) , 60 Nursery operators were allocated 25,000 CWD plantlets to establish mother gardens for subsequent generation of clones for expansion of the mother gardens. This brings the cumulative number of nursery operators to 143, with a total of 60,100 mother bushes established.

- Tissue Culture – Weaning and hardening of the 50,200 Tissue culture plantlets supplied by AGT carried out at NARL – Kawanda.
- Supported Buginyanaya (Sironko District), Zombo (Zombo District) Arabica seed gardens. This is to ensure a sustainable source of clean and certified Arabica seed. These sites were able to generate 3,620 Kgs of seed.
- To ensure sustainability of programmes in the new coffee growing areas, especially in Northern and North Eastern Uganda, support was provided to the seed gardens at Ngetta ZARDI (Lira District) and Serere ZARDI (Serere District). These sites were able to produce 450 Kgs of Elite Robusta seed.

3.3 Management of Diseases and Pests

There has been increased awareness on the infestation and control methodologies of the Black Twig Borer. There is however still increased infestation by the pest. Several interventions were put in place to address some of these attacks from Black Twig Borer, Coffee Leaf Rust, Caterpillars, Stem Borers, Coffee Berry Borer and Red Blister Disease.

Surveillance reports during the Coffee Year indicate continued spread and infestation by the Black Twig Borer with 68.8% of farms infested, 40.3% of trees infested and 8.6% of twigs infested. This was mitigated through spraying against the Black Twig Borer in all regions. A total of 34 Districts, 34 sub counties and 53 villages, were sprayed. A total of 2,410 liters of chemical was used covering 4,121 acres. This intervention benefitted 2,367 households.

Set up 34 Integrated Pest Management (IPM) demonstration sites in 34 Districts and conducted 40 farmer sensitization training sessions on IPM in all the 5 regions. This was complemented with 36 Radio programmes aired to create awareness, in addition to, posters/flyers. NaCORI continued with surveillance and characterization of the Black Twig Borer and other pests and diseases.

3.4 Promotion of Coffee Replanting

As part of the Strategy to increase coffee production, farmers, organisations and communities were mobilized for sustainable coffee planting. This involves planting seedlings that are mainly procured and supplied by UCDA and other institutions under various arrangements. A total of 37.41 million seedlings were planted under various initiatives benefiting a total of 226,859 households. 0.62 million seedlings were planted by 38 commercial farmers with planted farm size ranging from 2ha to 20ha.

3.5 Coffee Rehabilitation

This program is intended to improve coffee yield per tree from at least 0.5 kg to 1.0 kg of clean coffee. The initiative is to create awareness amongst farmers through, demonstrations, training and sensitization to stump and prune the old coffee trees, in addition good agricultural practices and appropriate soil and water management practices.

In order to demonstrate the benefits of rehabilitating old coffee trees, 250 demonstration plots (1 acre each) were established by farmers to act as centers of training and knowledge acquisition.

Held farmer competitions in 5 districts per region, involving 50 farmers per district. The competitions are an initiative to speed up and encourage farmers to rehabilitate their coffee. The competitions are based on adoption and implementation of Good Agricultural Practices (GAPs). The best 10 performing farmers per district were rewarded with various items (hand pulpers, tarpaulins, drying trays, solar panels). Out of this initiative, 1,071 farms (518.05 acres) of coffee farms across the country were rehabilitated.

Supported 50 farms to act as demonstrations on sustainable soil management practices. This included

establishment of tree nurseries, sensitization and training for farmers. Farmers were encouraged to use these sites as learning centers for adaptation to challenges related to climate.

Supported 50 farmers with domestic water harvesting equipment (water tanks and polythene sheets). This is to ensure available water for coffee and domestic use, besides acting as demonstrations to other farmers.

3.6 Support to Coffee Development in Northern Uganda

The Intervention to promote Coffee in New areas, especially Northern Uganda continued to register great success. These areas amongst others include; Mid-Northern Uganda districts of Apac, Kole, Gulu, Kitgum, Lira, Pader, Oyam, Amolatar, Dokolo, Nwoya, Alebtong, Lamwo and Amuru. The major goal is to create wealth and improve the welfare of the people in the non-traditional coffee growing areas through sustainable income and to ensure food security.

The main objective is to support adoption of production of coffee as a perennial cash crop grown on commercial basis while incorporating coffee/ banana and cover crops farming in the existing farming system. To achieve this objective, the following activities were undertaken:

- Held 4 sensitization workshops and seminars for local leadership and other stakeholders.
- Two groups of farmers had intra visits; From Acholi to Lang and Lango to Acholi sub regions. The objective was to create more effective awareness and knowledge in coffee value chain activities amongst their counter- parts in the new coffee growing areas.
- Aired 24 30-minutes radio sessions on radios in the region. The messages address all activities along the coffee value chain and tailored according to the seasonal activities.
- Formed 4 farmer groups and 8 – one day workshops were organized to improve farmer group knowledge in managing groups and associations.
- Formed and registered 89 community based nurseries with capacity to generate 1.8 million seedlings. The cumulative number of community based nurseries is 239 with a cumulative capacity of generating 4.8 million seedlings in the region. There has been a continued improvement in the survival rates of seedlings' to over 85%, except in periods of prolonged dry spells.
- Raised 2.626 million coffee seedlings in collobaration with community based nursery operators, and 1,826,992 seedlings were planted together with 36,600 shade trees, all benefitting 4,300 households.
- Procured 377,380 coffee seedlings and planted by farmer groups under UCDA sponsorship, benefitting 838 households.
- Facilitated 39 Farmer Field School (FFS) sessions with 722 participants.
- Established 20 Technology Development Sites (TDS), and 13 old ones supported to act as training and demonstration sites on new technologies. These sites are also used as multiplication fields for banana suckers distributed to farmers for intercropping with coffee. In this regard, 6,000 banana suckers were distributed benefiting 120 households. This, together with cover crops, provides early incomes to coffee farmers besides catering for food security.
- Conducted 7 workshops on processing and market development
- 170.3 MT of Kiboko sold by farmers at average price of shs. 1500 per Kg lower than the previous price of Sh. 1,800/= per kilo.
- Support the establishment of hulling facilities in the region, subject to business proposals – 3 proposals received for support to establishment of hulling facilities
- Conducted Coffee Characterization in the region in collaboration with NaCORI. Data was collected on; Yields, Screen distribution, Cup quality, Disease and pest occurrence

Good quality coffee-selective picking in Mid-North

3.7 Promotion of Sustainable Coffee Production Initiatives (Organic, Utz, 4C, Fair Trade, Rainforest Alliance)

Under the strategy to improve value addition at farm level and support penetration to niche and specialty market, support is given to farmer groups and/or organizations that are promoting sustainable coffee. The following were achieved under this initiative:

- Trained 10 Farmer groups on Organic and Fairtrade production practices in Zombo (2), Bushenyi (2) Kapchorwa (2), Kween, Sironko, Kisoro and Kasese (2). The training covered all aspects in sustainable coffee production systems.
- Supported 1 Farmer group - Kibinge Coffee Farmers Co-operative to access trade financing
- Supported NIHACOFA to attain certification for Flo Certification; NIHACOFA exported 15 containers to Europe and Canada.
- Carried out soil analysis in collaboration with University of Florida (UF). The report, highlighted soil nutrient status. The major findings were that Soil deficiencies with respect to nutrients, PH vary across the coffee growing areas, there is a substantial difference in nutrient requirement in Robusta and Arabica growing areas and that nutrient requirement varies with age of the coffee plant.
- 420,000 coffee seedlings were given for planting by farmers under Ugacof and UCFA.

3.8 Farmer Training and Extension Liaison

In collaboration with other stakeholders (NAADS, Local Governments, Projects, CSOs), regular farmer training is carried out, as a way of improving farmer knowledge and skills.

4 inter regional field trips were undertaken by farmers. The objective of the tours was for the farmers to learn and appreciate the practices of their colleagues in other regions. This helps in knowledge sharing and transfer, as better practices are identified and adopted.

UCDA in collaboration with Coffee Africa conducted 27 Coffee shows in 27 districts. The main purpose of the coffee shows was to showcase better practices along the coffee value chain and create interaction between farmers and other stakeholders, especially input suppliers. It was done in collaboration with other stakeholders under the coffee production campaign.

Coffee show in Isingiro District

Carried Out 384 Seminars, with 39,387 farmers (12,532 or 32% were women), attending in all coffee growing districts. These trainings address all aspects of coffee production, quality improvement and enforcement of coffee regulations

10 Radio stations were used to air 2,700 minutes of educative messages in 5 major regional languages. Farmers were sensitized on various issues along the Coffee value chain with respect to farm activities and any emerging issues such as disease and pest out-breaks.

3.9 National Coffee Platform

The National Coffee Platform is a multi-stakeholder consultative process whose objectives are to increase productivity, restore and increasing area under coffee production and to establish an enabling framework. The Platform achieved the following:

- Held 13 National Steering Committee Meetings of the Coffee Platform. Some of the key discussions and presentations were;
    - o Preparation of the annual Stakeholders Meeting
    - o Discussed the M&E of the National Coffee Export Strategy
    - o Received presentations from the USAID FTF Projects
    - o Approved coffee extension materials
    - o Engaged consultancy on appraisal of the performance of the Coffee Platform,
    - o Received update on review of the coffee regulations
- Reviewed a proposal on pilot scheme on implementation of sustainable coffee practices.

- Facilitated 13 district coffee platforms to sensitize farmers and processors on quality at post harvest, and in collaboration with the National Steering Committee of the coffee production campaign, participated in deliberations of the Annual stakeholders' Meeting
- Held the Annual Stakeholder Meeting of the Coffee Platform on 14th November 2013. Some of the presentations and deliberations centered on;
    - o The challenges and dilemma of the low coffee prices and impact on farm activities
    - o The Approved Coffee Policy – the next steps in operationalization.
    - o National Coffee Research Institute – new programmes.
    - o Discussions on performance of NSC – general issues of inadequate coverage raised including the need to bring other stakeholders on board

3.10 Provision of Technical Extension Services and Quality Enhancement

As part of the Quality improvement drive, programs were put in place to ensure that quality aspects are upheld at post-harvest level, in addition to enforcement of the Coffee Regulations. The following were the achievements;

- Registered and licensed 475 stores
- Licensed 305 primary processing factories.
- Registered 6 washing stations
- Licenced 43 Export grading factories as export firms
- Held 20 Workshops for traders and buyers, attracting 576 participants.
- Conducted 2 Regional task force in West Nile sub region and Western Region. During the exercise 5 factories were closed. All the offenders at farm level were sensitized and warned especially on harvesting green beans and drying on bare ground. Over 100 industry players including local leaders especially at LC1 levels were also sensitized.
- 5 Multi Stakeholder task forces set up for quality improvement in Eastern, Central, South – Western and Western Regions;
    - o 54 offending industry players majority of whom were local coffee merchants were apprehended and charges opened against them.
    - o Mal-practices of post-harvest handling were observed in almost all the areas visited.
    - o Green coffee harvesting /stripping is common and drying of Kiboko on bare ground, sun drying of FAQ,
    - o Operations of several stores and factories were suspended and a number of suspects were handed over to police
- Publicity of good handling and storage practices carried on local Radios and National TVs, enhancing visibility of UCDA.

CHAPTER FOUR:

COFFEE RESEARCH

4.1 Introduction

The Uganda Coffee Development Authority (UCDA) provides financial support to the National Coffee Research Institute (NaCORI) to augment the main stream funding by government for coffee research and development activities in the country. This support is normally directed towards the most pressing needs in improving coffee production. Currently, UCDA support is mainly towards the development and promotion of new technologies for effective and sustainable management of Coffee Wilt Disease (CWD) and the Black Coffee Twig Borer (BCTB) on Robusta coffee, and Coffee Leaf Rust (CLR) and Coffee Berry Disease (CBD) on Arabica coffee. Further, efforts are directed towards enhancing availability of adequate planting material through both direct provision of mother plants and giving support to nursery operators. Socioeconomic studies to support the uptake of the technologies are also undertaken.

This report presents research progress made by NaCORI during the coffee year October 2013 to September 2014. The projects were derived from the revised NaCORI Mid Term Plan developed through an elaborate NARO-wide process and encompass interests of UCDA and coffee stakeholders. The segments of research reported on here are on specific issues agreed upon with UCDA.

a) Coffee Variety and Seed Systems Improvement Program:

i. Development of high yielding Arabica coffee varieties with resistance to coffee leaf rust (CLR), coffee berry disease (CBD) and with desired market attributes
ii. Development of Robusta coffee varieties with resistance to Coffee Wilt Disease (CWD), coffee leaf rust and with desired quality
iii. Development of efficient and effective Coffee Seed System for increased coffee productivity

b) Coffee Integrated Pest Management Program:

i. Understanding the black coffee twig borer, and development and promotion of sustainable options for its management
ii. Development and promotion of coffee wilt disease and coffee leaf rust management technologies for enhanced coffee productivity

c) Coffee Production Systems Program:

i. Development and promotion of improved coffee cropping systems for enhanced productivity in different agro-ecologies of Uganda

4.2 Coffee Variety and Seed Systems Improvement Program

4.2.1 Development of Arabica coffee varieties with resistance to leaf rust, CBD, high yield and desired market attributes

Arabica coffee constitutes 20-25% of coffee produced in Uganda and 30-40% of the earnings from coffee. Arabica coffee is grown by 544,000 households in Uganda (UCDA, 2012). The main constraints to Arabica coffee production in Uganda are coffee berry diseases (CBD), which causes 30-90% yield loss, and coffee leaf rust (CLR) which causes up to 70% loss in yield on SL14, SL28, KP423 and Bugisu local varieties. These diseases reduce quality and yield valued in excess of US$100m annually. The SL14, SL28, KP423 and Bugisu local varieties yield about 1.5 tons per hectare per year of clean coffee which is 75% below the 5-7 tons per hectare per year

obtained from South American grown varieties. The poor genetic yield potential of the Ugandan varieties is aggravated by their susceptibility to diseases and pests. This project focuses mainly, on broadening the Arabica coffee genetic diversity and exploiting it for genetic gain in order to derive new Arabica coffee varieties that are high yielding, with adequate resistance to diseases and pests and, of desired market attributes.

4.2.2 Evaluation of introduced Arabica coffee lines for farmer and market desired traits

During the reporting period, research continued on a number of Arabica coffee lines introduced at different times between 1993 and 2008, and on arrays of intra-specific and inter-specific hybrids generated at different times and are at different stages of evaluation in on-station trials at Kituza, Bugusege and Buginyanya, and in on-farm trials in Kapchorwa, Manafwa, Nebbi and Zombo districts. Focus is put on fast-tracking identification and release of varieties with the desired characteristics including yield, resistance to major diseases (CBD, CLR and red blister), and quality attributes.

Evaluation of 2 selections from India: Two Indian selections 5A and 6 were planted in on-station field trials at Kituza and Buginyanya, and on-farm trials in Manafwa, Kapchorwa, Nebbi and Zombo districts alongside local genotypes, NG9257, SL14, Bugisu local, SL28, SL34, Ruiru II and KP423 as controls. These trials were planted between 2009 and 2010 and were laid out in Randomized Complete Block Design (RCBD).

Progress:

During the period under review, data were collected from the trials at Kituza on leaf rust incidence as indicator of genotypes' resistance to the disease. Yield, quality and plant vigor data were not collected from this trial because the plants were damaged by hailstorm. Collection of these data will resume on new re-growth after stumping the coffee trees. The plants were evaluated for resistance to leaf rust under field conditions using a 1-4 scale, where 1 is when plants had no disease symptoms and 4 is when plants had severe/maximum disease symptoms. The genotypes from the Kituza trials were also evaluated under laboratory conditions, by inoculating two centimeter (2cm) diameter leaf discs of each test genotype, with 1 milligram uredeniospores per milliliter solution of the pathogen and assessing the disease levels on the discs incubated on plastic foam layer placed in covered petri dishes, using a 1-9 severity scale.

Elgon CB, Indian selections 5A and 6, and local line NG9257 were completely resistant to CLR. The local check genotypes SL34, SL28, KP423and SL14 were variably susceptible to the diseases. SL28, SL34 and SL14 were the most susceptible

Table 4.2.1 Response of Arabica Coffee Genotypes to Leaf Rust Infection under Filed Conditions at Kituza

	Variety							
	NG9257	Selection 5A	Elgon CB	Selection 6	KP423	SL14	SL28	SL34
Score	1.0	1.0	1.0	1.1	2.0	2.4	2.8	3.0

Vegetative vigor of the genotypes was assessed using morphological data collected from trials in Manafwa, Nebbi, Kapchorwa and Zombo districts, where yield data collection is on-going currently. Results (Figure 4.1) from all these trials found Indian selections 5A and 6 to be taller than local genotypes, except Bugisu local, but they have smaller leaves, less berries, long stem and primary branch internodes. The results showed Ruiru II to have the best plant stature - wide canopy, broader leaves, short stems and primary branch internodes and many bearing primaries carrying many berries, which is an early indicator of a high yielding genotype

Figure 4.1 Agronomic Performance of Arabica Coffee Genotypes in a Variety Trail in Zombo District

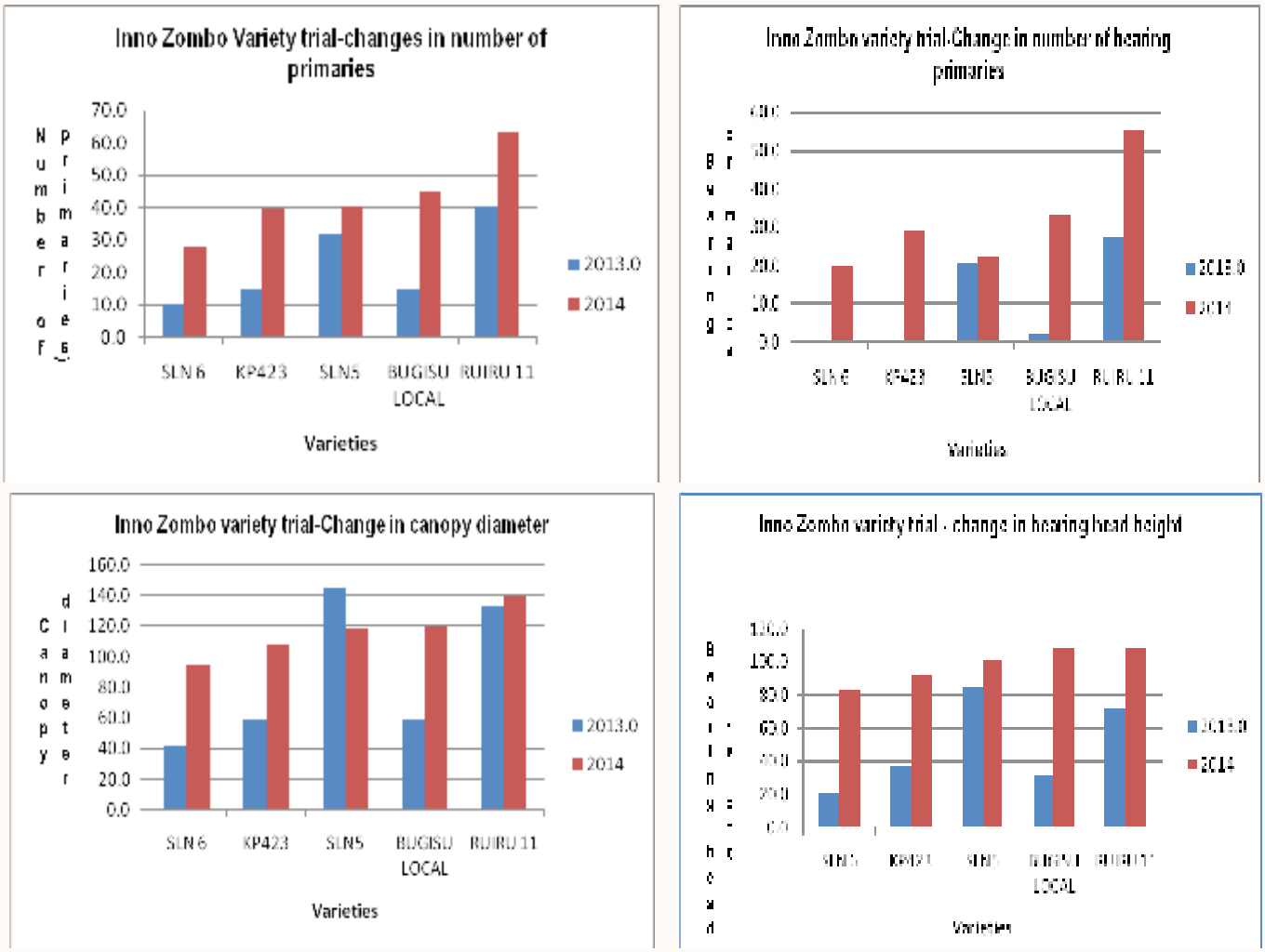


Figure 4.2: NaCORI Scientists and Farmers jointly assess yields of various test of Arabica coffe genotype in Manafwa

Figure 4.3: NaCORI Scientists and Farmers assess yields of Arabica coffee genotype in Kapchorwa

Preliminary inferences

- Basing on results of vegetative growth vigor from the on-farm trials in Manafwa, Kapchorwa and Zombo districts, which corroborates the results obtained from the trial at Kituza in previous reporting periods, Indian selections 5A and 6 are not suitable for release as varieties for cultivation.
- On account of preliminary results on resistance to CLR from Kituza trial, and quality and yield, which were obtained from the same trial in the previous reporting period, the Indian selections 5A and 6 are promising as good source of resistance to CLR and good cup quality, which

can be introduced into commercial lines by hybridizations.

- The outstanding performance in all traits of Ruiru 11 except cup quality has won admiration from farmers. This line is a commercial variety in Kenya, chosen for being high yielding and resistant to CBD and leaf rust but its quality has been contested by cuppers. Cultivation of this variety in Uganda can be explored for farming in areas at higher altitudes (over 1700 masl), since quality is purported to improve with altitude, and as source of resistance against CLR and CBD to be used in hybridization programmes.
- However, there is need to fast track response of the Indian selections to CBD in trials at Buginyanya and Kapchorwa, and relative yield and quality in all trials except that at Kituza for purposes of understanding their flexibility in different coffee growing ecologies.

Planned outputs:

- Data set on vegetative growth vigor (canopy size, width of leaves, length of stem and primary branch internodes, and numbers of bearing primaries, nodes per primary branch and berries per node), from on-farm trials and Buginyanya, at the fourth year of the cropping cycle.
- Yield, cup quality and response to leaf rust and CBD from on-farm trials and Buginyanya assessed

Evaluation of 17 Elgon A lines and 2 CB varieties

The 17 Elgon A clones were previously planted in a Randomized Complete Block Design (RCBD) trial on-station at Kituza. Elgon A average yields exceeded 1000 kg c.c. /ha as compared to 190 kg c.c. /ha for commercial varieties SL 14 and KP423 at Kawanda and had good quality and resistance to CBD and CLR, when they were evaluated under in-vitro and field conditions respectively. At Kituza Elgon A clones yields ranged from 575 to 2,642kg/ha of hulled coffee per year as compared to 530 and 579 of the commercial varieties SL14 and KP423 respectively. They were resistant to leaf rust under field conditions at Kituza, where they exhibited good cup and physical bean qualities. The 2 Colombian lines (CB) are newly introduced and have not undergone any field evaluation in Uganda yet. Activities during the reporting year focused on generating planting materials of the 17 Elgon A and 2 CB lines and establishing on-farm trials to test their performance under multi-location conditions, prior to their recommendation for further use. The study was supported financially by UCDA and ATAAS.

Progress:

Part of 1,500 rooted cuttings of the Elgon A clones and CB seedlings, which were raised in the previous reporting period were planted in on-farm evaluation trials in Kapchorwa (Siron), Zombo (Zeu) and Bulambuli (Kamu). Another set of 700 rooted cuttings were raised and will be planted in on-station trials at Bugusege and Buginyanya, together with remnants of earlier materials, before the end of year 2014.

Planned Outputs:

- 2 on-station trials planted at Bugusege and Buginyanya for evaluating adaptation of the genotypes (Elgon A and CB) conditions in these locations. .
- on-farm trials planted in South Western Uganda and interested farmer from any other regions for evaluating adaptation of the genotypes to the different ecological conditions.
- More rooted cuttings of Elgon A clones raised for planting in field trials
- Information on response of the varieties, in terms of plant vigor and resistance to CLR of the Elgon A and CB varieties to conditions in Kapchorwa, Zombo and Bulambuli during first year of the first cropping cycle generated.

Evaluation of 12 introductions from Ex-cooke Islands

The 12 lines were introduced in the 1990s as F6

generation, but field evaluations at Kawanda, Bugusege and Buginyanya found them to segregate highly for different agronomic traits, hence evaluation reverted to individual tree assessments. Assessments in the previous reporting period resulted into selection of 100 genotypes yielding above 1000kg c.c. per hectare, after which the trees were stumped to rejuvenate vegetative growth and production. During the current reporting period the 100 selected genotypes were re-assessed using previous yield data, and suckering ability.

Progress

Suckers on the stumped trees were counted to determine suckering ability of the selected genotypes and suitability for available suckers for rooting (vegetative propagation). 80 out of the 100 Ex-cooke Island line evaluated for suckering ability revealed 32 lines had over 20 suckers, 25 lines had between 11-20 suckers while 23 lines had less than 10 suckers.

Planned Outputs

- Preliminary information on agronomic growth and resistance to CLR of the rejuvenated plants of the 100 selected genotypes generated, with emphasis put on 59 genotypes which had yield of over 1,500 kg of hulled coffee per ha.
- Genetic traits of the test genotypes determined

4.2.3 Evaluation of Arabica coffee hybrids

Commercial Arabica coffee varieties in Uganda are susceptible to diseases, mainly leaf rust and CBD, low yielding and tall with low productivity per unit area but have good cup quality. But within Arabica coffee collections at Kituza, there are genotypes that possess some of the required traits but lack others. The hybridization program aims at generating new coffee genotypes by cross-fertilizing parents of complementary desired traits, followed by evaluation of the products. Arrays of hybrid progenies exist at Kituza, Bugusege and Buginyanya. This activity centers on evaluating F1 and inter-specific hybrid progenies at Kituza, Bugusege and Buginyanya for desired traits.

4.2.3.1 Arabica F1 intra specific hybrids (Bugusege, Kituza and Buginyanya)

This activity was supported by funds from UCDA and ATAAS. Individual trees among assays of single cross, 2-way cross and 4-way cross hybrid progenies, were planted at Bugusege, Kituza and Buginyanya in different years since 2008, to be evaluated for yield, field response to diseases (leaf rust and CBD) and cup quality.

Progress:

- Yields for the year 2012/13 of single cross F1 hybrids existing at Bugusege were analyzed and 50 individuals/genotypes were found to yield above 1,500 kg of hulled coffee per hectare per year, which was higher than yield of 1,200kg of hulled obtained for the commercial variety KP423.
- The same progenies responded variably to diseases and cherry size.
- 22 similar F1 hybrid progenies were planted in new evaluation trials at Kituza and more 28 progenies were planted in a new trial at Bugusege

Planned outputs:

- All the progenies will be evaluated again for response, at the third year of their first cropping cycle at Bugusege, to yield, bean quality, and resistance to CBD and CLR
- The hybrid progenies will be assessed vigor and tolerance to coffee leaf rust and red blister.
- Vigorous individual trees with yields above 1,500kg of hulled coffee per hectare per year and resistance to CBD and rust will be selected for advancement to on-farm evaluation under different agro-ecological conditions
- At least 44 F1 intra specific hybrid progenies will be planted in new trials at Buginyanya to be evaluated for response to CBD and other biotic and abiotic conditions
- Newly planted progenies will be groomed for evaluation.

4.2.3.2 *Evaluation of Arabusta/ (Inter-specific between Arabica and Robusta coffee*

Robusta is purported to carry resistance against leaf rust and CBD. Hybridization of Robusta and commercial Arabica coffee varieties, followed up with recurrent backcrossing to the Arabica parent after selection for the desired traits at every generation, would lead to Arabica coffee varieties that carry the desired genes from the Robusta parent. This activity envisages performing recurrent backcrossing and selection to identify ideal varieties that combine the Arabica qualities and resistance to diseases.

Progress

No progress noted since it is a new activity

Planned Outputs

Old Backcross 3 and 4 progenies which exist at Kituza rejuvenate for evaluation for desired agronomic trait.

4.2.4 *Profiling quality, disease and pest resistance, yield, morphological and molecular characteristics of Arabica coffee germplasm*

117 Arabica coffee genotypes, which include current and previous commercial lines, were recently planted in a single field gene bank at Kituza. Most of the genotypes were transferred from Kawanda collections. Information on the characteristics of these genotypes is either insufficient or lacking, yet the information is vital if the genotypes must be utilized in the variety improvement program and germplasm exchange. The collections are therefore being characterized by scientists for different traits. NaCORI also anticipated broadening the genetic base through importation of more genotypes.

Progress

- The 117 genotypes were found to vary in responding to field infestation by the BCTB under field conditions
- The genotypes were also found to respond differently (have variable resistance) to leaf rust infection under field conditions.
- The genotypes were found to vary for morphologically

Planned Activities

Further information on levels of disease resistance, yield, quality, and morphological and molecular variation among the germplasm generated and documented.

4.3 Development of Robusta coffee varieties with resistance to CWD, coffee leaf rust and desired quality

Robusta coffee contributes 75-80% of Uganda's coffee exports and 60-70% of earnings from coffee. It earned US$394m in the 2013/14 coffee year. About 1.7 million small holder farmers depend on it for their livelihood (UCDA, 2012). However, its production is constrained amongst others by CWD that causes about 45% yield loss valued in excess of US$ 150m annually. CWD can only be controlled by planting resistant varieties. Currently, 7 CWD-resistant varieties are being used for the replanting program nationwide. The 7 varieties do not suffice for the replanting in all the Robusta coffee agro-ecologies of Uganda, and they are deficient in yield (2-3 tons/ha/year). This study aims at broadening the genetic base of cultivable CWD-resistant varieties suited for replanting in the different agro-ecologies.

4.3.1 *On-station evaluation of Robusta coffee lines for yield, quality, CWD and CLR resistance*

Activities on-station aim to select CWD resistant lines with high genetic potential as expressed in yield, quality, resistance to rusts and red blister disease that are subsequently advanced to on-farm validation trials in various agro-ecologies. To-date, there are 1,500 genotypes that are undergoing such evaluation on-station at Kituza.

Progress:

During the year under review, notable progress was made that included the following.

- 293 CWD resistant lines were evaluated on-station at Kituza, from which 9 high potential lines with yields ranging from 1,000 to 1,500 kg c.c. per ha were selected. Plans are underway to advance the selected lines for further evaluation on-farm. In this regard therefore, 387 cuttings of the materials have been raised and are being nurtured for planting in the field in the first rains of 2015.
- 17 Robusta coffee hybrid progenies selected for yield, and resistance to CWD and other diseases in previous year were planted into one replicated trial at Kituza and they are being groomed for evaluation in 2015.
- Samples of 205 CWD resistant genotypes were processed for physical and organoleptic quality analyses and, data on quality for 57 of the genotypes profiled and an inventory made available for breeding purposes which has led to 9 new CWD resistant lines of high genetic value having been selected and prepared for on-farm trials.

Planned Outputs:

- Planting materials of the 17 Robusta coffee hybrid clones for on-farm trials generated.
- On-farm evaluation trials of seventeen (17) newly selected clones planted.
- Response to leaf rust and red blister disease, aagronomic characteristics of the selected clones assessed.
- Cup and physical bean qualities of the available 205 samples of hulled coffee analyzed and good lines identified
- More good performing clones selected from among the CWD resistant Robusta gene pool at Kituza.

4.3.2 On-farm evaluation of CWD-resistant Robusta coffee lines for yield, quality and CLR resistance

The CWD resistant Robusta coffee lines selected on-station on the basis of their resistance against CLR, red blister disease and CWD good yield performance and acceptable bean and cup qualities are subjected to further evaluation on-farm under various ecological conditions. This is primarily to test their consistency in performance under diverse agro-ecological environments prior to their recommendation for release to farmers. Consequently, a number of CWD-resistant Robusta coffee lines selected on-station have been advanced to on-farm evaluation trials in multi-locations for yield, quality and CLR resistance.

4.3.3 On-farm evaluation of 24 CWD-r Robusta coffee lines for yield, quality and CLR resistance

The 24 lines were planted in on-farm trials in Ibanda, Mukono (Nakanyonyi), Kamuli and Mityana districts in 2008, and have since been undergoing evaluation.

Progress:

- Results of agronomic performance in Mityana over the reporting period showed varieties JB109.4/5/1, J24/13/20/4, J1/14/21/1, UFCT,3/15/1 had highest mean canopy diameter, while varieties MFCT1, 3/15/1, J1/21/14/1, 261s/21/1, J12.01/16/1 had highest canopy diameter in Ibanda. In Kamuli, varieties J94/2/64/1, JB109.4/5/1, 2/22/12 were the most robust in growth.
- Results of genotypes' response to infection by coffee leaf rust and red blister disease under field conditions in Ibanda and Mityana are given in figures 4.6 and 4.7 respectively. Levels of rust infection on the promising candidate clone 3/15/1 were by leaf rust were comparable to current commercial CWD resistant KR3 (J/1/1) and KR2 (Q/3/4). 3/15/1 however was not affected by red blister at both sites. In this way it is better than the commercial clones.
- Samples of the 24 CWD resistant genotypes from Ibanda and Kamuli trials were submitted to UCDA for physical and organoleptic quality analyses

Figure 4.4: Farmers admiring a plot of CWD resistant Robusta Coffee line J/1/1 in an on-farm trial at Ankole Coffee Processors

Figure 4.5: 3/15/1 being tested in an on-farm trial at Ankole Coffee Processors Ltd in Ibanda

Figure 4.6: Response to Leaf Rust under Field Conditions in Mityana and Ibanda

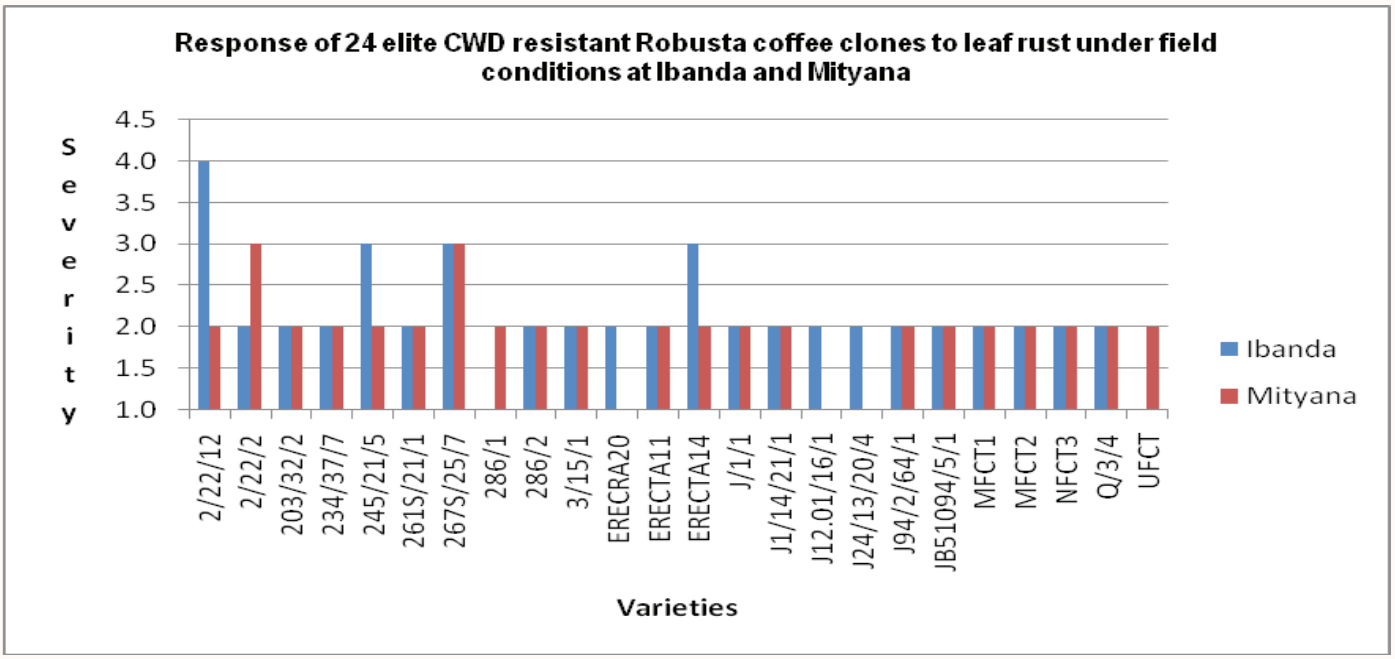
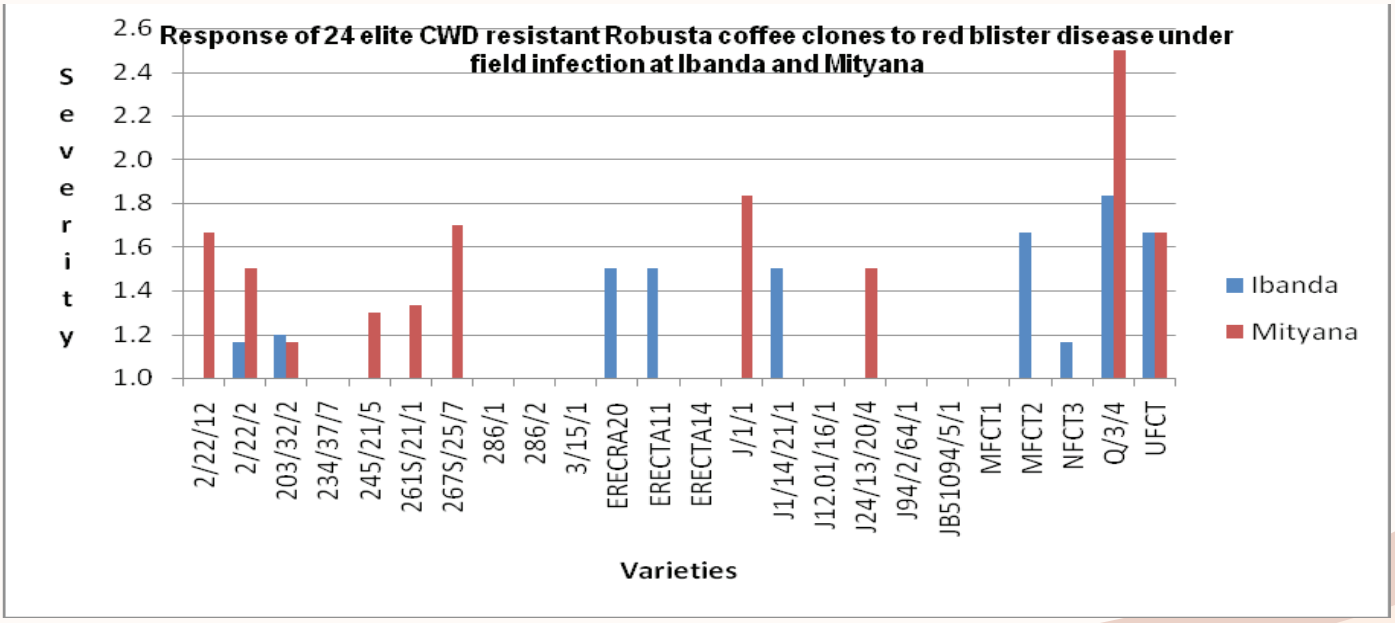


Figure 4.7: Response to Red Blister under Field Conditions in Mityana and Ibanda



Preliminary inferences

Basing on the available results (plant vigor, resistance to rust and red blister) and farmers opinion, clone 3/15/1 possess most of the traits required by farmers. However its quality and yield values are still being evaluated. This variety could be considered for release as soon as the results on quality and yield are obtained, without waiting for data on the second cropping cycle.

Planned activities

- Yield and quality data, being collected during the current cropping season, will be analyzed and the results will be used together with results on vigor and resistance against rust and red blister, for selecting clones performing as good as or better than the current 7 clones for release to farmers.
- Cup quality of bean samples of the 24 lines from all 4 sites (Mityana, Ibanda, Kamuli and Mukono) determined.
- Coffee trees in the trials in Mukono, Mityana and Kamuli stumped to rejuvenate growth for the cycle evaluation.

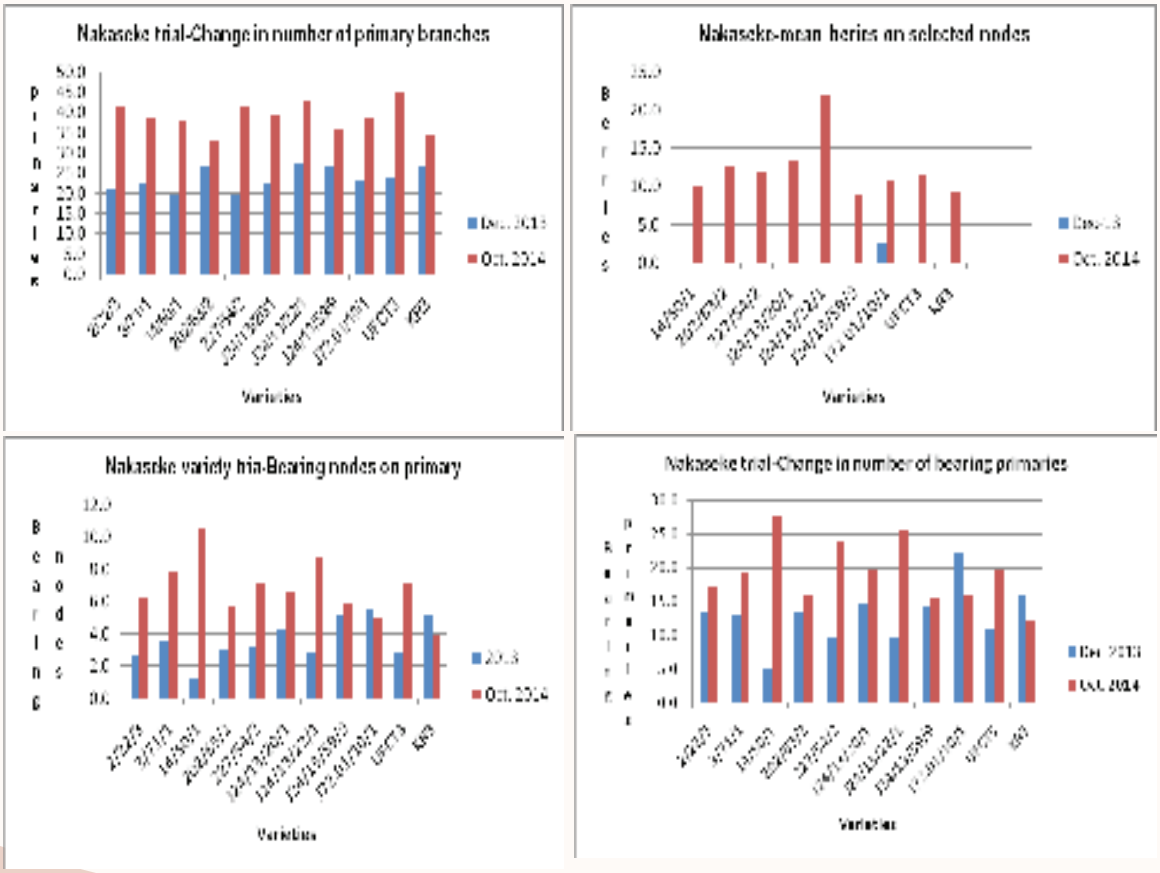
4.3.4 On-farm evaluation of 10 CWD-resistant Robusta coffee lines for yield, quality and CLR resistance

Another set of 10 selected CWD resistant lines was planted in Nakaseke, Kayunga and Bukomansimbi in 2012. These are to be evaluated for agronomic and yield performance, quality characteristics, and resistance against leaf rust and red blister diseases.

Progress:

- Analysis of the data to-date on plant vigor of the same 10 lines in two trials, earlier established in Kayunga and Nakaseke districts, show test lines are either as vigorous as the check variety KR3 or better (Figure 4.8). The vigor traits are early indicators of yield of a genotype
- The host farmer was trained to control BCTB which is infesting trees at an increasing rate.

Figure 4.8: Vigor of Selected Trials among Robusta Coffee Genotypes in the Nakaseke Variety Trial



Preliminary inferences

This crop is still young; hence it is too early to make any meaningful forecast.

Planned activities

Collecting another set of data on agronomic characters, yield, and resistance to CLR and RBD.

Figure 4.9: CWD Resistant Robusta Coffee Lines Undergoing Evaluation on Farm in Nakaseke

CWD resistant Robusta coffee lines undergoing evaluation on-farm in Nakaseke district and the host farmer holding pruned branches infested with BCTB. Inset is a close picture of a tree of one of the lines bearing a crop.

4.3.5 Profiling quality, disease and pest resistance, yield, and morphological and molecular characteristics of Robusta coffee germplasm

425 Robusta coffee genotypes, that include new introductions from Ivory Coast, old collections which were transferred from Kawanda, new collections from farmers' fields and hybrid selections, were recently planted in a field gene bank at Kituza. Information on the characteristics of these genotypes is either insufficient or lacking. The collections are therefore being assessed by scientists in different disciplines to generate information about them. It is anticipated to broaden the genetic base in the gene bank through further collections from the wild and farmers' fields, and importation of new genotypes.

Progress

- During the period, a tool for capturing morphological data (plant architecture, cherry size, cherry shape, cherry color, leaf shape, leaf size, leaf apex, leaf venation, stem and primary branch internodes length, etc.) was developed. Using this tool, 8 collections from Ivory Coast and The French Agricultural Research Centre for International Development (CIRAD) were assessed and some of them found to be good yielders.
- The 7 commercial CWD resistant Robusta coffee varieties were characterized using data on color of young leaves, leaf shape, leaf apex shape, ripe cherry (Fruit) color and fruit shape. However, it was noted that color of young leaves varies with the environment such as climatic season and hence not a good indicator for genotype

characterization.

- DNA bands of 27 high value CWD resistant Robusta coffee lines and 4 check genotypes were compared using molecular methods (5 RAPD markers). The CWD resistant genotypes shared 3 common bands, which shall be developed into diagnostic markers for identifying CWD resistant genotypes, therefore fasten development of CWD resistant varieties.

Planned activities

- Initiate collection of morphological characteristics of recently stumped genotypes.
- Analyzing data on morphological characteristics.
- Assessing yield of germplasm materials.

4.4 Enhancing the quality profiles of Ugandan Robusta coffee

The quality of coffee liquor is the driver in the market. Coffee quality is a function of the intrinsic biochemical properties of the beans, and the post-harvest handling of the coffee. Biochemical studies aimed at understanding sucrose metabolism and accumulation during bean development, which is vital in early selection of varieties with good organoleptic qualities were designed. Part of the work forms a Master of Science research proposal, undertaken in collaboration with the College of Natural Sciences, Makerere University.

Understanding effects of post-harvest handling on cup quality is of a practical importance in the development of standards for post-harvest handling of coffee, which, if applied, will enhance quality profile for the entire Uganda coffee industry. Studies are therefore being undertaken into various processing, drying and storage methods in order to derive the most appropriate recommendations for post-harvest handling of Robusta coffee.

4.4.1 Analyzing biochemical changes associated with aroma and flavor in the Robusta coffee bean

Progress

- During the year, 25 CWD-resistant lines were selected for the study on changes in biochemicals that influence quality in a coffee bean.
- A Memorandum-of-Understanding (MoU) was negotiated with the College of Agricultural and Environmental Sciences (Makerere University) for the biochemical analysis of bean samples from the candidate genotypes to be carried out at Makerere University.
- The related Master of Science proposal was vetted by the Makerere University and accepted

Planned outputs

- MOU on the collaboration with Makerere University signed.
- Enzyme activity and coffee bean sucrose content at different cherry development stages and under different agro-ecological conditions will be profiled.
- Isozymatic banding pattern polymorphism of the 24 candidate genotypes using 2D-Electrophoresis carried out.
- Isozyme bands associated with higher bean sucrose accumulation and filling, hence good cup quality will be identified.

4.4.2 Determining best-bet post-harvest handling options for Robusta coffee

Progress:

Composite samples have been drawn from cherry lots of mixtures of the same coffee varieties under different processing and drying methods as in table 4.4.1 below have been made.

Table 4.4.1: Assessment of Best Post Harvesting Methods

Sample	Processing methods	Drying methods	Storage method
A	Wet processing (Pulping, fermenting, washing, drying	Dried on trays under direct sunshine	Store in open plastic buckets
B	Semi-dry processing (pulping and drying)	Dried on trays under direct sunshine	Store in open plastic buckets
C	Drying processing (drying cherry)	Dried on trays under direct sunshine	Store in open plastic buckets
		Cemented floor	Store in open plastic buckets
		Bare ground	Store in open plastic buckets

Wet processing reduced drying time to only five days while semi-processed coffee dried in eight days. Dry processed coffee dried in 21 days.

Preliminary inferences

Basing on these results, wet processing minimizes the risks of fungal infections, which reduces health hazards arising from the fungal toxins such as ochratoxin A.

Planned activities:

- Evaluating the effect of storage conditions and storage time on the quality of the coffee bean.
- Analyzing and comparing the cup and biochemical profiles associated with aroma and flavor of coffee beans processed under different post-harvest handling regimes.

4.5 Genetic and phenotypic characterization of the CWD resistant germplasm

4.5.1 Biotechnological innovations: Finger printing CWD resistant lines

Finger printing of the seven elite CWD clones is required for genetic identification of each of the genotypes and for preventing perjury. Additionally, identification of diagnostic markers for CWD resistance among the 1500 lines available at Kituza will fasten the selection process during future screening germplasm for CWD resistance. This Marker Assisted Selection (MAS) will ease the time and labor consuming selection basing on artificial inoculations.

The activity mainly concentrated on DNA analysis of the resistant materials using RAPD random primers and genetic comparison of the plants produced by tissue culture to their parent clones. Both of these two activities will go through 2015.

Progress

- During the reporting period, DNA bands of clonal CWD resistant materials were compared with those of plants generated by somatic embryogenesis in order to test for uniformity. Genomic DNA were analyzed to determine the genetic proximity of the tissue culture generated plants to their mother plants.
- The analysis did not find significant differences between the clones and their corresponding somatic embryos (tissue culture plants) (P=0.05).

Preliminary inference

If this finding is consistent in further analysis, then plantlets generated through indirect somatic embryogenesis can be deemed true-to-type to their parent plants, and can therefore be confidently given to farmers.

Planned activities

- Further analysis of the materials using SSR molecular marker system

- Sequencing potential band markers for CWD resistant materials.
- Determining extent of soma-clonal variation within the tissue culture generated plants.

4.5.2 Phenotypic characterization of the CWD resistant materials

Progress

The main activity during the period under review was analyzing the data on the 13 phenotypic characters so far used to characterize the materials (YLC – Young leaf color; FC- Fruit color; FS- Fruit shape; LS- Leaf shape; LAS – Leaf apex shape; Fruit disc shape, fruit position, SDS-Seed shape; SDC-Seed color; No ST-number of stamen; No PT-number of petals; No SP-number of sepals; No SD- number of seeds in a fruit). Graphical analysis of the data showed that E/U/20 is the most distinct genotype and was separated singly with cherry shape, color and fruit color. One of the genetic cluster analyses agreed with the phenotypic data. Hence, E/U/20 can be identified phenotypically. J1/14/21/1 had the most unique leaf apex shape. The rest of the materials shared most of the characters. Thus, at least two of the resistant lines have so far been conclusively phenotyped.

Planned Activities

- Continue with data collection on other characters and increase on the number of lines.
- Data analysis using various software.
- Formulation of descriptive used in manual form.

4.6 Development of efficient and effective coffee seed system

Demand for coffee planting materials, especially of CWD resistant varieties is overwhelmingly high and on the increase, but production of planting materials of the CWD resistant varieties is far below the national target of 100 million plants per year. Production is limited by technical, institutional and socio economic constraints. Technical limitations include lack of genotype specific protocols for generating plants by tissue culture, inefficient protocols for raising plants by rooting cuttings, low levels of knowledge and skills for coffee nursery management among the private coffee nursery operators, rampant disease infections on plants in nurseries (tissue culture and cuttings) and lack of effective options for their management/control. Institutional limitations arise from limited parent/seed materials at source (research) and also limited interest by companies in the formal seed sector to participate in up-scaling production of coffee planting materials. The socio-economic factors arise from low aspiration of the private nursery operators, their inability to afford putting up prerequisite nursery infrastructure and acquiring inputs needed for raising planting materials. This project envisions removing some of the institutional (research) and technical obstacles causing inefficiency in the coffee seed system, and improving knowledge on coffee nursery, among the private nursery operators. It is presumed that this will greatly contribute in up-scaling production of planting materials and up-take of the CWD resistant varieties, which will enhance coffee productivity in Uganda.

4.6.1 Enhancing production of seed of commercial Arabica coffee varieties

NaCORI produces seed of SL14 and KP423 varieties from small plots/gardens of coffee at Bugusege equivalent to 1 acre producing to maximum of 1.5 tons of seed. UCDA's demand for seed from NaCORI surpasses this quantity. The seed gardens are to be expanded in order to increase production of quality seed.

Progress:

- During the period, 1.5 acres of a seed garden of SL14 variety were planted at Kituza
- The seed garden at Bugusege was rejuvenated through stumping.
- 1,500kg of seed of varieties SL14 and KP423 was produced.

Preliminary inferences

The crop will be in its first production in 2015.

Planned activities:

- The seed gardens at Kituza and Bugusege groomed for production
- SL14 and KP423 seed produced from Bugusege gardens
- Farmer owned and managed seed gardens of both SL14 and KP423 established in outlying areas/ districts such as Bwera (Kasese district).

4.6.2 Producing planting materials of CWD resistant Robusta varieties by rooted cuttings.

NaCORI had a mother garden of 1,065 bushes from which cuttings were harvested and rooted at the Kituza and Kawanda coffee nurseries.

Progress:

- During the reporting period, 9,492 rooted cuttings of the 7 CWD-R were generated and given out to nurseries;
- 11,444 cuttings were planted in cages at Kawanda for rooting.
- Mother garden of the 7 CWD resistant varieties at Kituza was expanded from 1,291 plants to 4,590.

Inferences

- With 5,000 mother plants, NaCORI will be able to produce at least 150,000 plants per annum, when all the plants come to production in 2017.
- Basing on the available demand for the planting materials, the unavoidable limitation of tissue culture and other limitations faced by the private nursery operators notwithstanding, NaCORI will continue to expand the mother gardens to at least 35,000 plants to be able to produce at least 1,000,000 plants per annum.

Planned Output

- At least 10,000 rooted cuttings of CWD resistant varieties generated and disseminated to nursery operators for use by stakeholder
- Mother plants groomed for production of more suckers
- Mother garden of the 7 CWD resistant varieties at Kituza increased to 10,000 mother plants.
- Producing planting materials of CWD resistant Robusta varieties by tissue culture
- NaCORI produces planting materials of the 7 CWD resistant Robusta varieties using the tissue culture laboratory at Kawanda, to supplement production by rooting cuttings.
- Also NaCORI weans tissue culture plants of the CWD resistant varieties produced by AGT Buloba.

Progress:

During the reporting period, 17,204 plantlets were generated through tissue culture, out of which 6,856 were given to nursery operators for planting in mother gardens. 10,348 plantlets are still undergoing nurturing in the nursery at Kawanda.

Nurtured 50,000 plantlets from AGT, of which 23,098 were given out to nursery operators for planting in mother gardens and 820 plantlets were given to MUZARDI for demonstration trials. 6,200 plantlets are still being groomed in the nursery at Kawanda. Unfortunately, nearly all have died due to unknown infections.

Planned outputs:

- At least 10,000 new plantlets generated;
- The 9,642 available plantlets from NaCORI-Kawanda TC laboratory will be nurtured and given to nursery operators to plant mother gardens.
- 6,200 available plantlets from AGT will be nurtured and given out to nursery operators to plant in nursery gardens.

4.6.3 Developing best-bet media for generating plantlets of different coffee genotypes by tissue culture

In tissue culture, leaf cuttings are grown on culture

media composed of different combinations and quantities of elements (macro, micro, vitamins and growth regulators). Each of the 7 CWD resistant Robusta coffee varieties responds differently on different culture media formulations. Whereas media formulations for near perfect response of 5 out of the 7 CWD-R varieties has been composed, optimal media formulations for two lines (KR4 and KR5) are yet to be discovered. New media formulations are being tested on the two varieties in a bid to get the most optimal medium for maximizing their propagation.

Similarly NaCORI has several Arabica coffee clones, which are being evaluated at farm level. Some of the clones had high level of the desired farmer and market attributes when they were evaluated in on-station trials. We anticipate some of them will do well at the farm and therefore be released for cultivation. NaCORI has therefore embarked on developing generic protocols for generating planting materials of these genotypes using tissue culture.

Progress:

- Explants of varieties KR4 and KR5 were cultured on various new media formulations but none of the media gave satisfactory development of embryonic callus of either of the varieties.
- Explants of 6 Arabica genotypes possessing the desired farmer and market traits were cultured in media of various formulations and different responses were observed.
- Explants of older leaves of the Arabica clones cultured on high frequency media so far gave the best callus response. Media for Robusta cannot induce callus on Arabica (Figure 4.10).

Figure 4.10: Response of Arabica Explant on Different Media for Inducing Callus Development

Planned activities:

- New media formulations tested for ability to induce and support development of embryonic callus from explants of the two CWD resistant Robusta coffee varieties
- Media for culturing Arabica coffee genotypes tested up to plantlet stage will further be evaluated to identify the best-fit media.

4.6.4 Developing best-bet media for nurturing plantlets of different coffee genotypes generated by tissue culture

Disinfection processes, formulation of weaning and hardening media largely determine the ultimate success of nurturing tissue culture generated plants. The 7 CWD resistant varieties are new and highly treasured thus require effective and efficient disinfection and weaning processes to minimize plant mortality and vigor. Substrates for weaning medium were to be mixed in different rations and tested for efficiency on plant growth under different

environments to identify best bet protocols for adoption.

Progress:

- 13 different ratio (by volume) combinations of saw-dust and coconut peat were tested for efficiency. All the formulations were enriched with soil which was missing in the previous weaning medium.
- Three media formulations consisting of saw dust, soil and cocoanut peat were found to promote better rooting and above surface vegetative growth (stem and leaf development and dry matter weight, leading higher survival of plantlets.

Inferences

On the basis of the observations, the three media combinations were chosen for use in routine weaning of coffee plantlets. Therefore the activity should be concluded.

Planned outputs:

Results of the analyses documented and published.

4.6.5 Developing best-bet options for controlling diseases infecting coffee plantlets generated using tissue culture

Media for weaning tissue culture plantlets are often contaminated with pathogens which are resistant to heat and disinfection using chemicals. These contaminations grossly affect the success of weaning plantlets. Samples of different recipes of the weaning and rooting media are to be analyzed for pathogens, to corroborate the identifications from plant tissues. The causal pathogens if identified will be classified and their control measures determined.

Progress:

Treating steamed media (soil and decomposed saw durst) with a combination of Rodazime and Rovroll (fungicides) and keeping the mixture for at least two weeks before planting in plantlets was found to minimize infection. This treatment plus subsequent spray of the plantlets with a tank mixture of the same fungicides, whenever it attacks the plants, reduced plant mortality to less than 5%.

Inferences

Basing on the observations, steaming media, augmented by application of Rodazime and Rovrol on both the media and plants, reduces infection on tissue culture plants to less than 5% and therefore should be adopted for routine use.

However, the pathogen causing mortality of plants in the nursery should be identified and a solution to the infection instituted.

Planned activities:

- Organisms affecting rooting and developing of issue culture plantlets identified
- Other management media disinfection options investigated.

4.6.6 Building capacity of the private sector to generate quality planting materials for farmers

In the absence of formal seed companies taking on multiplication of coffee planting materials, the multiplication of these materials is majorly vested in many small nursery operators scattered in many parts of the country. Many of these operators and their managers lack the necessary skills and knowledge to efficiently raise quality planting materials. In addition, private tissue culture laboratories are taking on production of plants of the 7 CWD resistant Robusta varieties but lack technical know-how. This activity aims at providing starter planting materials of the CWD resistant varieties to the nursery operators and tissue culture laboratories to startup their propagation unit, and equipping the nursery operators and laboratories with the necessary knowledge and skills to competently generate the planting materials.

Progress

- During the reporting period, NaCORI gave out 30,258 plants to 69 nursery operators, of whom 21 were new nursery operators, and 48 were existing nursery operators who took the plants for expanding and gap filling their mother gardens.
  - 23,098 plants were generated by AGT Buloba were given to 52 nursery operators.
  - 7,160 plants generated by NaCORI were given to 17 nursery operators
- 18,560 plants are being nurtured for distribution in 2014/2015 reporting period
  - 5,760 plants were generated by AGT Buloba
  - 12,800 plants were generated by NaCORI
- 39 nursery operators in 26 districts received on-spot trainings.

Inferences

Accumulatively, about 60,000 plants of the 7 CWD resistant Robusta coffee varieties have been planted in 138 nurseries distributed in 36 districts. The distribution is however, skewed, with some districts having as high as 11 nurseries while other do not have any. NaCORI will advise UCDA to allocate plants to nursery operators in districts that have received none or less.

The 60,000 plants can generate at least 1.8 million rooted cuttings, if the nurseries and their mother gardens are managed efficiently. However, basing on observation from advisory missions made by NaCORI scientists to the nurseries, most of the nursery operators are poorly equipped. Their major challenges are: lack of proper nursery shades for efficient plant rooting and lack of adequate knowledge and skills in efficient nursery management. In the next reporting period, NaCORI will continue to train the nursery operators in efficient nursery management and together with UCDA, dialogue development partners to support nurseries on infrastructure development.

4.7 Coffee Integrated Pest Management (IPM) Program

The program's focus is to develop and promote sustainable integrated management strategies for priority insect pests and diseases mainly the black coffee twig borer and coffee wilt disease of Robusta coffee, and coffee leaf rust and coffee berry diseases for Arabica coffee.

4.7.1 Towards understanding, development and promotion of sustainable management options for the black coffee twig borer (BCTB)

4.7.1.1 Information on spread and impact of BCTB in the different coffee agro-ecologies of Uganda

This activity seeks to generate a BCTB distribution map and create a reference database for BCTB spread and impact in the country that will provide a basis for an informed BCTB research agenda, design and implementation of an appropriate national spray program, and institution of apposite BCTB management policies. Preliminary country-wide surveillance covering 26 districts was concluded during 2012/2013. A more comprehensive follow-up survey will be undertaken in 56 districts of central, western, south-western, eastern and northern Uganda.

Progress:

During the period under review, BCTB surveillance was conducted in Bulambuli and Mbale districts in the Mt. Elgon Arabica coffee agro-ecology, a zone where BCTB was not found during the 2012/2013 surveys, following a report that BCTB had invaded the area. However, BCTB presence was not detected in Bufumbo and Bupoto sub-counties of Mbale district, and in Sisiyi sub-county of Bulambuli district that were surveyed. The purported damage due to BCTB in Sisiyi sub-county of Bulambuli district was attributed to the yellow headed borer, Dirphya (Nitocris) princeps Jord.

In the 2nd quarter of the reporting period, the western Uganda districts of Bundibugyo, Kibaale and Hoima districts were surveyed for incidence of BCTB. The surveillance confirmed presence of BCTB on cocoa in the 3 districts (See Figures 4.11 & 4.12). In many instances, unlike in coffee, BCTB attack on cocoa caused the death of whole trees (Figures 1 and 2). Overall, 60% of the cocoa farms sampled in the three districts were infested by X. compactus. The scope of infestation on the sampled trees and branches were 14.7% and 4.4% respectively. BCTB also occurred extensively on coffee that is often inter-planted in the cocoa. This implies that any BCTB management program in the 3 districts must take into consideration cocoa as an alternate host of the pest.

Planned Activities:

In the subsequent reporting period, surveys in 56 districts in central, western, south-western, eastern and northern Uganda shall provide a comprehensive reference distribution map and data-base for BCTB and other pests of coffee in Uganda.

Figure 4.11: Severe BCTB Infestsation in a Cocoa plantation in Kyakabadiima Sub County, Kibaale District

Figure 4.12: BCTB entry hole on a cocoa twig in Harugare sub county, Bundibugyo District

4.7.2 Field identification of the major bio-ecological drivers of populations of BCTB and associated fungi

This study aims to document the key bio-ecological drivers of BCTB and ambrosia fungi population dynamics in various coffee agro-ecologies that will guide the development and implementation of an appropriate BCTB research agenda. This entails in-depth diagnostic study of the influence of coffee farming systems and their intrinsic biotic and abiotic constituents, as well as the farming practices and ambient climatic conditions on the dynamics of BCTB populations within given coffee agro-ecologies.

Progress:

During the reporting period, field diagnostic studies of BCTB prevalence and incidences as influenced by farming systems and practices, as well as the biotic constituents and ecological conditions of the coffee plantations, were conducted in Mid-Eeastern (Buikwe, Jinja and Kamuli districts), Central (Mpigi, Sembabule and Lwengo districts) and mid-western (Kibaale, Hoima, Masindi, Mubende, Kamwenge and Ibanda districts) representing 3 major coffee agro-ecologies.

Consequently, the following were identified as

determinants of BCTB population dynamics: Presence of alternate hosts; cropping system; pruning and de-suckering regimes; coffee training practices; shade intensity; rainfall and temperature regimes; coffee spacing; and frequency of weed management.

Planned Activities:

- In the next period, further field identification of bio-ecological drivers of populations of BCTB and associated fungi and their roles shall be undertaken in Sheema, Bushenyi, Rukungiri, Mitooma, Ntungamo, Rubirizi, Ibanda, Kasese, Kabarole, Luweero, Mpigi, Mityana, and Butamabala districts.

- Profiling BCTB incidences and severity based on elevation and slope orientation in the Rwenzori region in order to determine the influence of elevation and slope orientation on BCTB prevalence, incidence and severity.
- A complete inventory of the bio-ecological drivers of BCTB and associated fungal complex shall then be instituted.

4.7.3 Screening chemicals for control of BCTB and associated fungal complex in the nursery and field

This study is intended to integrate chemical control options into the overall IPM package for BCTB and associated fungal complex. Neonicotinoids and other highly synthetic insecticides and fungicides are to be screened for efficacy of BCTB and associated fungal complex management. The trials are to be conducted in-vitro, in-vivo and in the field both on-station and on-farm. Spray strategies and regimes, and optimum application rates are to be determined for the most effective chemicals. The chemical control strategies developed shall be promoted for adoption by the farmers through existing Farmer Field Schools (FFS).

Progress:

A trial to evaluate efficacies of 3 neonicotinoids (Imidaclophrid, Thiamethoxam and Acetamiprid), Carbosulfan and Azadiractin (Neemroc) (Organic pesticide) in-vivo was established on-station at Kituza. The trial was subjected to special maintenance involving regular blanket foliar spray of rapid-grow fertilizers and soil moisture regimes. Unfortunately though, the experimental set-up was recently devastated by a hailstorm that struck the institute. The trial has been suspended.

Trial sites for on-farm field pesticides screening have been identified in Buikwe, Kamuli, Masaka and Mitooma districts, surveyed and initial field maps generated. On-station field trial sites have also been identified, were rehabilitated and marked, but have also been affected by the hailstorm, thus delaying application of experimental treatments.

Planned Activities:

In 2014/15 year, the in-vivo trial at Kituza will be re-started following the hailstorm damage;

Field pesticide trials shall also be conducted on-station at Kituza, and on-farm in Buikwe, Kamuli, Masaka and Mitooma. The findings from these studies shall be used to up-date the existing recommendations for chemical control of BCTB.

4.7.4 Developing trapping and repellent technologies for BCTB Management

This study aims to develop effective trapping and repellent protocols for BCTB, to be used in conjunction with other control methods. Preliminary studies on-station at Kituza found alcohol-based lures to be effective in trapping BCTB and other similar scolytid beetles including the coffee berry borer. The current study focuses on determining most appropriate lures, trap colors, placement level of traps within tree canopy, and number and frequency of placement of the traps.

Progress

During the under appraisal, further BCTB trapping trials were conducted on-station at Kituza, and on-farm in Buikwe, Jinja and Kamuli districts. They

were intended to compare the effectiveness of a local potent gin (Kasese-Kasese) against refined 75% ethanol, and the effect of trap colors on trapping efficiency, and identify the most appropriate placement of traps within the tree canopy.

Results for BCTB trapping trials show that both ethanol (75%) and local potent gin (Kasese-Kasese) are equally effective for BCTB trappings, with similar numbers of BCTB trapped. However, there were no clear variations between the test trap colors, while traps placed at lower canopy levels had much higher numbers of BCTB trappings than those placed in the middle and top thirds of tree canopy. It must be noted that the incidence of BCTB at both Kituza and Buikwe were quite low to bring-out the differences between the trap colors (see figure, 4.13 and 4.14).

Planned activities

During the 2014/15 year, further trials on trap color, placement, density per unit area and frequency of traps display shall be conducted at 3 sites in Buikwe, Jinja and Kamuli.

In addition, semio-chemicals earlier derived from Robusta coffee and ambrosia fungus and BCTB odors shall be tested for attraction and/or repellence of the pest. The chemicals to be tested were identified in the previous year in a chemical ecology study on BCTB alternate hosts and ambrosia fungus undertaken by NaCORI in collaboration with icipe.

Figure 4.13: A farmer in Buikwe District Seting up a BCTB trap color trial on his farm

Figure 4.14: BCTB trapping trial to evaluate effect of trap colors established on farm in Kamuli District

4.7.5 Evaluating predatory ants for the management of BCTB

Two ants namely Plagiolepsis sp and Pheidole megacephala have been identified by NaCORI scientists as predators of BCTB. However, the practical application of this discovery is yet to be worked out. This activity therefore aims to develop protocols for the use of these ants in BCTB management.

Progress

To-date, the ant species have been experimentally proven to feed on all developmental stages of BCTB. However, Plagiolepsis sp. did not feed on adult BCTB.

Planned activities

In the coming year, various food baits for trapping Pheidole megacephala into BCTB infested coffee trees shall be explored and the subsequent effect on BCTB incidence determined;

Studies towards developing protocols for mass rearing of Plagiolepsis sp. be undertaken.

4.7.6 *Determining diversity of BCTB and associated ambrosia fungi*

While it was previously thought that Xylosandrus compactus Eicchoff is the only species of coffee twig borer in Uganda, evidence has emerged that other borer species could be involved. It is however unclear whether the new discoveries are also responsible for the wilting of coffee and cocoa twigs as is X. compactus, or are secondary borers in already wilted parts of the two crop species. Activities under this study are aimed at conclusively elucidating the species diversity BCTB and associated ambrosia fungi in Uganda.

Progress

During the reporting period, BCTB samples were submitted to Centre Bioscience & Agriculture International (CABI) for identification and the results revealed that they were predominantly composed of Xylosandrus compactus Eichhoff. However, one (1) other borer species was identified in samples from coffee and four (4) others from cocoa plant samples.

Planned activities

Activities in the next year will focus on acquiring representative BCTB and ambrosia samples from newly infested coffee and cocoa parts from diverse agro-ecological zones for BCTB diversity tests. This will conclusively determine the full extent of the diversity of BCTB species attacking coffee and cocoa in Uganda.

4.8 Development of sustainable technologies for management of coffee wilt and leaf rust diseases

4.8.1 *Developing serological protocols for CWD pathogen detection in plants and soil*

Currently, CWD diagnosis is largely based on recognition of symptoms and microscopic observation. Other factors can produce effects on coffee plants that can be confused with CWD symptoms, while the microscopic method has since failed to detect the pathogen from soil and plant parts at earlier stages of infection before symptoms start appearing. There is therefore need to develop a method that is fast and fairly specific, to alert farmers about the presence of the fungus in the planting materials and in the soils of prospective coffee planting fields.

The purpose of the study therefore is to develop fast, sensitive and specific immunological tools for detection of CWD pathogen in soil and plant parts, in order to forestall the spread of the disease, foster control of the disease in nurseries and cleanliness of planting materials. Thus, this activity aims to develop and commercialize serological methods for CWD pathogen detection.

Progress:

- Results of profiling several CWD proteins using different extraction buffers revealed that only small proteins of less that 50kDa sizes always produced specific antibodies in animals. The finding has therefore limited further considerations to smaller proteins;
- The promising bands have been sent to South Korea for sequencing;
- CWD infected samples collected from West Nile region also tested positive with the so far identified antibody.
- No CWD was found in Gulu, Lira, and Pader, while the samples from Kabale reacted to the specific antibody to CWD pathogen generated in the rabbits.

Planned activities:

- Collect samples mainly from area where CWD has just been reported;
- Analysis of protein sequence data and converting to DNA information to come up with specific target for CWD pathogen detection and to clone in bacteria to produce protein which will be used to produce specific diagnostic protein in rabbits;
- Test ELISA and Agglutination methods for

laboratory and direct field use respectively.

4.8.2 *Genetic diversity characterization of CLR pathogen in Uganda*

Preliminary studies conducted in Uganda and other coffee producing countries have confirmed the existence of several races of the CLR pathogen. There is need to generate coffee varieties with durable resistance to the existing CLR races in Uganda in order to curtail farm yield and quality losses. Studies to quantify genetic diversity and also determine the geographical distribution of existing CLR races in Uganda by use of ITS genomic sequence data have been initiated at NaCORI. This information will accelerate breeding for durable resistance to CLR in Uganda.

Progress:

Twenty isolates were collected from Western Uganda and now a total of 60 samples are ready for genetic analysis

Planned Activities:

- Collecting more CLR samples from Nebbi, Zombo and Lamwo districts;
- Genetic analysis of collected CLR samples.

4.8.3 *Evaluating potential fungicides and crude botanical extracts against CLR and CBD*

This study is designed to study the anti-fungal effect of different plant samples with the aim to identify botanic fungicides effective against CLR that are cost effective and environmentally safe, and can provide for the need of the organic coffee movement in the country. The study therefore is to evaluate extracts from plants with known anti-fungal properties for efficacy of control of CLR and CBD.

Progress

12 botanical extract was put under evaluation for both preventive and curative effect under screen house conditions. Three of the extracts reduced CLR infection of leaf discs by 20%. This is a promising result given the complete lack of organic pesticides recommended for control of CLR in support of organic coffee farming in Uganda.

Planned activities

- Complete solvent extraction from 7 remaining collected plant samples and initiate bio-assay experiments to determine efficacy of all extracted phyto-chemicals for control of CLR and CBD;
- Conducting further laboratory bio-assay and in-vivo screen- house trials;
- Identifying active ingredients against CLR and CBD in the botanical extracts;
- Conducting field trials of pre-selected botanical extracts.

4.9 Coffee Production Systems Program

The program aims to develop and promote improved coffee-based cropping systems technologies for enhanced coffee productivity in different agro-ecologies of Uganda

4.9.1 *Diagnosis of coffee-shade tree systems in south-western Uganda*

Issues of declining coffee productivity in most parts of Uganda, food security and climate change have necessitated a review of the current coffee system approaches in order to accommodate these concerns. This study therefore aims to assemble appropriate coffee shade-tree systems recommendations for various agro-ecological zones of Uganda.

Progress

During the period under review, classification of coffee shade-trees systems was undertaken in Ibanda district in south-western Uganda. Majority of farmers inter-cropped coffee with bananas for food security, mulch and increased income;

- F. natalensis identified by farmers as a good shade tree in coffee only if the canopy is pruned since it grows very fast and can suppress coffee if unchecked; Findings showed coffee inter-planted with avocado and jackfruit are poor in growth and yield;

- Study also revealed 3 rows of coffee for every row of bananas gave optimum coffee yields;
- Most common shade tree was Ficus natalensis, fruit trees such (avocado, papaws and mangoes) and Albizia coriaria (36.3 % each), followed by Cassia sp. (27.2 %), Ficus ovate (18.1 %), Gravellea robusta and Avocado (9 % each).

Planned Activities:

Diagnosing coffee shade-tree systems in other regions of Uganda.

4.9.2 Diagnosis of Arabica coffee production systems in Kasese district

This activity was undertaken by NaCORI in response to a request by the political leadership of Kasese district. It aimed at critically analyzing the coffee production system in the area in order to identify production constraints and developing a technology support system for Arabica coffee production in the district that will sustain the mass coffee planting program currently underway in the district.

Progress:

The system diagnosis was conducted in six coffee sub-counties of Bwera, Mpondwe and Nyakiyumbu Isango sub-counties in the medium altitude zone, and Ihandiro and Rhubiria sub-counties in the high altitude zones; ***Fig: 4.15 & 4.16***

- Main production constraints were identified as wrong choice of coffee varieties, poor agronomic management, physiological disorders due to infertile eroded soils, pests and diseases, and lack of information;
- Expert advice on how to address the production constraints was provided by NaCORI scientists.

Planned Activities:

Developing a concept note aimed at addressing the key identified constraints and other issues important to increasing coffee production in the Mt. Rwenzori zone.

Figure 4.15: An Isolated Case of severe Berry Moth damange on clusters in Bwera Sub County Kasese District

Figure 4.16: Symptoms of berry moth damage-holes and cob-web like items at base of berries

4.7 Participation in coffee production campaigns, agricultural shows and events

In order to promote the adoption of various technologies generated by NaCORI, the institute participates in various activities that includes, but not limited to, coffee production campaigns and agricultural shows.

Progress

During the reporting period, NaCORI staff promoted coffee technologies through coffee shows

in 14 districts namely Kayunga , Luwero, Butambala, Kibaale, Hoima, Mityana, Mpigi, Mubende, Iganga, Mayuge, Zombo, Gulu, Lira, Arua. NaCORI staff also participated in 2 coffee conventions where coffee technologies were promoted. Through these shows, thousands of coffee farmers were reached with message on improved coffee technologies that include recent technologies in the rapid multiplication and general management in coffee production, handling and processing to increase production and better farmers' incomes.

At each show, stakeholders were given the following technology dissemination materials:
Posters: Management of Black Twig Coffee borer and Coffee Management Season calendars.
Brochures: 11 categories on all aspects coffee management (Establishment and field management, Nursery management, Pests and diseases control etc.).

Planned Activities

The following are the challenges commonly raised by stakeholders at the shows:

- Lack of planting materials for the new resistant CWD lines;
- Harsh climatic conditions (drought);
- High incidences of pests and diseases (BCTB, CBD, CWD);
- Coffee Price fluctuations;
- High cost/ unavailability of recommended agro-inputs in the locality;
- Lack of credit facilities for the purchase of inputs;
- In-adequate extension services.

Figure 4.17: Training Session at Nyamirama Sub County, Kanungu District

Figure 4.18: Participants at Nyamirama Sub County learn about the use of a coffee management seasonal calendar

Planned activities:

- Coffee technologies were promoted through 3 training sessions for farmers, extension workers and NGOs' agents in 3 sub-counties of Kanungu district in Nyamirama (Figures 4.17 & 4.18), Kihihi and Kanyantorogo sub-counties attended by 239 participants.
- Coffee technologies were also promoted during a training sessions for then NAADS ASPS coordinators from 10 districts of Mt. Elgon region held in Tororo M.C. in April, 2014.

4.10 Determining adoption of coffee technologies and impacts of Farmer Field Schools (FFSs)

4.10.1 Assessing the influence of FFSs on technology adoption, coffee production and farmers' livelihood

One of the avenues of disseminating technologies, skills and knowledge is through Farmer Field Schools (FFSs). The FFSs provide a forum for collective exchange of information, knowledge, skills and experiences among farmers, extension

and researchers. FFSs were implemented in Rakai (Jjongoza Sanje FFS), Mitooma (Kashekuro FFS), Bugiri (Bugoye FFS), Ntenjeru Mukono (Twekembe FFS) and Kayunga (Akwata empola FFS). A socio-economic study was conducted with the aim of determining the influence of the FFSs on technical efficiency of coffee farm-households. Data were collected from Jjongoza and Kashekuro FFSs. 15 FFS members and 15 non-members were interviewed using a semi- structured questionnaire. A non-parametric approach, the DEA (Data Envelopment Analysis) was done.

Progress

Preliminary results indicate that membership to FFS has positive impact on technical efficiency in both FFS, but it is only significant in Jjongoza. This implies that, households belonging to the FFS got better access to coffee technologies and training that made them more efficient than those who don't belong to the FFS. It was also observed that the FFS graduates in Jjongoza were able to initiate FFSs in other locations and even graduated into a stronger farmer association, a case in point is Kabasumbe FFS which was created by the former Vice Chairperson of Jjongoza. They operate a strong private coffee nursery called "Elite Farming Coffee Nursery" operated by Mrs. Caava which multiplies and sells to most farmers in Masaka and Rakai.

Indicators of adoption of CWD management technologies by the two schools show that the use of scientific methods and indigenous knowledge in controlling CWD were the main technologies adopted. Uproot and burn had higher adoption potential followed by cutting and burning affected stems. Others included pruning-off infected stems, use of concoctions, mulching, manure application and use of fungicides.

Planned activities

Assess technology adoption and impacts of Bugoye FFS, Ntenjeru Mukono, Akwata Empola FFS, Wabwoko Kayunga, Sosyo FFS Bumbo Manafwa and Kabasumba FFS in Kalisizo.

4.10.2 Assessing adoption rates of CWD resistant varieties

7 CWD resistant Robusta coffee varieties have been developed and released to farmers alongside the original susceptible 6 commercial Robusta coffee clones. Despite this, farmers still complain about the disease and its effect on yield. However, no information is available to-date on the demand of the improved varieties. A pilot study has been planned to inform scientists, researchers and other coffee stakeholders on level of adoption and demand, limitations and attributes to both adoption and demand of the disseminated CWD resistant varieties. This will in turn guide policy on how to improve and promote farmer adoption which will in turn increase productivity. 6 districts have been purposively sampled; Mukono, Kayunga, Luwero, Mubende, Rakai and Mpigi. The study has been conducted on 35 coffee farmers across Kitimbwa and Nazigo sub-counties in Kayunga and Ntengeru subcounty in Mukono.

Progress

- Preliminary results indicate that 100% of the respondents demand for the CWD resistant varieties.
- As per the previous 6 commercial clones, variety 1s/2 (A) was most adopted and most demanded by farmers while variety 1s/6 was least adopted. 257s/53 (F) was the least demanded variety.

Planned activities for next year

- Collecting data on level of adoption and demand of coffee varieties from Masaka, Rakai, Kalungu, Luwero, Nakaseke and Mpigi;
- Developing a logit model to understand the factors affecting adoption and demand of the varieties.

CHAPTER FIVE:
FINANCE AND ADMINISTRATION

5.1 Introduction

In the Coffee Year 2013-2014, the National Coffee Policy was launched at the National Coffee Research Institute (NaCORI). The Minister of Agriculture, Hon. Tress Bucyanayandi inaugurated a new Board of Directors on 26th May 2014. At its inauguration, the new Board was urged to develop specific programmes to support the Government 'Prosperity for All' Initiative, improve coffee productivity and quality, and promote value addition and good governance of UCDA. The new Board approved the new National Coffee Strategy operationalizing the National Coffee Policy.

UCDA continued to uphold good governance and sound HR Management practices, implemented good financial, asset management and auditing systems, and ensured compliance to procurement laws and guidelines.

In keeping with the provisions of the Statute, UCDA ensured that its revenue was sufficient to meet its planned expenditure. The Authority generated total revenue of Shs 21.11 billion to fund its programmes. Cess income, Government Contribution, Rent from properties, and Registration fees were the major sources of revenue.

5.2 Organisational Structure and Staffing

In the period, a total of 61 Staff were maintained on the UCDA structure, under the four departments of Production, Quality and Regulatory Services, Strategy and Business Development, and Finance and Administration. Nonetheless, the Board approved the following new positions on the Organizational Structure for the Coffee Year 2014 -2015 in order to address staffing gaps and up scaled activities;

- 2 Monitoring and Evaluation Officer (Strategy and Business Development Department)
- 1 Information Technology Assistant (Strategy and Business Development Department)
- 1 Internal Auditor (Managing Director's Office)
- 1 Human Resource Assistant (Managing Director's Office)
- 1 Assistant Procurement Officer (Finance and Administration Department)
- 1 Stores Assistant (Finance and Administration Department)
- 10 coffee Extensionists (Production Department) and
- 4 Quality Controllers (Quality and Regulatory Services).

Table 5.2.1 shows the distribution of Staff in the respective departments in the 2013/2014 Coffee Year, and the approved new positions and additional staff numbers for CY 2014-2015.

Table 5.2.1 Distribution of Staff per Department

Department	Title	Number of staff (CY 2013-2014)	Approved new positions and additional numbers (effective CY 2014-2015)
Office of the Managing Director	Managing Director	1	
	Principals (Auditor and HR)	2	
	Executive Assistant	1	
	Driver	1	
	Internal Audit		1
	HR Assistant		1
Finance and Administration	Board Secretary / Head Finance & Administration	1	
	Principal Accountant	1	
	Senior Officers (Procurement Officer & Accountant)	2	
	Administration Officer	1	
	Assistant Accountant	1	1
	Executive Assistant	1	
	Accounts Assistant	1	
	Driver	1	
	Stores Assistant		1
	Assistant Procurement Officer		1
Production	Manager	1	
	Principal Development Officers / Regional Supervisors	5	
	Regional Coffee Technical Officers	5	
	Coffee Extension Officers	18	10
	Driver	1	
Quality and Regulatory Services			
	Manager	1	
	Principal Quality Controller	1	
	Senior Quality Controller	1	
	Quality Controllers	7	4
	Laboratory Assistant	1	
Strategy and Business Development	Manager	1	
	Principal Business Development Officer	1	
	Principal Information Officer	1	
	IT Officer	1	
	Monitoring and Evaluation Officer		2
	Market Analyst	1	
	IT Assistant		1
	Driver	1	
TOTAL		**61**	**22**

5.3 Staff Recruitment and Selection

In order to improve service quality and delivery across the country, Management recruited the following Staff:

- Three (3) Agricultural Research Assistants - Centre of Robusta Excellence Project;
- Three (3) Quality Assurance Officers - Centre of Robusta Excellence Project;
- Three (3) Laboratory Assistants - Centre of Robusta Excellence Project;
- One (1) Promotion and Training Officer - Centre of Robusta Excellence Project;
- Administration Assistant - Centre of Robusta Excellence Project;
- Two (2) Drivers.

5.4 Staff Training and Motivational Schemes

In the effort to supplement the on-the-job learning, the following staff benefited from various trainings and workshops for personal growth, and development of personal competences;

- Fifty Seven (57) staff sensitized on Succession law and personal estates management as part of personal welfare and development training.
- Twenty six (26) staff were trained in customer care and communication skills.
- Ten (10) staff were trained in computer skills.
- One (1) staff trained in 2013 Microsoft databases.
- One (1) staff trained in World Bank Procurement procedures.
- One (1) staff was supported on a Continuous Professional Development Course for Accountants
- One (1) Staff participated in the Scientific Conference for the Association of Coffee Scientists in Colombia

UCDA continued to offer motivational initiatives that uplift Staff to serve the community better and to be socially responsible. Outstanding among its staff motivation initiatives, was the health care scheme that aims to improve employees' health and that of their families.

5.5 Staff Recognition and Awards

UCDA continued to recognize and reward members of staff with outstanding performance through the 'Employee of the Year' initiative. For the year 2013, Mr. Mugenyi Michael received the honor of the Employee of the year for his contribution to organizational efficiency and effectiveness.

5.6 Board of Directors

The Board of Directors considered and approved the following;

- The National Coffee Strategy,
- Budget and work plans for Coffee Year 2014-2015 and the supplementary budget estimates for Coffee Year 2013-2014,
- Financing for the development of an Information Management System (MIS),
- Financing for the development of architectural plans for the redevelopment of Plot No. 181 & 183 Muteesa II Road, Ntinda,
- Annual performance report for Coffee Year 2013-2014,
- Renewal of employment contracts for the Production Manager, Quality and Regulatory Services Manager, Strategy and Business Development Manager, Principal Development Officer, and the Principal Business Development Officer,
- Appointment of the new Board Secretary – Mr. Andrew Kilama Lajul,
- The Human Resource Manual.

5.7 Compliance with Regulatory Frameworks

Management continued to comply with Government regulatory frameworks by periodically submitting programme performance reports to;

- The Office of the Prime Minister,

- Office of the Auditor General,
- The Parliamentary Accountability Committees,
- Ministry of Agriculture Animal Industry and Fisheries,
- Ministry of Finance, Planning and Economic Development ,
- Public Procurement and Disposal of Assets Authority,
- Privatization Monitoring Unit (PMU).

In the period, UCDA secured more budgetary support from Government towards planting material production, coffee replanting and hosting of the 54th Annual General Assembly and 2nd African Coffee Symposium of the Inter African Coffee Organization (IACO). The Authority received an unqualified audit opinion, and also maintained a very good performance rating with PPDA due to its compliance with procurement regulations.

5.8 Partnerships and Special Projects

UCDA continued to partner with public organizations, the private sector and the donor community. Management continued to liaise with Government agencies, academic institutions by sharing strategic information on the coffee sub sector.

The Authority launched the Centre of Robusta Excellence (CORE) Project supported by aBi-Trust. The three-year Project is aimed at developing a sustainable Coffee Value Chain through; development of technology, innovations and promotion of best practices along the coffee value chain, exploring best practices in coffee, conducting specific research to provide accurate information and carry out demonstration activities with the view of improving house hold income and creating a coffee culture.

The partnership with USAID Enabling Environment for Agriculture Activity (EEA) Programme, UCDA received support towards sensitization of the public about the National Coffee Policy and drafting of the National Coffee Strategy.

Management partnered with the Operation Wealth Creation (OWC), a Government Initiative in distribution of coffee seedlings to Veterans. The exercise was impactful and was commended as a model for pooling synergies in the effort to eradicate poverty and improve household incomes. Management further continued to engage different stakeholders along the coffee value chain through meetings, trainings, sensitization meetings and radio programs for continuous improvement in service delivery.

In its continuous effort to promote sustainable coffee production, UCDA's partnership with Uganda Organic Certification Limited (UgoCert) has ensured that coffee certification services are affordable and credible for farmers. The following farmer groups were certified in the period; NIHACOFA (Organic / Fair Trade) & Gumutindo (Organic). The Authority further supported Kibinge Cooperative Society with training in preparation for Utz certificate.

5.9 Intergovernmental Meetings

Uganda participated in the 112th and 113th Council Sessions of the International Coffee Council (ICO) in March and September 2014 respectively.

Uganda participated in the 53rd Inter-Africa Coffee Organization (IACO) Annual General Assembly. At the November 2013 meeting, Uganda was selected to host the 54th Annual General Assembly and the 2nd African Coffee Symposium.

5.10 Management of Assets

Management explored options such as public-private partnerships and bank borrowing for financing the redevelopment of Plot No. 181 & 183 Muteesa II

Road, Ntinda.

Regular maintenance and repair of buildings and equipment was undertaken. The following renovations were completed: Parking yard and exterior painting of Bugolobi flats, and front area paving of Coffee House.

Two motor vehicles were procured to replace those disposed off. The fleet of 7 motor vehicles and 27 motor cycles were regularly serviced and maintained in good running condition.
The Authority purchased assorted ICT, farm and Laboratory equipment.

5.11 Shared Corporate Value, Memberships and Subscriptions

UCDA continued to enhance its corporate social responsibility by partnering with institutions and supporting community causes that are for the common good. This was demonstrated through the following specific areas of focus;

- Internship program that benefitted 8 students from Ndejje, Makerere, Mukono, and Kyambogo Universities. UCDA further participated in the Uganda Corporate League and promoted coffee consumption among corporate companies . UCDA was further recognized by the League as the most 'Social Team'.
- Participation in the Bible Society Marathon in support of maternal health in Karamoja.
- Provision of support towards the Children and Wives of Disabled Soldiers (CAWODISA) in raising coffee planting material and coffee farming as a means of income generation.
- Provision of free planting material to households in coffee growing districts. This is projected to increase production and so improve household incomes.
- Membership subscription to several institutions; Café Mundi, Specialty Coffee Association of America (SCAA), Specialty Coffee Association of Europe (SCAE), African Fine Coffees Association (AFCA), Institute of Corporate Governance (ICGU), Uganda Manufacturers Association (UMA), Africa Coffee Academy (ACA) and Federation of Uganda Employers (FUE).

Left:UCDA features on the front page of the Corporate League Magazine 2014. Right Delicious Coffee Served

5.12 Field Visits under Monitoring and Evaluation

UCDA together with the Parliamentary Committee on Agriculture conducted field visits to Western, South Western and Central Regions. The Committees appreciated the coffee programmes but noted pest and disease prevalence, and the impact of climate change on coffee production.

Management facilitated three (3) Parliamentary Coffee Fora for Honorable Members of Parliament who represent coffee-growing constituencies. The fora have proved to be important for networking on coffee programs with the political leadership.

Routine monitoring and evaluation in the 5 coffee regions was undertaken and reports written. Monitoring and evaluation exercises were done to measure the impact of coffee research, coffee production and productivity programmes as well as coffee promotion programmes. The monitoring and evaluation exercises were also undertaken to assess gaps in implementation that need strategic interventions.

APPENDIXES

Appendix 1: Coffee Exports By Exporter by Type for Coffee Year 2013/14

Exporting Company		Quantity – 60 kg Bags			%-age Market Share	
		Robusta	Arabica	Total	Individual	Cumulative
	Grand Total	**2,735,020**	**764,809**	**3,499,829**	**100.00**	
1	Ugacof (U) Ltd	540,732	53,529	594,261	16.98	16.98
2	Kyagalanyi Coffee Ltd	250,482	124,354	374,836	10.71	27.69
3	Olam (U) Ltd	212,012	22,671	234,683	6.71	34.40
4	Export Trading Company	227,986	-	227,986	6.51	40.91
5	Kawacom (U) Ltd	136,843	80,882	217,725	6.22	47.13
6	Ibero (U) Ltd	188,290	21,240	209,530	5.99	53.12
7	Ideal Commodities	154,771	19,556	174,027	4.97	58.09
8	Kampala Domestic Store	155,845	3,000	158,845	4.54	62.63
9	BESMARK Coffee Co. Ltd	84,028	64,920	148,948	4.26	66.88
10	Great Lakes Ltd	39,806	92,781	132,587	3.79	70.67
11	LD Commodities	75,232	37,271	112,503	3.21	73.89
12	Savannah Commodities	60,006	31,423	91,429	2.61	76.50
13	Commodity Solutions	70,272	14,517	84,789	2.42	78.92
14	Armajaro (U) Ltd.	46,017	37,160	83,177	2.38	81.30
15	Coffee World Ltd.	59,275	15,768	75,043	2.14	83.44
16	Kamba Petroleum	52,900	16,500	69,400	1.98	85.43
17	Job Coffee Ltd.	34,280	34,819	69,099	1.97	87.40
18	Risala (U) Ltd	55,100	9,600	64,700	1.85	89.25
19	Nakana Coffee Factory	62,746	-	62,746	1.79	91.04
20	Ishaka Commodities	61,041	-	61,041	1.74	92.79
21	Mbale Importers & Exporters	6,958	42,634	49,592	1.42	94.20
22	Lakeland Holdings Ltd.	28,396	-	28,396	0.81	95.01
23	Kaweri Coffee Plantation	26,305	-	26,305	0.75	95.77
24	KARAZ Coffee Factory	21,665	990	22,655	0.65	96.41
25	Ankole Coffee Producers	20,630	715	21,345	0.61	97.01
26	Wabulungu Multipurpose	18,334	640	18,974	0.54	97.57
27	Ankole Coffee Processors	14,862	3,900	18,762	0.53	98.10
28	Bakwanye Trading Co.	334	14,420	14,754	0.42	98.52
29	Banyankole Kweterana	11,204	-	11,204	0.32	98.84
30	Gumutindo Cooperative	-	10,003	10,003	0.29	99.13
31	Kibinge Coffee Farmers Coop.	8,320	-	8,320	0.24	99.37
32	Nile Highland Arabica	-	4,164	4,164	0.12	99.49
33	GERIOUS Ltd.	4,048	-	4,048	0.12	99.60
34	Bukonzo Joint Coop. Union	787	3,024	3,811	0.11	99.71
35	Evercom Coffee	2,400	-	2,400	0.07	99.78
36	Sena Indo (U) Ltd.	2,400	-	2,400	0.07	99.85
37	Ronald Bwambale Enterprise	700	1,040	1,740	0.05	99.90
38	Fairlop Global Co. Ltd.	-	990	990	0.03	99.93
39	Shiba World Investment	-	659	659	0.02	99.94
40	Bugisu Farmers AA Coffee	-	640	640	0.02	99.96
41	Zigoti Coffee Works	-	600	600	0.02	99.98
42	Budadiri Arabica Factory	-	399	399	0.01	99.99
43	Crown Coffee	313	-	313	0.01	100.00

Appendix 2: Export Performance By Individual Firms by Month in 2013/14 -60 Kilo Bags

EXPORTER/MONTH	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Ugacof (U) Ltd.	22,234	34,742	38,509	61,684	62,028	68,095	61,150	49,388	47,154	53,286	43,443	52,548	594,261
Kyagalanyi Coffee Ltd.	24,152	29,063	19,564	48,394	35,205	28,018	36,272	44,821	32,201	35,000	23,564	18,582	374,836
Olam (U) Ltd	16,364	17,350	15,690	19,266	19,519	16,240	30,358	21,963	21,721	21,032	26,472	8,708	234,683
Export Trading company	14,262	3,790	19,744	39,082	22,640	21,360	19,344	19,864	18,620	12,848	16,450	19,982	227,986
Kawacom (U) Ltd	29,460	20,175	14,410	20,114	26,104	25,080	26,416	19,100	12,960	7,614	12,452	3,840	217,725
Ibero (U) Ltd.	5,320	19,047	14,214	29,430	25,346	18,720	19,638	12,484	20,401	19,719	17,053	8,158	209,530
Ideal Commodities	7,249	18,096	15,780	17,912	15,612	16,834	9,090	10,990	10,334	19,850	19,658	12,622	174,027
Kampala Domestic	15,540	16,980	15,934	18,807	21,614	21,448	8,820	8,700	13,764	10,850	6,088	300	158,845
Besmark	4,082	10,099	11,446	17,643	11,631	14,300	11,357	12,491	7,902	16,901	14,312	16,784	148,948
Great Lakes	12,096	12,785	10,888	10,608	7,026	17,032	13,652	17,438	6,260	6,480	7,654	10,668	132,587
LD Commodities	8,070	3,636	5,405	4,604	4,652	16,073	9,532	13,863	7,262	16,626	13,063	9,717	112,503
Savanna Commodities	6,680	11,930	7,062	8,840	12,350	9,252	8,352	4,308	4,944	10,167	4,114	3,430	91,429
Commodity Solutions	2,056	5,258	8,822	10,204	7,566	5,730	8,586	5,854	8,456	9,683	4,726	7,848	84,789
Armajaro (U) LTD	4,314	9,621	4,082	14,064	10,708	8,778	14,310	5,720	9,250	1,050		1,280	83,177
Coffee World Ltd	3,374	5,880	8,282	10,342	13,218	10,210	13,564	5,924	654	2,975	620		75,043
Kamba Petroleum	4,348	5,392	4,062	7,222	7,074	6,302	6,550	6,126	5,604	5,344	7,734	3,642	69,400
Job Coffee	3,240	3,860	6,135	4,136	2,687	3,850	5,566	350	7,766	8,978	14,571	7,960	69,099
Risala (U) Ltd	5,100	7,150	8,370	9,480	7,000	7,150	5,850	6,300	3,150	3,050	1,200	900	64,700
Nakana Coffee Factory	4,352	6,976	8,444	10,544	14,072	8,358	2,374	2,024	1,990	1,964	1,328	320	62,746
Ishaka Quality Commodities	4,165	2,070	2,720	4,482	6,508	3,500	3,744	4,890	3,800	9,700	10,452	5,010	61,041
Mbale & Importers & Exporters Ltd.	640	4,440	4,960	4,414	6,688	7,554	5,112	3,364	330	4,012	4,342	3,736	49,592
Lakeland Holdings									7,146	21,250			28,396
Kaweri Coffee Plantation	320	1,280	1,640	3,720	1,600	4,600	3,400	2,920	2,560	960	2,345	960	26,305
Karaz Coffee Factory	2,450	2,800	3,825	5,532	2,714	664	330	330		330	1,666	2,014	22,655
Ankole Coffee Procducers	3,230	1,940	1,630	990	950	665	980	640	1,620	2,840	3,580	2,630	21,695
Wabulungu	684	700	720					1,336	2,054	5,394	5,366	2,720	18,974
Ankole Coffee Processors	720		700	2,752	4,412	1,430	2,134	720	2,394	1,420	1,730		18,412
Bakwanye Trading Co. Ltd	1,800	2,134	1,040	1,360	2,800	2,520	2,460		320		320		14,754
Banyankole Kweterana	640	640		334	960	720	640	1,310	1,710	980	1,280	1,990	11,204
Gumutindo	640	570	940	1,600	1,140	1,900	1,210	960	960	83			10,003

Kibinge Coffee farmers	1,280	320	960	960	320	1,280	640	320	640	960	320	320	8,320
Nile Highland		720		1,360	720		320	360	684				4,164
Gerious							330	1,360		2,028	330		4,048
Bukonjo joint	650	530	650	252	585		320	230				594	3,811
Evercom Coffee * Commodity		2,400											2,400
Sena Indo (U) Ltd.										600	1,800		2,400
Ronald Bwambale Enterprises	1,040	700											1,740
Fairlop Global Company Ltd.										330		660	990
Shiba World Investment Ltd.		659											659
Bugisu Farmers AA Coffee				640									640
Zigoti Cofee Works			366				234						600
Budadiri Arabica Coffee F			79	320									399
Crown Coffee Ltd.			313										313
Total	**210,552**	**263,733**	**257,386**	**391,092**	**355,449**	**347,663**	**332,635**	**286,448**	**264,611**	**314,304**	**268,033**	**207,923**	**3,499,829**

Appendix 3: 25 Year Export Performance Series by Type & Unit Price-$/Kilo in 60 Kilo Bags

Coffee Year	Robusta		Arabica		Total		Unit Price in US $ /Kilo		
	Qty	Value $	Qty	Value $	Qty	Value $	Robusta	Arabica	Average price
1989/90	2,228,293	125,970,229	136,458	13,615,502	2,364,751	139,585,731	0.94	1.66	0.98
1990/91	1,924,319	105,733,784	160,948	15,647,712	2,085,267	121,381,496	0.92	1.62	0.97
1991/92	1,884,183	91,742,542	169,034	12,813,523	2,053,217	104,556,065	0.81	1.26	0.85
1992/93	1,841,510	90,576,148	247,132	18,117,843	2,088,642	108,693,991	0.82	1.22	0.87
1993/94	2,471,960	192,307,120	533,245	81,351,730	3,005,205	273,658,850	1.30	2.54	1.52
1994/95	2,284,109	338,762,354	507,644	93,731,757	2,791,753	432,494,111	2.47	3.08	2.58
1995/96	3,762,347	345,136,777	386,456	43,779,380	4,148,803	388,916,157	1.53	1.89	1.56
1996/97	3,789,013	288,858,906	448,101	66,267,735	4,237,114	355,126,641	1.27	2.46	1.40
1997/98	2,691,278	227,361,611	341,060	49,112,624	3,032,338	276,474,235	1.41	2.40	1.52
1998/99	3,291,540	247,869,096	356,449	35,126,416	3,647,989	282,995,512	1.26	1.64	1.29
1999/00	2,390,682	121,850,127	526,575	42,899,788	2,917,257	164,749,915	0.85	1.36	0.94
2000/01	2,617,777	79,703,961	456,996	25,072,463	3,074,773	104,776,424	0.51	0.91	0.57
2001/02	2,715,955	64,496,820	430,426	19,440,133	3,146,381	83,936,953	0.40	0.75	0.44
2002/03	2,221,440	81,843,934	442,448	22,943,160	2,663,888	104,787,094	0.61	0.86	0.66
2003/04	1,979,353	82,611,561	543,689	33,093,283	2,523,042	115,704,844	0.70	1.01	0.76
2004/05	1,986,890	105,833,286	518,000	56,262,950	2,504,890	162,096,236	0.89	1.81	1.08
2005/06	1,408,314	103,873,269	594,010	66,470,317	2,002,324	170,343,586	1.23	1.87	1.42
2006/07	2,144,482	192,779,546	559,754	63,801,298	2,704,236	256,580,844	1.50	1.90	1.58
2007/08	2,713,498	316,060,409	497,105	72,337,793	3,210,603	388,398,202	1.94	2.43	2.02
2008/09	2,405,137	212,848,980	648,551	78,912,759	3,053,688	291,761,739	1.47	2.03	1.59
2009/10	1,957,400	163,484,690	711,571	103,230,931	2,668,971	266,715,621	1.39	2.42	1.67
2010/11	2,484,013	294,606,045	665,410	154,284,625	3,149,423	448,890,669	1.98	3.86	2.38
2011/12	1,904,176	223,976,023	822,073	168,722,105	2,726,249	392,698,138	1.96	3.42	2.40
2012/13	2,781,478	317,728861	801,151	114,965,197	3,582,629	432,694,059	1.90	2.39	2.01
2013/14	2,735,020	285,614,846	764,809	108,307,489	3,499,829	393,922,335	1.74	2.36	1.88
AVERAGE	**2,424,567**	**188,065,237**	**490,764**	**62,412,341**	**2,915,330**	**250,477,578**	**1.27**	**1.97**	**1.40**

Appendix 4:Coffee Exports by Volume& Value 2009/10-203/14 (Quantity in 60 Kilo Bags, Value in US$

MONTH	2013/14		2012/13		2011/12		2010/11		2009/10	
	QTY	VALUE $	QTY	VALUE $	QTY	VALUE $	QTY	VALUE $	QTY	VALUE $
TOTAL	**3,499,829**	**393,922,335**	**3,2582,629**	**432,694,059**	**2,726,249**	**392,696,138**	**3,149,423**	**448,890,669**	**2,668,971**	**266,715,621**
ROBUSTA	**2,835,020**	**285,614,846**	**2,781,478**	**317,728,861**	**1,904,176**	**223,976,023**	**2,484,013**	**294,606,045**	**1,957,400**	**163,484,690**
OCT	157,615	16,621,666	137,049	17,098,647	167,645	18,987,639	118,422	10,761,243	146,711	11,789,081
NOV	184,679	17,779,683	165,052	19,882,439	149,684	16,060,997	200,269	19,394,818	185,004	15,012,284
DEC	201,687	19,047,336	180,217	20,903,513	167,558	18,694,380	187,487	18,580,525	208,903	16,509,486
JAN	321,287	30,740,312	263,010	30,069,401	159,446	17,991,284	159,880	17,495,886	209,993	17,019,416
FEB	284,861	27,270,385	270,891	31,046,761	157,860	17,606,100	142,834	15,938,202	184,432	14,653,763
MAR	268,178	27,678,522	239,090	27,274,443	104,260	12,244,136	172,243	20,795,170	145,988	11,613,230
APR	229,868	24,469,528	190,212	21,736,112	70,758	8,563,982	129,578	15,844,878	91,882	7,242,599
MAY	210,449	23,455,390	287,932	33,282,174	168,233	20,193,776	193,356	24,484,235	105,498	8,641,248
JUN	201,114	22,434,984	284,425	32,197,294	215,940	26,844,583	306,392	41,108,666	173,598	14,644,776
JUL	274,992	31,036,626	318,731	35,312,780	235,689	28,873,154	334,502	44,052,764	210,977	18,950,466
AUG	234,002	26,528,610	258,704	28,533,797	172,506	21,472,939	257,823	32,059,107	170,178	16,056,668
SEPT	166,288	18,551,804	186,165	20,391,501	134,597	16,443,052	281,227	34,090,553	124,236	11,351,674
ARABICA	**764,809**	**108,307,489**	**801,151**	**114,965,197**	**822,073**	**168,722,115**	**665,410**	**154,284,625**	**711,571**	**103,230,931**
OCT	52,937	6,116,453	40,975	6,396,639	47,640	12,119,169	69,590	12,539,111	52,300	6,883,497
NOV	79,054	8,870,068	59,344	9,084,288	77,493	18,034,286	66,457	12,811,912	48,507	6,950,918
DEC	55,699	6,170,411	62,964	9,560,719	74,103	18,208,484	50,260	10,111,007	63,852	9,188,988
JAN	69,805	8,106,380	82,104	12,495,417	67,016	15,879,186	55,300	12,485,120	53,021	8,126,715
FEB	70,588	8,241,027	72,239	11,059,343	86,429	18,543,370	51,131	11,950,718	78,361	11,624,043
MAR	79,485	11,093,911	70,100	10,530,447	83,332	17,976,722	56,336	14,044,553	73,696	10,352,161
APR	102,767	16,016,652	57,217	8,590,756	70,462	13,300600	45,962	11,152,999	60,758	8,303,960
MAY	75,999	12,389,563	104,453	14,817,094	84,210	15,544,422	54,104	14,771,417	71,882	9,592,094
JUN	63,497	10,388,102	77,096	10,614,273	59,111	10,160,825	64,532	17,112,925	61,358	8,376,326
JUL	39,312	6,825,647	76,833	9,808,267	70,642	11,928,412	41,671	10,376,649	55,238	8,581,474
AUG	34,031	5,940,395	59,690	7,409,146	59,947	10,083,535	50,916	12,193,492	47,106	7,645,086
SEP	41,635	8,148,880	38,136	4,598,809	41,688	6,943,105	59,151	14,734,721	45,492	7,605,669

Appendix 5: Coffee Procurement Figures in 60-Kilo Bags

	2011/12			2012/13			2013/14		
	Actual			Actual			Actual		
	Robusta	Arabica	Total	Robusta	Arabica	Total	Robusta	Arabica	Total
Oct	155,167	50,123	205,290	151,243	42,400	193,643	139,070	61,005	200,075
Nov	160,012	65,012	225,024	180,116	60,252	240,368	179,072	86,258	265,330
Dec	170,235	69,015	239,250	190,258	63,015	253,273	233,812	81,214	315,026
Jan	160,012	68,510	228,522	280,415	85,102	365,117	225,023	75,219	300,242
Feb	165,009	90,018	255,027	260,219	75,200	335,419	290,234	72,816	363,050
Mar	106,105	85,658	191,763	240,005	71,018	311,023	325,123	60,217	385,340
Apr	75,013	72,009	147,022	201,505	60,002	261,507	200,429	52,014	252,443
May	190,215	95,145	285,360	300,104	90,102	390,206	304,103	76,201	380,304
Jun	252,148	80,146	382,294	310,184	87,106	397,290	293,100	76,650	369,750
Jul	320,125	79,164	399,289	330,014	109,010	439,024	250,176	60,146	310,322
Aug	270,125	70,103	340,228	300,147	89,100	389,247	215,975	65,235	281,210
Sep	200,136	65,158	265,294	260,553	75,802	336,355	175,474	54,301	229,775
Total	**2,224,302**	**890,061**	**3,114,363**	**3,004,763**	**908,109**	**3,912,872**	**2,831,591**	**821,276**	**3,652,867**

Appendix 6: Coffee Exports by Buyer by Month 2013/14

BUYER/MONTH	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
SUCAFINA	16,604	37,158	39,209	63,396	62,066	66,443	61,144	49,332	45,472	55,234	37,051	48,708	581,817
OLAM INTERNATIONAL	15,216	15,034	14,616	28,446	26,005	23,698	28,524	22,273	23,063	23,276	34,366	16,240	270,757
ALTASHEEL	26,950	15,050	18,390	19,296	13,140	27,570	13,300	13,140	14,350	23,530	16,900	5,950	207,566
BERNHARD ROTHFOS	5,640	20,567	14,214	23,716	24,358	17,740	16,640	11,844	20,721	20,359	17,053	8,478	201,330
ICONA CAFÉ	10,522	6,578	14,450	33,130	29,928	22,330	17,148	14,000	10,342	5,924	5,326	5,122	174,800
ECOM AGRO INDUSTRIAL	13,050	16,345	13,440	19,814	22,764	17,420	20,846	16,440	9,320	7,614	5,270	5,120	167,443
ALDWAMI	21,000	9,100	13,300	15,050	7,350	13,300	6,270	8,050	5,950	20,620	12,950	350	133,290
BERCHER	4,604	9,842	9,270	8,596	7,956	12,898	14,194	13,274	5,524	9,004	8,920	11,988	116,070
SOCADEC		3,840	2,480	6,735	11,978	12,544	5,230	4,970	11,336	17,517	18,753	16,788	112,171
STRAUSS COMMODITIES	3,126	6,545	3,564	9,735	9,595	8,420	19,303	15,889	3,585	13,920	10,919	5,267	109,868
ABACO	9,420	19,250	13,995	7,000	700	350	5,950	1,400	5,886	24,084	11,550	2,100	101,685
LOUIS DREYFUS	7,980	8,764	12,709	8,456	3,014	4,945	2,922	1,018	7,015	10,578	6,974	8,293	82,668
ARMAJARO	4,314	8,656	4,082	14,214	10,708	8,778	12,120	5,400	8,610	1,050			77,932
KONINKLIJ		1,080	3,600	30,556	22,320	5,400					5,400	7,560	75,916
COFFTEA	6,900	9,100	1,900	4,000	700	2,350	5,391	7,150	3,900	7,000	14,000	7,000	69,391
ABU ASMA	5,100	7,150	8,370	9,130	7,000	7,150	5,850	6,300	2,975	3,050	1,200	900	64,175
VOLCAFE	3,840	3,680	3,690	6,200	5,230	6,070	8,130	8,460	4,610	5,780	2,600	3,245	61,535
GEBRE WEST	4,998	3,213	2,150	1,414		7,342	10,363	15,550	6,655	3,158	3,461		58,304
LUIGI LAVAZZA			10,020	15,108	6,322	3,650	668	1,336	4,586	1,336	5,230		48,256
COEX COFFEE	3,240	1,602	1,415	1,693	4,803	3,070	3,684	1,336	7,632	7,248	3,372	6,798	45,893
GUZMAN	330	3,352	4,712	4,688	5,722	4,318	3,984	3,674	998	5,686	5,010	3,004	45,478
HAMBURG	3,574	7,849	7,138	8,614	6,800	5,704	3,454	1,054		720			44,907
CCL PRODUCTS			2,240	1,600	5,944	4,506	9,258	6,818	6,036	2,385	3,000		41,787
FALCON COMMODITIES	3,840	4,800	2,880	2,240	2,070	960	1,920		320	2,880	3,520	5,760	31,190
COFFEE SERVICES	2,074		5,260	360	4,800	1,980	5,120	2,190	4,464	640	2,460	640	29,988
VAYHAN				1,200	5,100	1,500	4,500	7,200	300	1,800	3,520	3,520	28,640
OTHERS	38,230	45,178	30,292	46,705	49,076	57,227	46,722	48,350	50,961	39,911	29,228	35,092	516,972
Total	**210,552**	**263,733**	**257,386**	**391,092**	**355,449**	**347,663**	**332,635**	**286,448**	**264,611**	**314,304**	**268,033**	**207,923**	**3,499,829**

Appendix 7: Coffee Exports By Destination By Month In CY 2013/14

DESTINATION/MONTH	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
EU	100,630	159,883	168,051	287,414	261,569	245,390	236,234	203,103	177,762	210,067	179,338	153,271	2,373,392
Sudan	71,270	58,200	56,145	55,660	30,540	44,300	37,516	32,547	38,636	78,280	56,504	17,750	577,348
India	1,475	3,210	7,024	3,440	13,604	7,916	15,277	15,838	8,980	5,960	7,380	9,500	99,604
USA	7,872	3,700	5,500	4,191	9,217	10,368	6,294	1,770	6,280	7,249	3,214	11,450	77,105
South Korea	8,490	720	2,932	4,420	6,258	7,038	8,160	7,770	9,958	3,757	2,844	1,160	63,507
Morocco	5,130	668	2,040	8,501	5,816	5,148	6,830	8,088	6,456	7,310	3,228	2,260	61,475
Switzerland	3,234	10,450	3,602	5,736	4,538	7,940	4,538	6,412	3,576	4,322	2,330	2,274	58,952
Ecuador	2,880	2,400	1,600	3,840	6,720	9,280	1,570	1,800					30,090
Singapore	3,256	8,890	5,800	3,340	1,360	320	360				1,280	668	25,274
Japan	320	3,410	1,366	5,376	4,472	940	2,368	3,080	1,200	1,200	300		24,032
Russia	3,755	640	960	996	1,290	1,300	330	1,920	1,290	1,610	3,600	3,200	20,891
South Africa	360	300	320	1,580	1,240	945	2,880	1,260	3,488	1,587	2,215	2,250	18,425
Israel		960	640	1,920	640	3,520	4,480	960	2,585	334	1,600	640	18,279
China	660	330	466	1,300	620	1,300	970	320	2,110		1,980	640	10,696
Australia	320	1,280	320	320	640	334	2,250	640		1,294	960	640	8,998
Afghanistan				654	2,959								3,613
North Korea		1,800		1,750									3,550
Taiwan	900		300			300	300	300	300		300	300	3,000
Kenya					694	334	650			334	640		2,652
Swaziland		2,313					320						2,633
Niger		1,790											1,790
Algeria					1,002		668						1,670
Canada		530				320						640	1,490
Eritrea					350				1,030				1,380
Serbia		1,350											1,350
UAE		659		334		320							1,313
Cape Verde					1,280								1,280
Mexico							320	320			320	320	1,280
Ukraine									640			640	1,280
Egypt					320				320			320	960
New Zealand		250			320		320						890
Brazil						350							350
Armenia								320					320
Hong Kong			320										320
Saudi Arabia				320									320
Total	**210,552**	**263,733**	**257,386**	**391,092**	**355,449**	**347,663**	**332,635**	**286,448**	**264,611**	**314,304**	**268,033**	**207,923**	**3,499,829**

Appendix 8: Export Performance By Grade By Month In 2013/14 -60 Kilo Bags

GRADE	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOTAL
TOTAL	**210,552**	**263,733**	**257,386**	**391,092**	**355,449**	**347,663**	**332,635**	**286,448**	**264,611**	**314,304**	**268,033**	**207,923**	**3,499,829**
ROBUSTA	**157,615**	**184,679**	**201,687**	**321,287**	**284,861**	**268,178**	**229,868**	**210,449**	**201,114**	**274,992**	**234,002**	**166,288**	**2,735,020**
QUEEN OF NILE												320	320
ORGANIC ROBUSTA UTZ					630								630
ORGANIC ROBUSTA	330	1,660	380		710	330	350		330	670	1,650	50	6,460
WASHED ROBUSTA	320	3,290	1,940	4,080	2,060	4,600	3,400	3,250	2,240	1,280	2,025	1,230	29,715
SCREEN 18	14,104	17,243	15,715	28,069	20,420	20,501	21,513	19,576	23,760	19,350	20,345	14,564	235,160
SCREEN 18 (UTZ)									320				320
SCREEN 17	3,900	7,680	6,652	16,391	13,062	22,600	10,726	5,524	3,410	7,542	14,903	14,385	126,775
SCREEN 15-UTZ									1,440				1,440
SCREEN 15	94,759	100,828	103,313	158,943	131,970	114,673	99,256	90,096	105,442	143,851	121,250	58,237	1,322,618
SCREEN 14		700	660	660		200	330				660		3,210
SCREEN 12-UTZ									720				720
SCREEN 12	35,502	37,300	64,443	88,083	68,019	62,854	45,268	55,838	39,202	73,235	42,088	45,037	656,869
ROBUSTA UTZ										350			350
BHP 1199 UTZ									600				600
BHP 1199	3,515	8,428	5,470	13,375	29,515	23,420	24,969	26,395	16,621	18,976	16,510	14,945	202,139
OTHER ROBUSTA	5,185	7,550	3,114	11,686	18,475	19,000	24,056	9,770	7,029	9,738	14,571	17,520	147,694
ARABICA	**52,937**	**79,054**	**55,699**	**69,805**	**70,588**	**79,485**	**102,767**	**75,999**	**63,497**	**39,312**	**34,031**	**41,635**	**764,809**
SIPI FALLS		20	1,160	3,600									4,780
RWENZORI	320												320
ORGANIC ARABICA UTZ					290								290
ORGANIC OKORO		1,080	1,080	640	2,160	2,160			1,080				8,200
MT.ELGON A+	2,680	2,150	2,980		5,616	1,050	700	1,310	10,750	5,600	2,360	1,965	37,161
MT.ELGON A		320	640				2,010	4,420	170	320		320	8,200
MT. ELGON				2,840									2,840
MT.ELGON A UTZ										1,750			1,750
MT.ELGON A+UTZ									350				350
ORGANIC BUGISU							920	400		1,940	320		3,580
ORGANIC FULL							2	80					82

MT ELGON C							640	640					1,280
BUGISU A SUP										360			360
WUGAR	1,800	13,565	7,860	9,858	14,910	5,650	10,480	1,680	4,670	720		1,920	73,113
BUGISU A+	720	2,800	2,040	640	1,080	680	1,025	720	720	520	1,800		12,745
BUGISU AA	6,140	6,809	6,714	12,303	7,270	10,717	14,731	4,510	3,796	1,393	1,940	3,175	79,498
BUGISU A	320	1,100	420	976	320	719	4,149	2,080	700	2,160		140	13,084
BUGISU AB	3,880	7,307	3,311	6,090	7,348	7,814	6,122	3,934	360	1,294	3,344	5,413	56,217
OKORO WUGAR						200							200
BUGISU PB		1,013	3	25		1,060	695	810	84				3,690
BUGISU CPB	1,840			2,070	1,340	670	1,980		964		350		9,214
BUGISU B						244							244
BUGISU C		320		320	320		360						1,320
DRUGAR UTZ ORGANIC									1,050				1,050
ORGANIC DRUGAR					1,060	700		1,400		150			3,310
DRUGAR	28,587	35,470	18,881	25,113	19,990	43,885	51,695	43,287	31,927	19,000	19,371	27,188	364,394
MIXED ARABICA		1,560	320	320	320		320	320	320		320	640	4,440
ORGANIC WUGAR							320	1,310		174		274	2,078
OTHER ARABICA	6,650	5,540	10,290	5,010	8,564	3,936	6,618	9,098	6,556	3,931	4,226	600	71,019

Appendix 9: Bio-Chemical Analysis of Coffee Finished Products on the Market.

	Water Soluble Content	Total Ash content	Water soluble Ash	Alkalinity of water	Acid Insoluble Ash
	26.0-35.0 (Range)	3.0-6.0(Range)	65.0(Minimum)	3.0-6.0(Range)	1.0(Maximum)
BRAND					
Big gorilla, hand roasted, special Espresso ground Arabica, 250g	32.7	4.9	75.7	4.1	0.01
Big gorilla, hand roasted, special roast, dark roasted and ground Arabica coffee, 250g	28.6	4.8	79.4	4.4	0.06
Buddu Espresso plain, Robusta coffee, ground, 40g	30.7	4.8	78.2	4.4	0.03
Crane coffee blend of freshly selected Uganda coffee, Gayaza coffee roasters, 15g white	27.7	5.3	69.5	4.3	0.4
Elgon pride coffee, medium to dark roast, Pure Arabica, 250g	27.8	4.7	80.2	4.2	0.03
Elgonia coffee house, Superior blend, Freshly ground, 250g	26.9	4.6	79.9	4	0.04
Elgonia coffee, Arabica, 10g	27.8	5	75	46.4	0.2
Everbest Arabica coffee, 10g	28.8	8.5	58.1	5	1.2
Gayaza factory fresh coffee, 15g dark brown sachet	28.6	6	64.9	4.4	0.7
Gayaza factory fresh coffee, 20g	25.6	5.1	79.2	4.9	0.07
Good African Medium roast and ground Uganda Rukoki Gold, 250g	26.5	4.7	77.4	4.1	0.2
Good African Medium roast and ground Uganda Rukoki Gold, 250g	30.3	4.4	77.2	3.7	0.06
Kahawa Uganda coffee, Nvumu GHM Ltd, 30g	25.9	9.6	61.1	6.8	1
KahawaUganda coffee, Nguvu KJS Ltd, 20g white	26.9	9.2	56.8	5.1	1.1
Masaba coffee club, Masaba espresso pure, MTL Ltd, 250g	28.3	4.2	79.5	4.2	0.01
Ngumu coffee, Kahawa Ngumu Nitamu	21.1	10.1	51.3	6	2.1
Nguvu factory fresh coffee, 20g yellow and brown sachet	27.6	11.2	40.2	4.6	3.4

Nile coffee, roasted ground, Bugisu Arabica, 250g	27.7	4.2	80	4.3	0.02
Safari coffee, safari industries, Uganda coffee	23.9	16.8	25.1	4.2	6.4
Star Café, blend, 20g sacket	30.3	5.8	75.9	4.6	0.2
Star Café, Bugisu Gold, freshly ground coffee, 250g	23.7	4.2	78.8	3.9	0.02
Star Café, Bugisu Gold, Whole beans, 250g	23.7	4.7	81.1	4.5	0.03
Star Café, freshly roasted and ground coffee, Bugisu AA, Medium roast, 250g	26.4	4.7	73.3	3.7	0.06
Star Café, White mountain, freshly ground coffee, 250g	28.1	4.3	80.1	4.3	0.02
Star Café, White mountain, freshly ground coffee, 250g	25.5	9.6	65.2	6.5	0.8
Super coffee 25g	26.8	9	61.4	6.5	0.9
Wagagai Espresso Real, Arabica coffee, Freshly Ground, Mt. Elgon, 80 g	31.3	4.2	79.2	4.5	0.1
Wagagai Espresso Real, Arabica coffee, Roasted beans, Mt. Elgon, Medium roast, 250 grams	26.5	4.4	79.2	4.2	0.03
Zicofe, Zigoti coffee, pure and rich Ugandan coffee, 100g	28	4.8	77.2	4	0.08
Crane coffee blend of freshly selected Uganda coffee, Gayaza coffee roasters, 30g	24.7	8.8	62.5	6.5	0.7

Appendix 10: Report of the Auditor General on the Financial Statement for the Year Ended 30th September 2014

REPORT AND OPINION OF THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF UGANDA COFFEE DEVELOPMENT AUTHORITY FOR THE YEAR ENDED 30TH SEPTEMBER, 2014

THE RT. HON. SPEAKER OF PARLIAMENT

I have audited the financial statements of Uganda Coffee Development Authority (UCDA) for the year ended 30th September, 2014 as set out on pages 1 to 10. These financial statements comprise of the Statement of Financial Position as at 30th September, 2014, the Statement of Financial Performance, Statement of Cash flows and Statement of Changes in Equity together with other accompanying statements, notes and accounting policies.

Directors' Responsibility for the financial statements

The Directors are responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards and the requirements of the Uganda Coffee Development Authority (UCDA) and for such internal controls as management determines is necessary to enable the preparation of financial statements that are free from material misstatements whether due to fraud or error.

Auditor's Responsibility

My responsibility as required by Article 163 of the Constitution of the Republic of Uganda 1995 (as amended) and Sections 13 and 19 of the National Audit Act, 2008 is to express an opinion on the financial statements based on my audit. I conducted my audit in accordance with the International Standards on Auditing. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the Auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the Auditor considers the internal controls relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purposes of expressing an opinion on the effectiveness of the Organization's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence obtained is sufficient and appropriate to provide a basis for my unqualified opinion.

Part "A" of my report sets out my opinion on the financial statements. Part "B" which forms an integral part of this report presents in detail all the significant audit findings made during the audit which were brought to the attention of Management and will form part of my Annual Report to Parliament.

PART "A"

Opinion

In my opinion the financial statements present fairly in all material respects, the financial position of the Uganda Coffee Development Authority (UCDA) as at 30th September, 2014 and its financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards and the Coffee Development Authority Statute 1991.

Report on other legal requirements

As required by the Uganda Coffee Development Authority statute 1991 and the National Audit Act, I report to you, based on my audit, that:

i. I have obtained all the information and explanations, which to the best of my knowledge and belief were necessary for the purpose of my audit.
ii. In my opinion, proper books of accounts have been kept by the organisation, so far as appears from my examination of those books; and
iii. The statement of financial position and statement of financial performance are in agreement with the books of accounts.

John F. S. Muwanga
AUDITOR GENERAL

KAMPALA

18th March, 2015

Uganda Coffee Development Authority

THE REPUBLIC OF UGANDA

FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2014

UCDA
COFFEE HOUSE
Plot 35 Jinja Rd
P.O. Box 7267 Kampala
Tel: 256 41 256940; 233073
Fax: 256 41 232912
E-mail: ucda@ugandacoffee.org
www.ugandacoffee.org

Having a competitive, equitable, commercialized and sustainable coffee subsector

UGANDA COFFEE DEVELOPMENT AUTHORITY

STATEMENT OF RESPONSIBILITIES FOR THE FINANCIAL STATEMENTS FOR YEAR ENDED 30 SEPTEMBER 2014

The Uganda Coffee Development Authority Act requires the Authority to keep proper books of accounts and records of its transactions and affairs that give a true and fair view of the state of affairs as at the end of the financial year and its surplus or deficit.

It also requires that the Authority keep proper accounting records that disclose, with accuracy, the financial position of the Authority.

The Directors accept responsibility for the annual financial statements set out on pages 1 to 10, which have been prepared using appropriate accounting policies supported by reasonable and prudent judgements and estimates, in conformity with International Financial Reporting Standards and the requirements of the Uganda Companies Act.

The Directors are of the opinion that the financial statements give a true and fair view of the financial affairs of the Authority and of its deficit for the year.

The Directors accept responsibility for the maintenance of accounting records that may be relied upon in the preparation of financial statements as well as adequate systems of internal control.

Nothing has come to the attention of the Directors to indicate that the Authority will not remain a going concern for at least the twelve (12) months from the date of this statement.

Perez Bukumunhe
Chairman, Board of Directors

Henry Ngabirano
Accounting Officer/
Managing Director

Appendix 12: Statement of Financial Position for the Period Ended 30th September 2014

UGANDA COFFEE DEVELOPMENT AUTHORITY
STATEMENT OF FINANCIAL POSITION FOR THE PERIOD ENDING 30 SEPTEMBER 2014

	Notes	2013/2014 U SHS	2012/2013 U SHS
Fixed Assets(Net)	2	15,950,403,540	16,175,836,276
Investments			
Investment in Joint ventures	12	-	1,147,379,212
Other investments and work in progress	13	417,407,905	407,532,905
Current Assets			
Retirement Benefits Scheme	3	1,047,132,737	975,668,589
Short-term Fixed Deposit (Operations)	4	2,560,851,414	3,265,000,000
Cash at Bank	5	2,026,763,166	1,527,046,369
Cash at Hand	6	245,000	1,000,000
Debtors	7	1,230,356,962	1,177,321,373
Prepayments	8	502,844,170	85,497,090
		7,368,193,449	7,031,533,421
Less Liabilities			
Creditors: Amounts falling due within one year	9	5,209,660,723	747,787,695
Retirement Benefits Scheme	10	1,047,132,737	975,761,739
		6,256,793,460	1,723,549,434
Net Current Assets		1,111,399,989	5,307,983,987
Net Assets		17,479,211,434	23,038,732,380
FUNDED BY			
Funds of the Authority	11	16,112,166,300	17,249,670,512
Retained Earnings		1,367,045,134	5,789,061,968
TOTAL		17,479,211,434	23,038,732,480

HENRY A. NGABIRANO
MANAGING DIRECTOR

NINA L. NASSUNA
PRINCIPAL ACCOUNTANT

Appendix 13: Statement of Financial Performance for the Period Ended 30th September 2014

UGANDA COFFEE DEVELOPMENT AUTHORITY
STATEMENT OF FINANCIAL PERFORMANCE FOR THE PERIOD ENDING 30 SEPTEMBER 2014

	Notes	2013/2014 U Shs	2012/2013 U Shs
REVENUE	1		
Cess 1%		10,031,055,514	11,298,853,532
Sundry income		108,013,074	62,100,090
Rent income		693,212,604	675,549,806
Export & processing licence		136,180,852	152,358,200
Interest Earned		324,871,164	385,780,070
Government Contribution		9,286,007,435	3,114,204,693
Centre of Robusta Excellence Project Funds		569,070,070	-
Total Operating Revenue		21,148,410,713	15,688,846,391
OPERATING EXPENSES			
Staff Costs	2	4,326,261,757	3,904,655,272
Administrative Expenses	3	1,334,065,334	1,288,909,659
Programme Expenses	4	18,251,996,851	8,385,931,144
Support to Coffee Organisations	5	258,720,136	203,916,260
International Obligations	6	776,777,790	736,260,177
Depreciation/ Provisions	7	671,355,104	614,635,744
Total Operating Expenses		25,619,176,972	15,134,308,256
UCDA Operating Surplus/ (Deficit)		(4,470,766,259)	554,538,135
Gain or loss on disposal of fixed assets		-	-
Net Surplus/ (deficit)		(4,470,766,259)	554,538,135

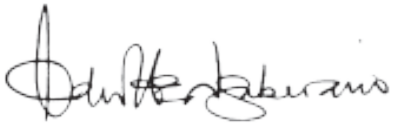
HENRY A. NGABIRANO
MANAGING DIRECTOR

NINA L. NASSUNA
PRINCIPAL ACCOUNTANT

Appendix 14: Statement of Changes in Equity for the Period Ending 30th September 2014

UGANDA COFFEE DEVELOPMENT AUTHORITY
STATEMENT OF CHANGES IN EQUITY FOR THE PERIOD ENDING 30 SEPTEMBER 2014

	Note	2013/2014 U Shs	2012/2013 U Shs
Retained surplus at the beginning of the year		5,789,061,968	3,817,801,026
Prior year adjustments	14	48,749,425	1,416,722,807
Operating surplus/(deficit) for the year		(4,470,766,259)	554,538,135
Retained surplus at the end of the year		1,367,045,134	5,789,061,968



HENRY A. NGABIRANO
MANAGING DIRECTOR

NINA L. NASSUNA
PRINCIPAL ACCOUNTANT

Appendix 15: Statement of Cashflows for the Period Ending 30th September 2014

UGANDA COFFEE DEVELOPMENT AUTHORITY
STATEMENT OF CASHFLOWS FOR THE PERIOD ENDING 30 SEPTEMBER 2014

	2013/2014 U. Shs	2012/2013 U. Shs
Cashflows from Operating Activities		
Net Operating (Deficit)/Surplus	(4,470,766,259)	554,538,135
Adjustments for:		
Depreciation	592,952,829	551,957,209
Provision for bad & Doubtful debts	78,402,275	62,678,535
Unrealised loss on International obligations	(169,902,488)	(183,346,325)
Prior year adjustments	48,749,425	1,398,764,807
increase in Debtors & prepayments	(470,382,669)	319,610,292
increase in Liabilities	4,533,244,026	(1,482,892,794)
Net cash flows from operating activities	142,297,139	1,221,309,859
Cashflows from Investing Activities		
Construction of Laboratory equipment/Land & Buildings	-	(8,975,000)
Purchase of computers	(81,011,128)	(73,998,773)
Purchase of Furniture	(33,600,000)	(630,000)
Purchase of Liquoring Equipment	(293,800)	(3,840,000)
Purchase of Office Equipment	(33,112,300)	(5,759,580)
Purchase of Commercial vehicles	(226,460,600)	-
Purchase of Farm Equipment	(14,661,000)	
Purchase of Espresso Machine	-	(31,500,000)
Purchase of Generator	-	(47,377,403)
Purchase of Motor vehicles	-	(374,543,313)
Disposal of Fixed Assets	41,655,000	-
Net Cash from Investing Activities	(347,483,828)	(546,624,069)
Net Cash flows from financing Activities	-	-
Net decrease in cash and cash equivalents	(205,186,689)	674,685,790
Cash and cash equivalents at the beginning of the period	4,793,046,369	4,118,360,579
Cash and cash equivalents at the end of the period	4,587,859,680	4,793,046,369

HENRY A. NGABIRANO
MANAGING DIRECTOR

NINA L. NASSUNA
PRINCIPAL ACCOUNTANT

Appendix 16: Fixed Asset Schedule

UGANDA COFFEE DEVELOPMENT AUTHORITY

NOTES TO THE FINANCIAL STATEMENTS FOR THE PERIOD ENDING 30 SEPTEMBER 2014

NOTE 2: FIXED ASSET SCHEDULE

COST/VALUATION	Land	Buildings	Office Furniture	Computer & Peripherals	Office Equipment	Motor Vehicles	Commercial Vehicles	Liquoring Equipment	Motor Cycles	Generator	Moisture Meters	Espresso Machines	Farm Equipment	TOTAL
At 1 October 2013	4,080,000,000	12,157,746,000	296,387,688	331,334,538	179,497,642	551,545,472	340,946,135	294,723,302	159,366,198	108,748,174	132,809,000	76,771,089	28,800,000	18,738,675,238
Additions 2013/2014	-		33,600,000	81,011,128	33,112,300		226,460,600	293,800					14,661,000	389,138,828
Adjustments & Disposals 2013/2014			-53,312,633	-37,852,857	-1,014,000	-88,858,325	-55,204,336		-19,355,000	-14,000,000				-269,597,151
At 30 September 2014	4,080,000,000	12,157,746,000	276,675,055	374,492,809	211,595,942	462,687,147	512,202,399	295,017,102	140,011,198	94,748,174	132,809,000	76,771,089	43,461,000	18,858,216,915
DEPRECIATION														
At 1 October 2013	320,369,062	684,119,294	229,273,874	250,167,704	110,153,525	226,979,979	301,492,708	223,660,303	80,910,983	52,112,307	55,391,088	16,679,373	11,528,774	2,562,838,974
Disposal Adjustments													-	
Accumulated depreciation on disposed assets			-49,771,036	-37,390,560	-322,987	-78,898,474	-53,892,832		-15,295,959	-12,406,568				-247,978,416
Adjusted depreciation	320,369,062	684,119,294	179,502,838	212,777,144	109,830,538	148,081,505	247,599,876	223,660,303	65,615,024	39,705,739	55,391,088	16,679,373	11,528,774	2,314,860,558
Depreciation for the Year	106,789,687	229,472,534	11,660,666	53,366,169	12,211,849	62,921,128	66,150,631	8,562,816	14,879,235	6,605,092	9,290,149	7,211,006	3,831,867	592,952,830
Accumulated Depn at 30 September 2014	427,158,749	913,591,828	191,163,504	266,143,313	122,042,386	211,002,634	313,750,507	232,223,119	80,494,259	46,310,831	64,681,238	23,890,379	15,360,641	2,907,813,387
Net Book Value as at 30.9.14	3,652,841,251	11,244,154,172	85,511,551	108,349,496	89,553,556	251,684,513	198,451,892	62,793,983	59,516,939	48,437,343	68,127,762	52,880,710	28,100,359	15,950,403,528

Appendix 17: Notes to the Final Accounts for the Period Ended 30th September 2014

UGANDA COFFEE DEVELOPMENT AUTHORITY
NOTES TO THE FINAL ACCOUNTS FOR PERIOD ENDED 30 SEPTEMBER 2014

1.1 BASIS OF ACCOUNTING

The accounts of the Authority are prepared under the historical cost convention and accruals basis and in compliance with International Financial Reporting Standards.
The reporting currency is Uganda shillings.

1.2 RECOGNITION OF REVENUE

i) Cess; Recognized at the time of export.
ii) Rent; Recognized at the beginning of the month.
iii) Government contribution; Recognized at the time of expenditure.
iv) Other revenues (Licenses and interest earned on account); Recognized on realization.

1.3 DEPRECIATION & IMPAIRMENT

Depreciation is calculated to write off the cost of fixed assets over their expected useful life using reducing balance method at the following annual rates: -

*	Commercial Vehicles	25%
*	Buildings	2%
*	Plant, Furniture and Equipment	12%
*	Motor Vehicles	20%
*	Computers & Peripherals	33%

Land and buildings are reported separately in accordance with the requirements of IAS 16.
Given that all the land of the Authority is held on term leases, it is therefore accounted for in accordance with the requirement of IAS 17.

1.4 BAD AND DOUBTFUL DEBTS

Specific provisions are made for all known doubtful debts in addition to a general provision that is estimated by Management (5%). Bad debts are written off after approval of the Board of Directors.

CONVERSION AND TRANSLATION OF FOREIGN TRANSACTIONS

Transactions in foreign currencies during the year are converted into Uganda Shillings at rates ruling at the transaction dates.
Assets and liabilities denoted in foreign currencies are translated into Uganda Shillings at the rates ruling at the balance sheet date.
The resulting differences from conversion are recognized within the Income and expenditure account, while translation differences are charged against retained surplus or deficit in the year they arise.

1.6 GOVERNMENT CONTRIBUTIONS ON VOTE 160: UGANDA COFFEE DEVELOPMENT AUTHORITY

Total Government contribution was Shs 9,286,007,435 for the coffee year 2014/2015.

1.7 PROJECT FUNDS

During the year the Authority recognized Shs 569,070,070 from aBi Trust relating to the Centre of Robusta Excellence project.

1.8 OUTSTANDING COURT CASES

The Authority has 3 pending court cases; Semalwadde Wasswa Michael versus U.C.D.A, Kisarach Kelly versus U.C.D.A and Barakuraha James versus U.C.D.A. These cases are not yet concluded.

1.9 OUTSTANDING NURSERY OPERATORS

The Authority had outstanding nursery operators worth Shs 3.8billion accumulated as a result of upscaled planting in line with Government programmes on Commodity Approach where 100 million coffee seedlings are to be planted every year.