

AFRICAN **FINE COFFEES** REVIEW MAGAZINE

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Innovea Global Coffee:
BREEDING NETWORK CONNECTS
AFRICAN ARABICA BREEDING
PROGRAMS WITH ASIA AND LATIN
AMERICA.

**A new dawn for the coffee
sub-sector in Uganda**

Rwanda Coffee:
IS RWANDA COFFEE BECOMING
A DRINK FOR-ALL?

CLAUDE BIZIMANA

**CHIEF EXECUTIVE OFFICER, NATIONAL AGRICULTURAL
EXPORT DEVELOPMENT BOARD - RWANDA**



AKAGERA

C O F F E E



Akagera Coffee project Ltd (ACP) is a Social Private Enterprise with head office located at KG 176, st - Rwanda. The Company has started by building Akagera Coffee Washing Station in 2016 at akagera road, Kayonza District in Eastern Province under the support of Kula Project, Inc. The Coffee Washing Station has built in order to produce the harvest of Rusave Farmer's Coffee Cooperative (RFCC) members and other coffee farmers in that's area; ACP Ltd started to be fully in operation as Akagera Coffee Project Ltd since 2017. We are driven social enterprise where we invest 30% of our net income into cooperatives to support the community through field farm school, providing farming input like coffee and shade trees seedlings and we have initiated cow for coffee farmer project where we have started with 5 cows in 2022. We are even establishing ECD (Education Center for Development) that are operating as pre-school to take care on kids that are belong to 3 to 5 years old and we do use that's platform as running process of their mothers to fight against male nutrition and we have also a women center that is used as tailoring class for younger women.

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A WORD FROM THE EXECUTIVE DIRECTOR



Welcome to the 11th Edition of AFCA magazine. This Edition is very special as it comes as the first publication after the Pandemic Period. Like many other organizations, AFCA was not able to organize any activity during the pandemic period making this a special edition that ushers us to the 19th African Fine Coffees Association Conference and exhibitions. As the coffee industry re-emerges from the effects of the pandemic, this specific conference in Kigali Speaks of the Coffee industry's as well AFCA's resilience in sailing through the macro and micro economic challenges resulting from the effects of the Covid pandemic on world-wide trade.

In this conference, AFCA delves into the crucial emerging issues affecting the coffee industry in Africa and beyond. In addition to the business systems re-engineering forced by the Pandemic, other key emerging issues such as the EU regulation on deforestation-free products, which will definitely affect the production and trading of coffee in European market.

A handwritten signature in black ink, appearing to read 'Nancy Chelangat Cheruiyot'. The signature is fluid and cursive.

Nancy Chelangat Cheruiyot
Executive Director, AFCA

This conference also for the first time will have a small holders farmers workshop where special attention is given towards discussions around small holder producer challenges, coffee cooperatives societies as well coffee income, coming hot in the heels of the discussions of the World Coffee Producer Forum. Not this is up and above and the Sustainability workshop that takes place on the first day.

The Inter-Africa Coffee Organization , a key partner of AFCA will be highlighting their vision of the African Coffee Industry from a policy makers perspective. Indeed this conference takes place a time when the Coffee industry in Africa is at cross-roads towards push for Inter-Africa trade on one hand and climate change related regulations on the other.

Lastly, indeed the discussions in this conference ensures that there something for everyone in the value chain, from the micro-producers to Coffee Financing, Machinery, as well as domestic Coffee consumption among others.

Once again, we welcome you to the ever welcoming Rwanda, the land of a thousand hills and very good coffee.

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A WORD FROM THE CHAIRMAN



It gives me great pleasure to welcome you to this special **19th AFCA Conference and Exhibition** from this beautiful City of Kigali. This is so special because it forms a bridge between pre- and post- pandemic periods where many changes were experienced some not so good and some not so bad but ultimately lessons were learnt and adaptation realized.

In addition to the pandemic challenges, Conflicts in different countries and climate change impacts such as drought, or flooding have continued to negatively impact the production and productivity of coffee as well as the coffee trading. This in turn negatively impacts the bottom-line income of the coffee producers. Subsequently these challenges have also given rise to legislations and regulations aimed at mitigating some of the effects hence slowing altogether the growth of the sector as it affects Coffee markets as well as the production expansion.

However, Coffee industry has proven to be quite resilient as it has quickly bounced back on track and this conference is a celebration of this fact. Whereas some losses were made during the period, lessons

were also learnt ensuring that the industry became even stronger and ready to face future challenges that may come. In addition, new opportunities were discovered as new ways of doing business emerged. Overall, there was more gains than losses, and that the beauty of Coffee!

In conclusion, the 19th AFCA conference exhibition hereby provide a very important forum for you to engage discuss with industry players and experts in the way forward for the African industry , the emerging opportunities , as well as the anticipated challenges and how to prepare for them. Of course, the opportunity to cup various coffees and interact with all coffee industry stakeholders from all over the world is the icing on the cake!

The conference is made possible by the support of the Rwandan Government, through the NAEB, together with the Rwandan coffee industry players. Despite the late Launch of this conference, the coming together of the public and private sector in support has ensured a successful event. Indeed where there is coffee, nothing can go wrong!

Amir Hamza
Chairman, AFCA

IS RWANDA COFFEE BECOMING A DRINK FOR-ALL?

Less domestic consumption and a high export rate are general trends in African countries, with the exception of Ethiopia, which consumes more than half of its coffee locally. As in Ethiopia, drinking coffee locally would benefit not only the people of other African nations as consumers, but would also help smallholder farmers avoid being influenced by international coffee price fluctuations over which they have little control.

Rwanda, a tea-drinking country, is attempting to increase indigenous coffee production while decreasing imports. If Rwandans loved coffee as much as they loved tea, the country would not export nearly all of its coffee.

Rwanda's coffee history is intertwined with the country's history. German and Belgian colonists introduced the crop after the turn of the twentieth century. Coffee cultivation was made compulsory under Belgian control, and Rwandans were forced to cultivate it under harsh conditions. Those missionaries, on the other hand, rigidly limited their beverage use to themselves.

Indeed, Rwandans farmed it being informed that coffee caused heart disease and insomnia, which is why its consumption was frowned upon until later in the 1950s when some of them gained access to education or traveled outside the nation.

Rwanda now consumes an estimated 3%, up from 0.02 in 2007. The rest is shipped to countries like the United States, Switzerland, Singapore, China, the U.K., etc. To say that Rwanda's coffee culture is new would be an understatement. But why would Rwanda, whose coffee is regarded among the best in the world, not drink its own produce?

To begin with, Rwanda had only two coffee washing stations and one dry mill by 2000, which may explain why Rwandans would export coffee and then import it after processing if

they needed to consume it. At that time there was no-where-to go for a cup of coffee. It is later in 2007 that an investor had the idea to open the very first coffee chain restaurant in the country, Bourbon Coffee Shop.

It didn't take the owner two years to discover that having the store branches would make him more as Bourbon coffee shop grew with a large number of customers. Because coffee processing began to grow as well, this had an effect on the entire value chain.

Stafford Rubagumya, the creator and proprietor of Stafford Coffee, one of Rwanda's most prominent coffee shops today, believes that companies should aim to include individuals who earn less and develop ways to have great products for all income levels.



According to him, the average Rwandan typically finds the cost of coffee to be out of their price range, leading them to choose alternatives like tea. He stated that, for example, a cup of coffee can cost up to Frw4,000, which many people cannot afford. "Can you imagine producing something you'll never get to consume or enjoy? What is then the essence of growing it if it is only enjoyed by others?"

Stafford Rubagumya's objective is to ensure that Rwandans may consume the coffee they grow themselves, rather than reading about how Rwandan coffee performs against global coffees.

He explained that the pricing are determined by the processes that coffee goes through before it is ready for the market. He claimed that, a kilogram of coffee beans that costs a few hundred Rwandan francs at the field ends up costing Rwf8,000 after processing.

However, it would not be a lie to assert that the consuming culture is expanding. Some factors influenced the rearing culture:

The two Coffee Washing Stations rose to 313 as of today, and coffee shops grew to more than 250 nationwide - excluding coffee consumed at home by persons who roast or grind coffee themselves.

The country began producing instant coffee, making it easier for coffee drinkers to drink it at home, at work, and elsewhere.

David Ngarambe, CEO of Rwanda Farmers Coffee Company, one of the instant coffee makers, expressed confidence that Rwandan instant coffee will contribute to the portion consumed by local inhabitants. "We should also break the myth that coffee is only for the wealthy. To accomplish this, we must provide affordable options by manufacturing different sizes of coffee, including instant ones." Ngarambe elaborated. He believes that in the next five years, more individuals will choose coffee over other beverages.

Increasing domestic consumption should continue through education, but it must begin at the grassroots level, for example; farmers must love the coffee, and residents must

comprehend the beauty of coffee and why they need it.

Currently, coffee is grown on an area of 39,844 hectares by more than 350,000 smallholder farmers. Total annual production is between 22,000MT and 24,000MT, with Arabica accounting for 98 percent of the total.

Rwanda Coffee has received numerous global awards for its quality and is one of the country's largest export money earners. Between January and December 2022, the East African country earned USD105,034,794 from coffee exports.

“ Stafford Rubagumya's objective is to ensure that Rwandans may consume the coffee they grow themselves, rather than reading about how Rwandan coffee performs against global coffees. ”



Uganda Coffee Development Authority

A NEW DAWN FOR THE COFFEE SUB-SECTOR IN UGANDA

Coffee is a significant contributor to Uganda's economy, accounting for 22% of export earnings in the 2021/2022 fiscal year. The Government in recent years has made efforts to improve the Coffee Sub-sector including a Presidential directive in December 2015 to raise coffee production from 4 million 60 kg bags to 20 million 60 kg bags by 2030, the development of a National Coffee Strategy, and enactment of the National Coffee Act, 2021.

On 31 August 2021, the President of the Republic of Uganda, H.E Yoweri Kaguta Museveni assented to the National Coffee Act, 2021 which will facilitate the development of a competitive, participatory and sustainable coffee sub-sector in accordance with the National Coffee Policy (2013). It will also provide for the Uganda Coffee Development Authority (UCDA) to regulate, promote and oversee the coffee sub-sector in the entire value chain. This includes generation of planting materials, soil management, irrigation, pest and disease management and harvesting all the way to off-farm activities including drying, sorting, primary, secondary and tertiary processing.

The new law seeks to address new developments, advances and challenges that have emerged in coffee research and extension services, farmer organizations and climate change.

In order to enhance planning, traceability and service delivery, UCDA is now empowered to provide coffee extension services beyond agronomic practices and to register stakeholders engaged in coffee production. The Authority will lead the implementation of coffee specific extension services by coordinating the efforts of different agencies and stakeholders.

It is important to note that the Act introduces a voluntary coffee auction system to offer an alternative method of selling coffee. This will bring dynamism and efficiency in the sub-sector resulting from increased competition in the selling of coffee.

The National Coffee Act, 2021 also provides for coffee research and development, which is vital to the improvement in production and productivity, quality and value addition, market development and intelligence and institutional development and accountability. The new law is critical in facilitating the drive to achieve the country's target of increasing production, productivity and export earnings. The Coffee Sub-sector in Uganda has





registered significant achievements which include coffee becoming Uganda's second leading export after gold in FY 2021/22, Uganda becoming the 7th coffee producer globally and Uganda coffee being ranked the 3rd best in terms of quality.

Strong partnerships between UCDA and regional bodies such as Africa Fine Coffees Association (AFCA) will enable Uganda to achieve its goals. The 19th African Fine Coffees Conference & Exhibition to be held at the Kigali Convention Center in Kigali, Rwanda from the 15th – 17th February 2023 provides the right platform to showcase Uganda coffee and for local businesses and coffee actors to connect with buyers from across the world.

The Conference also builds on the success of the G25 Summit held in May 2022 in Nairobi, Kenya. Twenty-five African coffee-producing countries came together to forge a consensus on integrating coffee as an anchor commodity in the African Union (AU) in line with Agenda 2063. The summit was organized by the Inter Africa Coffee Organisation (IACO).

Coffee is now recognized as a priority agricultural commodity on the continent and this opens up new opportunities for millions of coffee growers and processors to access new markets, invest in value addition, branding and job creation for youth across the coffee value chain. There are also additional opportunities presented by the African Continental Free Trade Area, (AFCFTA) which provides for free movement of persons, capital, goods and service to deepen economic integration and promotion of agricultural development.

In Uganda, UCDA remains at the forefront of working with value chain actors including the youth to ensure an inclusive, transformative and sustainable coffee industry.

UCDA has continued to champion improvement in the quality of Ugandan coffee and as a result, global demand for Uganda coffee has continued to grow and the price has also been competitive. Uganda's coffee production now stands at 8.4 million bags annually making her the second biggest coffee producer on the continent behind Ethiopia.

Uganda is also the top exporter on the continent. With a new coffee law in place, Uganda is ready to take the coffee sub-sector to the next level, leveraging on the opportunities in the coffee value chain.



Innoeva Global Coffee Breeding Network connects African arabica breeding programs with Asia and Latin America

First global coffee breeding collaboration in over 50 years

In November 2022, World Coffee Research (WCR) announced the formation of Innoeva, a global coffee breeding network for arabica that will, for the first time, bring coffee producing countries together in a global effort to combat production challenges through a collaborative breeding effort. Innoeva brings together nine invited countries (including Kenya, Rwanda, and Uganda in East Africa, as well as Costa Rica, Mexico, Peru, and the United States in Americas and India and Indonesia, in Asia) to transform coffee breeding and accelerate the pace of genetic improvement on a global scale. Innoeva represents the first time that key African arabica countries will be connected not just through bilateral collaborations, but via a truly global network with Indonesia, India and the Americas. The network will expand for other interested countries to join in the future; it will also expand to include Robusta beginning in 2024.

“Coffee faces a crisis of innovation that makes the industry’s sustainability, quality, and supply assurance goals difficult—if not impossible—to achieve if we stay on the path we are on,” said Dr. Jennifer “Vern” Long. “But as we have seen with COVID-19, incredible solutions to urgent, global problems are made possible with scientific collaboration.”

“The Innoeva Global Coffee Breeding Network will help sustain Rwanda’s coffee sector with the next generation of coffee varieties combining good yielding potential, good quality characteristics and multiple stress tolerance,” says Simon Martin of the Rwanda Agriculture Board. “This is critical to enhance Rwanda’s capacity to adapt to current and future production threats, improve the livelihoods of small scale farmers, and increase the share of coffee in the national economy.”

The Innoeva network is funded by over 200 coffee companies worldwide that comprise WCR’s membership. The network builds on a decade of groundwork laid by

WCR and its partners, including KALRO in Kenya, NARO/NaCORI in Uganda, and RAB in Rwanda, to drive science-based agricultural solutions to secure a diverse and sustainable supply of quality coffee on an urgent basis. Through the network, WCR will create new, improved breeding populations, including new and unique genetic combinations created using modern genomic selection techniques. Participating countries can use the populations without restrictions, including for finished variety selection and customized breeding.

“Agricultural science is critical for securing the global supply of high-quality coffee in the face of the climate crisis,” said Jim Trout, chair of WCR’s Board of Directors and Head of Coffee Research & Development for the J.M. Smucker Co., the producer of Folgers®, “WCR created this network because roasters know we can’t wait another day.”

Innoeva’s unique collaborative design provides tremendous value to countries to enable them to tackle the challenges of climate change together while

maintaining their individual competitive positions in the market. The network gives participating countries open access to new genetic materials, training in modern breeding approaches, and shared tools. The network will undertake a dedicated workstream to build skills and technical expertise to strengthen individual scientist capacity in using modern breeding approaches to deliver technology for their nation's farmers.

It will operate by connecting researchers across national boundaries to achieve results that would be unfeasible for programs working in isolation. At the same time, its design leaves coffee producing countries in the driver's seat for finished variety development and release, providing avenues for countries to connect with roasters and buyers to ensure that new varieties are tailored for market demand.

"With this network, we will be able to achieve results that would not be possible while conducting breeding within the borders of a single country. Costa Rica is very excited to participate. It will allow us to develop more and better varieties and make them available to farmers faster," said Xinia Chaves Quiros, Director of Instituto del Café de Costa Rica (ICAFFE).

Better trees = better future

For a farmer, having the right tree is critical. A better tree can mean the difference between economic survival and the end of a livelihood. But there isn't just one "right" tree; the best tree for a farmer is the one that is well adapted to his or her situation—resistant or tolerant to major diseases in the area, adapted for local climate conditions, producing a good yield, and with the right cup quality for the market that the farmer sells into. Securing the future of coffee in Africa means providing farmers with more and better choices about the varieties they can grow – and ensuring those varieties tackle critical challenges on the farm, especially resistance to devastating diseases like coffee leaf rust and coffee berry disease.

But the history of arabica variety introductions and breeding in Africa is similar to the story in other parts of the world—historically, farmers haven't had a lot of choices. A quick survey of arabica variety introductions in east Africa shows that most varieties arrive through "spillovers" from neighboring countries in the early 20th century—typically of materials highly susceptible to major diseases including rust and CBD. In short, in many parts of Africa where arabica is produced, farmers continue to work with plants





that are decades or even centuries old. In the last 15 years, only Kenya (Batian) and Rwanda (RAB C15) have released new arabica varieties out of dedicated breeding programs.

If varieties are essential to prepare coffee for climate change, an infusion of new and better plants would help African coffee farmers tremendously. Through Innovea, participating African coffee research programs will secure access to a diversity of new and unique arabica plants, from which they can make selections of varieties locally adapted for their unique climate conditions, farmers' needs, and markets.

Breeding to the rescue

Innovea's launch marks the first global infusion of new plant material to breeding programs in over 50 years, and the first program to deeply connect breeding programs from the different major world regions.

Decades ago, in the late 1960s, coffee researchers at Centro de Investigação das Ferrugens do Cafeeiro (CIFIC) in Portugal developed and distributed plants that were resistant to one of the most devastating coffee diseases in existence—coffee leaf rust (CLR)—to many breeding programs around the world. The plants, known as Catimor and Sarchimor, led to the development and release of dozens of new varieties worldwide. Distribution was concentrated especially in the Americas (including Brazil, Colombia, and many Central American countries), where

they became the basis for most coffee breeding over the next half century, creating billions of dollars of benefit for farmers and helping sustain global supply of the crop in the face of multiple cycles of epidemic disease. In Africa, Kenya, Tanzania, Malawi, and Zimbabwe received CIFIC plants, which were used to release or develop a small handful of rust-resistant varieties between 1980 and 2010, including Catimor in numerous countries, and Ruiru 11 and Batian in Kenya.

Today, arabica agriculture globally continues to lean heavily on this single, 50-year-old program of innovation alongside other fragmented national breeding efforts. But, the challenges facing coffee today are far greater than they were at the time of the CIFIC's program as they include the existential threat posed by climate change. We must run faster just to stand still.

Using the power of global collaboration and modern breeding approaches, the Innovea Global Coffee Breeding Network will create the innovations that coffee agriculture needs for sustainable, stable, high quality production in the future.

Bringing modern approaches to coffee breeding

To truly take advantage of the improved materials that Innovea will provide to partner countries, participants need support to modernize and enhance their breeding programs. Innovea therefore also includes targeted



support to countries to strengthen their national variety development capacity in order to drive impact for farmers.

Countries participate in a baseline breeding program assessment, informed by a standardized method pioneered for other crops. The results of the assessments will lead to a collaboratively designed plan for each breeding program, to ensure that each national breeding program is well positioned to deliver varieties that respond to national farmer demand and global market opportunity.

An opportunity to develop varieties that address farmers' needs

To date, two technical workshops of participating countries have taken place—in Rwanda in August 2022 and in November in Costa Rica—and the first crosses for the network have already been made. As many as 5,000 genetically unique plants will be distributed to network partners for evaluation in 2023 and subsequent improved crosses will be made every six years.

"The network brings together a wide diversity of high-performing varieties from Africa, Asia, and the Americas that have never been bred together before," said Dr. Senthil Kumar, Director of Research at the Central Coffee Research Institute (CCRI). "India is enthusiastic about the opportunities this network provides for us to develop varieties that address farmers' needs and to ensure our success in achieving climate resilience."

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"With this network, we will be able to achieve results that would not be possible while conducting breeding within the borders of a single country.

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Modern coffee breeding can solve multiple problems at once. For example, it will bring more durable resistance to key pests and diseases into coffee varieties, reducing the need for pesticides. It can bring higher-quality coffee to lower elevations, expanding the potential for production in tomorrow's hotter environments—critical for climate change adaptation—and/or tailored to specific geographies.

The first cycle of crosses were designed to bring together high-priority traits such as yield, disease resistance, and cup quality. In the next two decades, as a result of the Innovea network, multiple countries will have a basket of improved varieties that are more productive, climate-resilient, diverse, and better tasting than all of today's current varieties. From then on, there will be a continuous pipeline of ever-improving, more stable, predictable, and diverse materials available to farmers through their respective national research institutions.



NEW EUROPEAN UNION DEFORESTATION REGULATION: NAVIGATING THE REQUIREMENTS FOR COFFEE SUPPLYCHAIN

In December 2022, the EU reached agreement on a new law to prevent the import of commodities linked with deforestation and forest degradation onto the EU market. Employing an ambitious set of legislative measures, the new EU Deforestation Regulation (EUDR) targets imports and exports from the EU of key commodities and derivative products, including coffee (whether or not roasted or decaffeinated), coffee beans, husks and skins, substitutes containing coffee. Addressing key themes 3 and 4c, our presentation will explore this regulation for the African coffee sector. Within the permitted timeframe, Preferred by Nature will seek to cover the following 4 topics: Firstly, the basic elements of the regulation of highest relevance to the African coffee sector;

Secondly, we will explore key definitions and concepts in the regulation which have wide-ranging implications for African coffee supply chains they are sourcing through. The regulation requires EU-based companies to prove their supply chains do not contribute to the deforestation or forest-degradation, as well as to demonstrate the coffee was grown in accordance with the relevant legislation; We will then identify potential impacts of the regulation on coffee-growers and industries, trading directly or indirectly into the European market; Finally, we will raise potential tools or actions the coffee sector supplying into the EU market may employ, to meet the additional sourcing requirements that will stem from EU-based buyers. These may be necessary to facilitate continued access to the EU market.

Emerging Production Challenges and Market Restrictions Edging out Conventional Arabica Coffee in Kenya

Arabica coffee is one of the most intensively sprayed and fertilized crops in the world. This is because, the coffee is attacked by a myriad of insect pests and disease-causing micro-organisms including fungi, bacteria and nematodes. While most of the conventional production methods have a major contribution to climate change, the phenomenon, on the other hand, seems to promote the spread and voraciousness of these pests. In quest of achieving maximum production, farmers are tempted use large amounts of pesticides, herbicides, fungicides, and chemical fertilizers. Inorganic fertilizers and pesticides are among the major contributors of greenhouse gas emissions especially methane and nitrous oxide. These gases together with carbon that is emitted by other coffee production processes significantly raises the carbon footprints in coffee production. On the other hand, the carbon sinks are significantly low as most Kenyan farmers prefer growing coffee in open sunlight rather than under shade. That notwithstanding, these chemicals are not only unsafe to the consumers, but are also quite detrimental to the producers and the entire eco-system. Consequently, many consuming countries including the United States, European Union, Japan and Korea have become extra restrictive. Some have even updated their regulations regarding the allowable maximum residue levels for some popular but potentially toxic pesticides such as Chlorpyrifos. This paper highlights the emerging Arabica coffee production challenges and offers sustainable solutions.

Learning goals:

- 1.To sensitize the coffee farmers on the emerging production challenges and market restrictions.
- 2.To enlighten the farmers on the available sustainable, eco-friendly and healthy coffee production methods.



Dr. Bernard Mukiri Gichimu is a Senior Lecturer in the School of Agriculture, University of Embu. He holds BSc. and MSc. Degrees in Horticulture from Maseno University and PhD in Plant Breeding from JKUAT. Previously, he worked for six (6) years at Coffee Research Institute (formerly Coffee Research Foundation) in Ruiru as a Plant Breeder and the Head of Plant Breeding Section. Bernard has published 58 research articles in peer-reviewed journals and presented 28 papers in local and international conferences. Besides, Bernard has participated in over fifteen (15) local and international consultancy missions on coffee related issues.

Digital Integration of Agricultural Supply Chains Alliance (DIASCA): Turning Market Regulations into Opportunities



Due diligence and sustainability requirements, such as the new EU rules for deforestation-free products, confront the African coffee sector with the need to produce increasing amounts of data and make coffee traceable from farm to cup. While the number of digital solutions on the market is steadily rising, data incompatibilities unfortunately often mean that the various systems are unable to exchange data. As a result, both coffee producers and buyers have to collect, store and convert data repeatedly - in various formats, in different systems, often lacking data ownership and re-usability. The Digital Integration of Agricultural Supply Chains Alliance (DIASCA) is a GIZ project, commissioned by the German BMZ, implemented in collaboration with GS1, COSA, ISO/DIN, supply chain actors, several African governmental traceability initiatives, technology providers, and other relevant organisations - linked to the ICO sector dialogue. Its objective is to find a broad agreement on globally accepted standards on a) traceability, b) forest monitoring and c) farm income, as fundamental building blocks for efficient data flow and compliance within agricultural supply chains, underpinned by concrete use case reference projects. DIASCA aims at system interoperability; greater efficiency of data collection at origin by making data comparable and (re-) useable for a variety of purposes; empowering (data and coffee) producers through enhanced freedom of choice and improved access to digital solutions, data ownership, and higher (analytical and economic) value from data. The presentation intends to inform and invite all private and public coffee stakeholders to collaborate in this open and inclusive project.

CLIMATE CHANGE:

The real impact on coffee production and what must be done to mitigate in the long run

Coffee has been decreasing for many west and central African countries, while increasing in value for specialty markets. Meanwhile, productivity and aging of coffee trees are big concern in many African countries, and African coffee farmers are considered to generate more income than their peers from other producing countries. Youth involvement to the value chain is key to ensure the sustainability of production, consumption and recycling. Young coffee entrepreneurs who remain engaged in the coffee sector and offer climate-smart solutions will play a key role in creating a more resilient, sustainable and inclusive trading system. Robusta offers a more resilient, climate-smart alternative and with recent efforts in research and development for higher quality, 'fine' Robustas, it could be a competitive choice. This could offer new opportunities to the new African generation, while offering a global solution to the coffee sector.

In this panel discussion, panelists will explore how boosting Africa's Robusta sector can contribute to a more resilient, climate-smart global coffee sector, how it can benefit African economies and livelihoods, and how engaging youth is key to a sustainable future. Questions to be addressed will include: How is Robusta a climate-smart solution, and why is African Robusta a new, less explored opportunity the industry needs to look at? What are the strategies, actions and partnerships that need to happen to boost the African Robusta sector, and who benefits? In light of the recent African Continental Free Trade Area agreement, where are the opportunities and how do they contribute to a more inclusive trading system? How can we incentivize youth to remain in or join the coffee sector, and what tools do they need to succeed?



A ugandan produced organic fertiliser that outperforms alternative (imported) mineral fertilizers in coffee production.

Innovation: Feeding coffee waste to black soldier fly larvae to produce an organic coffee fertiliser that is carbon negative and higher yielding than organic and non-organic alternatives.



The most serious threats to coffee production in Uganda are soil degradation and the loss of suitable coffee-growing areas due to rising temperatures. To answer the questions how the climate impact of coffee production can be lowered and production systems can be made resilient to climate change, two experimental studies were conducted.

In the first study, a locally produced insect-derived organic fertilizer

made from municipal organic waste was applied to coffee plants in Masaka, Uganda, in a randomized trial alongside other organic and non-organic alternatives. Fertilizer applications were repeated every season from November 2020 to October 2022, and plants were evaluated based on productivity and plant health parameters. Plants that received the insect fertilizer consistently outperformed the other organic and non-organic treatments regarding yield and

health appearance, demonstrating that the organic insect fertilizer is an economically viable and sustainable option.

A second study sought to determine whether the nutrient cycle in coffee production could be completely closed by producing organic coffee fertilizer from coffee waste streams. Therefore, coffee pulp obtained from a UGACOF washing station in Kasese, Uganda, was subjected to different enzymatic and microbial pre-treatments before being fed to Black Soldier Fly larvae. The various treatments were monitored and evaluated based on different growth and bioconversion parameters, and the resulting insect manure was quantified to determine potential fertilizer yields and scalability of this process. The results show that treating coffee cherries with Black Soldier Fly larvae is a viable solution for producing coffee-specific organic fertilizers on a large scale.



Philipp Straub graduated from TU Munich with a BSc in Agricultural Sciences and an MSc in Biosystems Engineering from Wageningen University. During a one-year research stay at ICIPE in Nairobi, Kenya, he developed storable diets for mass-production of edible crickets and locusts, which resulted in a peer-reviewed journal publication and a presentation at the scientific conference Tropentag Bonn 2018. Since 2019, he has been focusing on scaling the production capacities of insect-derived feed and fertilizer in Uganda as co-founder and CTO of Marula Proteen Limited.



Challenges to and importance of engaging women and youth in the coffee sector.

In many producing countries the average age of coffee farmers is increasing, youth are not motivated to stay in coffee as they lack ownership of land, coffee trees, access to training and finance and benefits derived from coffee. As a result, they increasingly leave rural areas and look for employment in cities. The continuation of coffee production by the “next generation” is therefore at stake, which poses a great risk to the coffee sector as a whole. Additionally, women form the majority of the world’s estimated 25 million coffee farmers, yet coffee is seen as a men’s crop. Women are responsible for many of the production activities, but men tend to benefit more from training in sustainable coffee practices, inputs, income and other benefits derived from coffee sales. This unequal distribution leads to many inefficiencies in the coffee chain, and hampers the development of the coffee sector generally, and production in particular.



As smallholders' coffee incomes evaporated, investment in coffee production reduced or stopped resulting in lower production and ever lower incomes, starving coffee communities having lost their main source of income. It was within this climate that a group of entrepreneurial coffee farmers and Technoserve's industry experts met to recommend a solution to despondent coffee growers.

The choices were stark; find a way back to profitability or choose another crop. Advice was sought from global network of experts who included Jerry Baldwin, one of the founders of Starbucks Coffee Company, who recommended that a great opportunity lay in the growing specialty coffee market. It was with this opportunity in mind that a strategy was developed to create a unique coffee business in Tanzania, "SHAMBA" (Southern Highlands Agricultural Marketing and Business Acceleration). Right away, three successive steps were identified as essential to fulfilling the mission at hand. First, to create a competitive market structure that rewards quality. Secondly, farmer organization, independent farmer groups and an Association (KILICAFE) would have to support the farmers to improve their coffee quality. And thirdly, support the farmer group members to access world's specialty coffee markets. Ironically, it is this last step coupled with the government's having admitted producers to export directly without passing through the auctions that most significantly boosted farmer incomes. However, the success of the intervention was pegged on the farmers' ability to produce high quality coffee and of considerable volumes which fetched competitive prices from the specialty coffee market. KILICAFE's system of passing on price premiums to individual farmer groups created the essential reward that drove

these groups to seek every opportunity to enhance coffee quality. It is with this goal in mind that many established centrally located processing facilities where the group can collectively process their coffee to produce a consistent high-quality product. These facilities, known as central pulperies, required an investment in excess of seven thousand dollars. More than 200 of KILICAFE's member farmer groups had acquired loans to set-up central pulperies by 2005, and every one of those groups had met their loan repayment obligations. Business challenges in the implementations of Kilicafe strategy include consistent supply of required volumes and quality, compliance with new initiatives like traceability and certification schemes, building professional management structure, expanding market demand and capital resources. As farmer groups grow, they require more specialized services that KILICAFE had no capacity to provide. Today, prominent private coffee traders like DAE Ltd, Tutunze Kahawa Ltd and CMS Ltd provide over one million dollars of working capital to the groups, linked most groups to sources of finance for CPU development and selectively bulk all the coffee for marketing to premium buyers. As a result, the southern regions supply more than 40% of the total production and about 70% of Tanzania Arabica coffee in the market and buyers launched an exclusive partnership with prestigious international roasters like Starbucks, Peet's Coffee & Tea and Japanese buyers who buy southern coffee such as Ruvuma PB and "AA Mbinga CPU". Success can also be attributed to an upgrade in infrastructure; i.e. paved roads to Mbinga, plus "Songwe international airport" in Mbeya. These developments have attracted new investments like the 2,000 hectare Aviv Farm by Olam (T) Ltd in Songea, promoting the future of the region to become a major producer of Arabica coffee in the country



A STRATEGY WAS DEVELOPED TO CREATE A UNIQUE COFFEE BUSINESS IN TANZANIA

- 01** Create a competitive market structure that rewards quality
- 02** Farmer organizations, independent farmer groups and an Association (KILICAFE) would have to support the farmers to improve their coffee quality
- 03** Support the farmer group members to access world's specialty coffee markets

ROLE OF TRADING STANDARDS IN SUSTAINABLE SOCIAL AND ECONOMIC TRANSFORMATION OF THE COFFEE INDUSTRY IN AFRICA

Sustainability refers to the ability to address the needs of the present without compromising on the ability of future generations to meet their own needs (UN). One of the objectives of the International Coffee Agreement 2007 is to encourage stakeholders to develop a sustainable coffee sector in economic, social, and environmental terms. Sustainability standards emerged in areas where national and global legislation was weak, but where the consumer and NGO movements around the globe demanded action. Trading standards have been developed by a broad range of stakeholders and experts in the Agriculture sector. They comprise a set of practices or criteria outlining how a crop should be tended or the ethical manner in which a resource should be exploited.

The contribution made by coffee growing and trading to environmental and social issues is positive. Coffee is an evergreen shrub, hence an important contributor to carbon sequestration, and is effective in stabilizing soils. It also permits the preservation of much of the original bio-diversity in planted areas. One of the main problems associated with coffee production is water pollution arising from wet processing. To address this issue, standards recommend that farmers in producing countries use environmentally friendly technologies. Coffee also makes a positive social contribution by maintaining substantial rural employment and stable communities. Improving the living standards of coffee producers in Africa, especially smallholders, is a priority for many trading standards.

The diversity and resilience in maintaining sustainability in the coffee sector lies in the contribution of each participant in the value chain. The path of social and economic transformation as a function of sustainability is therefore a continuous endeavor. The role of standards

in promoting the sustainable production of coffee is anchored in the knowledge of the coffee industry, climate, policy, extension, agronomy, market needs, value addition, and the culture of the primary growers. Certification bodies have demonstrated a great understanding of this context in offering independent third-party certification and verification across Africa.

Whereas climatic variability has always been the main factor responsible for fluctuations of coffee fields in the world, climate change, as a result of global warming, will trigger actual shifts on where and how coffee will be produced in future. Several adaptation and mitigation measures for coffee producers have been proposed as a remedy to the challenges facing the sector. Short-term adaptation strategies include improved farming practices and better post-harvest processing. Longer-term strategies include capacity-building, improved monitoring of climate data, enhancing soil fertility, introducing or preserving different production models, and developing drought and disease-resistant varieties.

The input of certification bodies in sustainability goes beyond farm audits and product certification. Observations and recommendations presented by audit teams are independent and objective. Once adopted and implemented, they bring about the direct impact and foster improvement. The long-term compliance approach introduces a verifiable logic impact path in the theory of change. Consequently, players in the value chain will be rewarded with higher output, reduced operational costs, healthy ecosystems, legal compliance, and improved well-being of workers, and smallholder families.

AfriCert is the premier certification body in East, Central and West Africa. Our capacity to add value to sustainability in the production of coffee has been enhanced overtime and continues to evolve in a dynamic environment featuring an aggressive shift of policy, market needs and research with a view to improving existing coffee varieties.

EMERGING REGULATIONS IN THE INTERNATIONAL MARKET AND ITS EFFECT IN THE SUSTAINABILITY OF THE COFFEE INDUSTRY

The European Parliament recently approved an EU-wide directive on mandatory corporate sustainable due diligence, which will hold downstream supply chain actors in EU member states accountable for their impact on people and planet on a legal basis. While this is a move in the right direction, there will be some effects on non-EU suppliers, including coffee producers, that will need to be mitigated through important accompanying measures that ITC is working on with the EU.

There are many questions buzzing now across the coffee industry: How will this shift from voluntary to mandatory affect us? Will the cost of doing business go up? How will suppliers deal with compliance demands? Will the burden of proof be shifted down to suppliers? Who will absorb the costs this transformation requires? Last but not least, what are the opportunities and benefits linked to this radical shift? The recently published 4th edition of ITC's Coffee Guide, the world's most comprehensive, practical source for the international coffee trade, contains comprehensive information of the global coffee sector. The guide was an effort in co-creation and informed through consultation with over 70 industry actors from across the value chain. Chapter 2 provides a comprehensive summary of the coffee sector's sustainability landscape - its evolution, a breakdown of certifications, what is happening 'beyond certification' and where we stand today. It also refers to the latest shift from voluntary to mandatory environmental and human rights due diligence.

African Continental Free Trade Area (AfCFTA), Opportunities for the Coffee Industry

The recent African Continental Free Trade Area agreement provides new opportunities for African businesses to trade value-added products within the African continent. Coffee is the most highly traded commodity in the world. African coffee farmers are considered to generate less income as their peers from other producing countries, and productivity and aging of coffee trees are big concern in many African countries. Further, many producers do not know the taste of their own coffee. At the same time, some African coffee growers and business owners are diversifying their green coffee exports with local sales of value-added products, such as roasted coffee. The AfCFTA provides new opportunities to expand regional trade of value-added products, providing increased income for African coffee growers. Businesses in Africa and the Next Generation of coffee farmers wanting to increase regional trade of roasted coffee would benefit from the global experience of coffee roasting and coffee bar culture. The International Trade Centre (ITC)'s 4th Edition of The Coffee Guide offers the world's most extensive, hands-on and neutral source of information on the international coffee sector, from seed to cup. Over 70 coffee experts from around the world contributed to the content. Chapter 3 provides an overview of the coffee market, while Chapter 5 describes global and regional quality standards, from green coffee to roasted coffee. In this panel discussion, representatives from African value-added businesses will discuss opportunities in the local market, regionally, and how this compares to the raw commodities export market. Authors of The Coffee Guide will provide strategic advice for new coffee roasting businesses.



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BECOME AN AFCA MEMBER TODAY AND JOIN AFRICA'S LARGEST COFFEE BUSINESS NETWORK

The AFCA membership department together with the Secretariat and on behalf of the Board of Directors would like to take this opportunity to thank all its members for your continued support and partnership. We are proud to have you all as part of the AFCA family. For those who are non-members, you are missing out a lot. Below are some of the benefits that all members are entitled to;

1. Grow your Business;

AFCA has put together excellent opportunities for you to grow your business along the coffee value chain.

These include;

- Participation in the only African Fine Coffees Conference & Exhibition which is attended by over 2000 regional and international coffee trade professionals every year.
- Participate in the AFCA Business –to-Business Match Making Services. These are critically designed to facilitate business introductions and establish new links and relationships between different categories of stakeholders along the value chain.

3. Members have exclusive access to the AFCA Taste of Harvest Competition and Coffee Auction Platform.



4. Enhance your visibility and competitive advantage

by using the AFCA publications (monthly and quarterly) through running your advertisements at the AFCA exclusive platforms which include;

- AFCA Fine Coffees Review magazine and access to the digital version online
- Monthly news letter
- E-Resource Centre
- Blog and Social Media Forums

5. Keep up with the Coffee news and coffee updates across the world

using our detailed World Coffee Calendar of activities.

6. Train for coffee brilliance at our Cupping and Barista international accredited seminars.



MEMBERSHIP FEES:

1 | ANNUAL Membership: US\$ 500

2 | TERM Membership: US\$ 1200



Please visit our website at www.afca.coffee for more information or send us an e-mail at secretariat@afca.coffee



- Members participate with AFCA in International specialty related events such as SCAA, SCAE, and SCAJ where they are presented with an opportunity to engage in global multi – stakeholder platforms.

2. Grow your Coffee Knowledge

through attending any of the exclusive AFCA workshops, seminars held in different member countries.

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