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VERITAS**

Bureau Veritas agricultural testing

Optimize the efficiency
of your agricultural
production with Bureau
Veritas laboratories



SOIL ANALYSIS

Allow you to check the soil nutrient composition, considering its chemical elements and its potential to nourish plants



PLANT ANALYSIS

Determine the nutritional status of plants and detect nutrient deficiencies, which are essential to choose the right fertilization plan, suitable for your needs



WATER ANALYSIS

Determine the quality of irrigation water and identify its nutrient composition to better control the fertigation



ORGANIC SUBSTRATE ANALYSIS

Be aware of chemical element composition to establish the necessary organic amendments

SERVICES PROVIDED:

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- Contaminants
- Plant Pathology



“

BEYOND ANALYTICAL SERVICES, WE INTERPRET YOUR TESTING RESULTS AND WE OFFER PERSONALIZED ADVICE TO SUPPORT YOU TO CHOOSE THE FERTILIZATION PROGRAM THAT WOULD BE BETTER TO OPTIMIZE YOUR RESULTS.”

BUREAU VERITAS AUDITING CAPABILITIES

ENSURE SAFETY & DEMONSTRATE THE QUALITY OF YOUR PRODUCE



Internationally recognized set of farm standards dedicated to Good Agricultural Practices (GAP)



Support the development of sustainable agricultural practices



KS 1758: 2015 & KS 1758: 2016
Safety; food safety and traceability along the agriculture value chain for fresh produce



ORGANIC

Proving that agricultural and food products have been produced with emphasis on the protection of soil and water, the biodiversity, the responsible use of energy and natural resources



Rain Forest Alliance. Promote a sustainable production for fresh produce worldwide



Promote responsible sourcing through social and ethical audits



ISO 22000

International standard that defines the requirements for a food safety management system covering the entire supply chain



Ensures that manufacturers fulfill their legal obligations and provide protection for the end consumer



HACCP

Hazard Analysis Critical Control Point. Standard to ensure that food is safe at the time of human consumption



Quality and safety standards covering the entire supply chain.



Risk management system for food safety throughout the food supply chain



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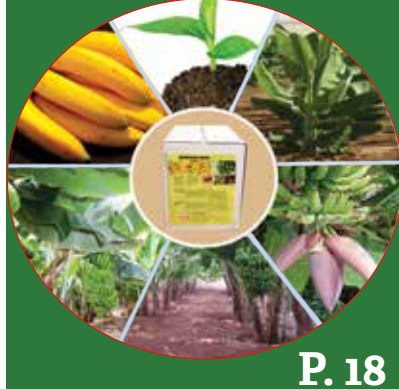
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EDITOR'S NOTE



The good news though is the horticulture industry players and leaders are fully aware of the importance of not relying entirely on rain-fed farming.

Joe Mbutia

Seeking sustainable solutions

Kenya, like the rest of the world, is experiencing the worst effects of climate change yet. Over the past year, the country has grappled with a persistent drought that has been described as the worst in 40 years. Throughout the nation, sorry scenes of drying trees and food crops in regions such as central Kenya that have remained evergreen dot farms and forests. In game reserves and livestock zones, animal carcasses litter the dusty environment; dry beds in place of once all-season rivers, streams and water paddocks where we once had heavy rivers flowing, withered crops on farms indicative of no harvests, emaciated animals.

For a country like ours that is a major producer and exporter of agricultural produce – flowers, fruits, vegetables, herbs and spices, the state of the weather has naturally depressed harvests. The good news though is the horticulture industry players and leaders are fully aware of the importance of not relying entirely on rain-fed farming. In this sector will be found all the innovations and initiatives available anywhere in the world.

The flower sector in Kenya is arguably the best when it comes to adopting technology. The founders of one of Kenya's finest flower farms, Redlands Roses, are this year hanging their boots after successfully growing the field crop for 26 years. Isabelle and Aldric Spindler retire a happy couple, having spearheaded a seamless succession plan to continue the firm foundation they laid for growth, development and expansion of the Ruiru-based outfit. If there is a farm where every available technology in flower farming has been pioneered, it is at Redlands Roses.

The legacy the Spindlers leave behind is sustainability. Going back to the beginning of this editorial, surmounting the challenges of climate change requires a deliberate approach to sustainable practices to reduce carbon emission, tree planting, renewable energy, collection and storage of water, preservation and creation of wetlands, reduce waste, integrated pest management and care for humanity. Redlands pioneered hydroponics, the growing of crops in soilless media. The land the farm stands on was unsuitable for natural productivity, occupied by spitting cobras and shrubs. Technology converted it into a producer of some of the most beautiful flowers sold all over the globe.

This gives a clear pointer to the need for the application of technology to the exploration of Kenya's vast virgin lands that have not been farmed since creation.

In the northern frontiers, it is possible to find thriving orchards in isolated spots where water has been made available. What then stops the entire country from fully embracing practices that would catapult productivity? We have land, hardworking people, the sun in plenty, a conducive environment and supportive policies.

These policies must be implemented if Kenya is to take a leap and play a bigger role in helping alleviate the global shortage of food. Countries with smaller surface, less water and harsher climates have succeeded in creating agricultural powerhouses – so can Kenya.

Speaking of the sun, a good number of horticulture farms are increasingly going solar in pursuit of sustainability in power issues. As a result, some flower firms have been certified carbon neutral for using natural solutions in their various needs. Ranging from renewable energy, tree planting, creation of wetlands, recycling water, biological pesticides, integrated pest management, gravity, electric cars, rails, geothermal energy, composting waste, vermiculture – there are numerous environmental solutions available.

In the coming editions, we will take a detailed focus on unlocking soil potential, a journey brought to you by Andermatt.

Despite all the bad news, there is something to smile about. Kenya has developed a standard for local produce, the KS1758, ensuring the safety of the food available in the markets. Courtesy of Bureau Veritas Kenya Limited, we will give you information on where to source the certified produce.


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COMPILED BY ANITA NKIROTE



IFTEX 2023

The 9th edition of the Kenya-based flower trade show IFTEX will take place from 6th to 8th June 2023 at Visa Oshwal Community Centre on Ring Road Parklands in Nairobi. Last year's show attracted over 200 exhibitors and 5,000 industry professionals from 60 countries.



International Africa Avocado Congress

The Avocado Society Of Kenya jointly in collaboration with other regional and international organizations in the Avocado value chain in Africa are hosting the second International Africa Avocado Congress (Avocado Africa 2023) which will be held at the Sarit Expo Centre, Nairobi, Kenya from 31st May - 2nd June 2023. The theme is, "Avocado Africa; A Convergence of technology and business for increased competitiveness and trade", the event will draw participation of Avocado sector stakeholders from all over the world.



World Floral Expo 2023

The World Floral Expo will take place at the Jacob. K.Javits Big Center in New York from Thursday September 7 to Friday September 8, 2023. The show is expected to have many exhibitors from different continents such as South America, Africa and Europe.



1st KALRO Scientific Conference and Exhibition

The Kenya Agricultural and Livestock Research Organization (KARLO) announces the 1st KARLO Scientific Conference and Exhibition organized from 27th to 31st March 2023 in collaboration with stakeholders in the agricultural sector. The theme is "Transformative agricultural technologies, innovations and management practices for food and nutrition security, income and climate resilience"



8th AGRITEC AFRICA 2023

The 8th AGRITEC AFRICA, An international exhibition and conference on agriculture technologies will be held on 15-17 June 2023 at Kenyatta International Convention Centre, Nairobi, Kenya. A total of 175 companies from 25 countries and visitors are expected to participate in the event which includes progressive farmers, dairy farmers, dealers & distributors, importers, government officials, etc. Concurrently, the 8th Dairy Livestock & Poultry Expo Africa and 2nd Gaintech Africa Expo is also being organized which includes companies from dairy, poultry, livestock and grain-related sectors.

PROFILE

The accidental flower manager



ELVIS MUSYOKA ♦ SALES MANAGER,
UNITED SELECTIONS

BIO

Born in Kitui County, graduated from Jomo Kenyatta University of Agriculture and Technology, where he studied Ornamental Science and Landscaping.

Joined flower industry by chance in 2010, when he landed a six-month internship at Syngenta Flowers' Kenya Cuttings Ltd.

Career blossomed at Redlands Roses in Ruiru, Kiambu County.

Later referred to United Selections in 2016 where he got his current job as Sales Manager.

He majored in landscaping and had dreams of starting his own business in the area of his specialty. Essentially, all he had envisioned during his studies was to run his own business

By **BRIAN OKINDA**

Born and brought up in Kitui County, Elvis Musyoka, the sales manager at Nakuru-based flower breeding company, United Selections, hadn't always contemplated working in any role similar to that which he now holds. In fact, he hardly fancied any such role.

He landed it by chance though, and now some eight years down the line, it is so much been ingrained into him that he now feels he wouldn't trade it for any other anywhere.

Majored in landscaping

His dalliance with the flower industry began in 2010, soon after graduating from the Jomo Kenyatta University of Agriculture and Technology where he studied Ornamental Science and Landscaping.

He majored in landscaping and had dreams of starting his own business in the area of his specialty. Essentially, all he had envisioned during his studies was to run his own business. At the start of 2010, he landed a six-month internship at Syngenta Flowers' Kenya Cuttings Ltd, a development that somewhat triggered his interest in floriculture.

His proper career in floriculture however began at Redlands Roses in Ruiru, Kiambu County where he worked as a management trainee later on in 2010. In fact, he credits Redlands Roses for much of what he now knows about the flower industry.

"Though I signed up as a management trainee at Redlands Roses, I ended up [basically] working in different roles [and] in different departments during the course of my tenure at the flower farm - from 2010 to 2015. The last role I held there was that of production assistant manager," he says.



I ended up [basically] working in different roles [and] in different departments during the course of my tenure at the flower farm - from 2010 to 2015.



Then he quit the job. He wanted to pursue other engagements. But at the back of his mind, he still toyed with the idea of starting his own landscaping company.

Early the following year he however got a referral at United Selections. The flower breeding company needed a sales manager for its Kenya region. And though he had neither training nor competence in sales and marketing, he ended up acing the interview and getting the role.

Although the work that the role entailed was a bit scary for him at first, he credits his background, previous management roles and other stints at Redlands Roses, for giving him the confidence and guidance that he so desperately needed.

"I also had some little sales and marketing skills which I got from my days as a child when I spent time accompanying my mother who was a goods trader. But it is mainly the



United Selections 2020 Open Day held in Nakuru, Kenya which was attended by Kenyan flower growers, suppliers and other stakeholders in the flower industry. The theme of the day was “Breeding a Colourfull Future Sustainably”.

influence from my previous employer that got me going in my new role,” Elvis says, adding that he currently undertakes agribusiness management courses to boost his capabilities.

Elvis’ day at United selections, where they deal in breeding both spray and other standard roses, largely entails bringing clients’ attention to new flower varieties that they breed, giving technical and market advice to growers, linking growers to markets and mostly visiting the flower growers. He spends roughly 70 percent of his working days visiting flower growers.

Sales and marketing, he says, is more fun for him, as other than earning him an income, it presents an opportunity to meet new people and make networks from virtually all over the world.

Passion for the job

A piece of advice he would give to anyone prospecting an opportunity in sales and marketing is that other than what one reads in the books, they have to have a passion for the job.

“People also value good relationships. You, therefore, need to be one who relates well with anyone you interact with. Because in this case and for the most part, people will mostly

remember how you related with them, more than what you were offering them to buy,” Eric says.

United selections, he says, has an open-door culture; a culture that tries as much as possible to build and nurture relationships. And this has been key in seeing him build the good relationships he achieves and maintains with the firm’s clientele.



Elvis Musyoka in one of the United Selections greenhouses.

“
People also value good relationships. You, therefore, need to be one who relates well with anyone... For the most part, people will mostly remember how you related with them, more than what you were offering them to buy
 ”

Are you a stakeholder in the horticulture industry and would like to be profiled by HORTInews? Please get in touch on hortinewsagencies@gmail.com

Well-known varieties such as Madam Red, Upper Class, Confidential among others are some of the celebrated brands and milestones that the firm has managed to come up with so far.



Pushing the boundaries of flower breeding

By EDWIN KIRWA

Based in Njoro, Nakuru County, United Selections, a premier flower breeding company has been pushing the boundaries of breeding for the past decade.

Well-known varieties such as Madam Red, Upper Class, Confidential among others are some of the celebrated brands and milestones that the firm has achieved in coming up with this far.

But it is the breeder's recent introduction of Premium Class that is testament to their commitment to not only breed a colourful future but create varieties that are befitting different clients regardless of their altitudes. It is this belief that translates into the creation of a sustainable floral supply chain.

Premium Class

The hint is in the name. Premium Class is a novelty red rose, recently introduced by the breeder United Selections. Initial commercial plantings are completed and the company expects an official market unveiling of the variety during the second quarter of 2023.

Key traits of Premium Class

- Colour: Red
- Head Size: 6cm+
- Length: 60-80 cm
- Vase life: 15+ days
- Petals: 50-70

Premium Class is an intriguing addition to the red roses premium segment that the firm already has. With a red velvety colour when it is open on the vase; Premium Class definitely draws one in with immense sentiments of love.

Love is natural and authentic and so is Premium Class bred with love for love.

Colourful future

No one can pre-empt everything at this stage, but this is just the beginning of a colourful future for Premium Class and for rose lovers around the world. Soon clients will get to experience this rose and view it in different big floral stages globally – it is a manifestation.



Premium Class is a novelty red rose, recently introduced by the breeder United Selections, Initial commercial plantings are completed



Interestingly, Premium Class gained a lot of traction during the breeder's annual open days, with a significant number of growers who visited the breeder's showhouse in Nakuru, requesting trials to further observe and develop the variety in their farms and subsequently for their respective markets.

For more information regarding Premium Class, please get in touch with United Selections marketing @united-selections.com www.united-selections.com



A flower display at the United Selections stand at the International Flower Trade Exhibition (IFTEX) held at the Vishal Oshwal Centre, Nairobi, and below, Some of the solar panels the company uses as part of sustainability in power. Photo| File



How 2.5 turned to 250 hectares in 25 years

By HORTINews Team

It is from the two hectares where the couple initially cultivated vegetables in 1997, a regional powerhouse in flower production has grown, supporting roughly 15,000 people across the neighbourhood.

Largely considered to be one of the leading cut-flower producers and exporters in the world, Kenya is a country whose flower industry has continued to thrive by leaps and bounds.

Key players in the industry – flower farms – indefatigably continue to ensure that roses, astromerias, carnations, arabicums, eryngiums, statics, lilies, hypericums and gypsophila among other flower varieties are available for the international markets, giving the country an exceptional advantage in the global flower markets.

The Kenya flowers story of growth and expansion can be exemplified by the PJ Dave Group Ltd, a narrative that bears all the hallmarks of success and diversification in the country's fresh produce scene.

To an out-of-towner, Isinya, a rustic town located roughly 36 miles south of Kenya's capital city, Nairobi, may not have much to

attract attention other than the fact that the Nairobi-Namanga Highway passes through it. In the background, however, the bucolic surroundings that the often dusty town presents offer an idyllic setting for one of the most remarkable flower farms in the country.

Some 25 years ago after retirement, Pravin Jaychandra Dave (popularly known as PJ Dave), then aged 50 and enchanted by the rugged terrain that defines Isinya, acquired two hectares of land just off the Nairobi-Namanga Highway. Here, together with his wife, Elizabeth, they founded PJ Dave Flora Ltd, an enterprising flower company.

It is from the two hectares where the couple initially cultivated vegetables in 1997, a regional powerhouse in flower production has grown, that is now, directly and indirectly, supporting roughly 15,000 people across the neighbourhood.

More of this in the next edition

Customer Appreciation

To **PJ Dave Flora**, thank you for being our valued customer. We are so grateful for the pleasure of serving you and hope we met your expectations.

Thank you so much for your support. We truly appreciate your business and **EABCL** is looking forward to serving you better.



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Kenya rolls out safety and quality standard for fruits and vegetables

By CATHERINE RIUNGU

KS 1758 is divided into two parts; 2015 for floriculture and ornamentals and KS 1758 ;2016 for fruits and vegetables Growing concerns over quality and safety of domestic fresh produce in Kenya have finally been addressed through the new KS 1758, a standard that seeks to certify vegetables and fruits as fit for human consumption.

Fresh Produce Consortium Kenya (FPC) Chief Executive Officer Okisegere Ojepat says it is important to ensure food consumed locally carries a mark of quality, a common practice in export produce.

Kenya is recognized globally as a supplier of fresh produce that meets stringent sanitary and phytosanitary standards through a rigorous system administered by the Kenya Plant Health Inspectorate Service (Kephis), working with internationally recognized verification and certification institutions.

To be safe for humans and the environment, produce must conform to allowable chemical residue limits, commonly known as Maximum Residue Levels (MRLs) and quarantine pests as spelt out from time to time by agriculture, health and environment authorities.

The measures leading to conformity are compiled into a code of practice against which players through the value chain are continually audited and certified without which trade licences and permits cannot be issued. Failure to adhere to the laid down standards leads to suspension of licences until measures to rectify the lapses are taken, checked and verified.

Regular audits ensure players conform to existing procedures and emerging challenges such as new pests, diseases and changes in agrochemical controls.

“Time has come for us to apply the strict export market requirements to produce consumed locally”, said Mr Ojepat adding, “in order to address the rising health challenges associated with consumption of unsafe food”.



Fresh Produce Consortium Kenya (FPC) Chief Executive Officer Okisegere Ojepat says it is important to ensure food consumed locally carries a mark of quality, a common practice in export produce.

Photo | File

It is against this background that the KS 1758, has been developed to address food safety, plant health, environmental stewardship, and worker health and safety for both domestic and international markets.

KS 1758 is a code of practice for the horticulture industry that is divided into two parts; for floriculture and ornamentals - KS 1758: 2015, and for fruits and vegetables - KS 1758: 2016.

This standard is based on international and regional private voluntary standards and government regulations. It is domiciled at the Kenya Bureau of Standards.

It was developed with the input of the Ministry of Agriculture through the Horticultural Crops Directorate (HCD), KEBS, FPC, Retail Trade Association of Kenya, Fresh Produce Exporters Association of Kenya and Kenya Flower Council, among others. The institutions are rolling out programmes that encourage farmers, supermarkets, groceries, county markets, consolidators, packhouses and other value chain players to comply with the standard.

Certification firm, Bureau Veritas Kenya District Chief Executive - Eastern Africa, Cyprian Kabbis says there will be enhanced quality of horticultural products and safety of the produce in both the export and domestic markets.



KS 1758: Code of Practice for horticultural produce

The Standard is divided into two parts, Part One for Floriculture and Ornamentals - KS 1758: 2015 and Part Two for Fruits & Vegetables - KS 1758: 2016



Mr Cyprian Kabbis, Bureau Veritas District Chief Executive-Eastern Africa at the KS1758 Food Safety Conference.

Bureau Veritas is a world leader in testing, inspection, and certification. Founded in 1828, Bureau Veritas has offices in over 160 countries worldwide and a workforce of over 80,000 employees.

These include over 6700 highly experienced engineers, auditors, technologists, and product experts who support economies in their geography through consultancy, inspections and testing, conformity assessment, and technical assistance.

Challenges in the horticultural value chain can be broadly itemized as market access; product safety; sustainability; quality and transparency.

Bureau Veritas supports horticultural value chain actors to address challenges related to market access through obtaining required certifications such as BRCGS; IFS; SMETA; FSSC22000; ISO 22000, GlobalGap.

The horticulture sector in Kenya has remained resilient over the last two years despite the impact of Covid-19. In addition, the changing climatic conditions and effects of environmental impacts due to economic activities globally are permanent fixtures in the horticultural value chain. Stakeholders, therefore, have to establish sustainability programmes for well being. The impact of the recent drought in Kenya; necessitates targeted actions to mitigate effects from the same.

As we become more and more aware of the requirements by multisectoral stakeholders; the three triplets of food security, food safety and sustainability are always a permanent fixture in the current agricultural value chain.

The changing climatic conditions and effects of environmental impacts due to economic activities globally are permanent fixtures in the horticultural value chain

According to the Agriculture and Food Authority (AFA), horticulture products exported for the period January to November 2021 rose from Kshs 136.7 billion in 2020 to Kshs 145.4 billion in 2021 representing a 6% increase.

This was attributed to increased volumes despite the average export prices being low compared to those achieved in 2020 pointing to quality issues that should be a concern to all of us. The total volume and value of horticulture exports reached 313 million kilograms with a value of Kshs 150 billion. Cut flowers shipped reached Kshs 101 billion, followed by vegetables at Kshs 26.8 billion, fruits fetched Kshs 17.5 billion. Vegetable export volumes increased from 99.5 million

KS 1758: ADDRESSING FOOD SAFETY



It is in the wake of these challenges that a Kenyan Standard KS 1758 was developed to address challenges of food safety, plant health, conservation of the environment, and worker health and safety for both domestic and international markets.

kilograms in 2020 to 110.5 million kilograms in 2021 representing an 11% rise as compared to the same period in 2020. The value however dropped from Kshs 17.75 billion to 17.57 billion in 2021 representing a 1% decrease. In July 2021, Kenya successfully exported the first hot water-treated mango consignment to Italy after a seven-year self-ban, and it was found to be compliant in both phytosanitary and quality aspects.

Export market requirements

The strict export market requirements especially on sanitary and phytosanitary matters remains a notable challenge for Kenyan horticultural produce. In essence sanitary and phytosanitary issues have remained a major challenge in trade for horticultural products for both domestic and international markets. Some of the issues include exceedance of pesticides in produce (maximum residue



In essence sanitary and phytosanitary issues have remained a major challenge in trade for horticultural products for both domestic and international markets



levels), notification for the quarantined pests like False Codling Moth (FCM).

It is in the wake of these challenges that a Kenyan Standard KS 1758 was developed to address challenges of food safety, plant health, conservation of the environment, and worker health and safety for both domestic and international markets. The Ministry of Agriculture through the Horticultural Crops

Directorate, Kenya Bureau of Standards, the horticulture industry and other stakeholders recently established a Kenyan Standard dubbed KS 1758: 2015 & KS 1758: 2016 addressing safety; plant health, food safety and traceability along the

agriculture value chain for fresh produce.

KS 1758 is a Code of Practice for the Horticulture Industry that is divided into two parts, Part One for Floriculture and Ornamentals - KS 1758: 2015 and Part Two for Fruits & Vegetables - KS 1758: 2016 that was developed with reference to international and regional, private voluntary standards and government regulations. The four basic principles of this standard are; food safety; plant health; worker health and safety and conservation of the environment.

Bureau Veritas Kenya Limited in partnership with horticultural value chain stakeholders like Fresh Produce Consortium (FPC); Retail Traders Association of Kenya (RETRAK); Fresh Produce Exporters Association of Kenya (FPEAK); Kenya Flower Council (KFC); among others have rolled out programs from which producers/farmers, supermarkets, groceries, county markets, consolidators, packhouses and exporters are supported in implementation and certification of KS 1758 Standard to enhance quality and food safety of produce in the domestic market. Bureau Veritas has certified nine (9) individual producers and one group of farmers.



Ms Esther Passaris, Nairobi County Woman Representative and Fresh Produce Consortium Kenya, Food Safety Ambassador.



KS 1758: Code of Practice for horticultural produce

Bureau Veritas is accredited to the ISO 17065: 2012 that gives confidence that certification to the KS 1758 by Bureau Veritas follows internationally accepted rules & codes for certification bodies engaging in product certification.

To support the KS 1758 certification; Bureau Veritas has a state of art Laboratory based in Mombasa that is accredited to the ISO 17025: 2017 for laboratory testing and is registered by NEMA for water & effluent testing; air, noise and emission monitoring.



Bureau Veritas assists horticultural value chain players to establish, implement; maintain quality demonstrating high quality of produce through product certification solutions such as GlobalGap & GRASP and Organic Certifications



The laboratory offers solution in microbiological testing; elemental testing, physico-chemical; soil analysis; plant analysis; organic substrate analysis; irrigation water testing. Bureau Veritas offers specific value added services such as capacity building; agricultural project studies on pesticide residues; safety and traceability of fresh produce and research.

Bureau Veritas assists horticultural value chain players to establish, implement; maintain Quality thus demonstrating the high value of produce through product certification solutions such as GlobalGap & GRASP and Organic Certifications.

Innovative solutions

Bureau Veritas has developed innovative solutions for Transparency throughout the horticultural value chain that ensure traceability from farm to fork with adoption of block chain technology such as SAFEOPs; and TRACE by Bureau Veritas.



Mr Benjamin Tito, Director, Horticulture Crops Directorate of the Agriculture and Food Authority.

Bureau Veritas offers quantity and visual quality inspection solutions to support and address issues related to verification of quantities; grades; packaging; cold chain management for quantity verification

Bureau Veritas provides other solutions for product safety thus safeguarding reputation by demonstrating responsible sourcing practices and enforcing Chain of Custody through inspections and certifications such as Rainforest Alliance and FSC; PEFC. Through the Bureau Veritas Greenline, horticultural supply chain actors are provided with Sustainability Solutions that assure brands protection by controlling and managing social, governance and environmental issues throughout the supply chain.

Among certifications schemes offered by Bureau Veritas include ISO 14001: 2015 environmental management; ISO 45001: 2018, health and safety management; ISO 50000 energy management; ISO 26000 social responsibility; ISO 55000 asset management; ISO 39000 risk management; RSPO; Forestry Certifications such as FPC among others; Climate Change Certifications – CDM, GHM. Marine related certifications ASC, MSC, BAP among others.

Bureau Veritas offers quantity and visual quality inspection solutions to support and address issues related to verifications of quantities; grades; packaging; cold chain management for quantity verification; claims processing with underwriters and is accredited to the ISO 17020: 2012 for inspections. Bureau Veritas assists clients exporting avocados and flowers for inspections and verifications prior

KS 1758: ADDRESSING FOOD SAFETY



From left: FPC CEO Okisegere Ojepat; CS Agriculture & Livestock Development Hon. Mithika Linturi; RETRAK CEO Madam Wambui Mbarire; PS State Department for Livestock Harry Kimtai; Bureau Veritas DCE-EA Cyprian Kabbis; Nairobi Women Rep & FPC Food Safety Ambassador Esther Passaris; an industry official; Bureau Veritas EA Sales & Marketing Manager Ali Noor.

to exports. Bureau Veritas recognizes the value of partnership and recently partnered with the Agrochemical Association of Kenya (AAK) to carry out a baseline study on MRLs in commonly consumed produce in three counties of Kajiado, Nakuru and Nyandarua on tomatoes; brassicas and onions.

Bureau Veritas has also partnered with Fargo Courier Services for shipment of samples to laboratories in order to support the constraints faced by clients in the main agricultural producing areas and major towns in Kenya, thereby improving efficiency as clients can drop laboratory test samples at any of the Fargo Courier and agency offices country wide. These samples are then delivered to the Bureau Veritas Mombasa Laboratory in the shortest time possible.



Bureau Veritas recognizes the value of partnerships and recently partnered with the Agrochemical Association of Kenya to carry out a baseline study on MRLs in commonly consumed produce.



Agriculture CS officiates at the Standard launch



Cognizant of local market challenges of accessing quality, safe and traceable food, Bureau Veritas Kenya Limited in partnership with Fresh Produce Consortium

organized a breakfast meeting at Radisson Blu, Upper Hill Nairobi to bring together agricultural value chain actors.

The aim of the meeting, which was graced by the Cabinet Secretary for Agriculture & Livestock Development, Hon. Mithika Linturi, (left), was to create awareness and promote food safety along the agricultural value chain. The theme of the breakfast meeting was: "Shaping A World of Trust in Food Safety." A total of 169 participants attended the meeting representing stakeholders who are actors in the horticultural value chain.

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An enterprise that sprung out of vision, hope and intent

Dr Isabelle Spindler went against the grain growing flowers where coffee was a predominant crop and in a male dominated field

By **BRIAN OKINDA**

In 1996 when Dr Isabelle Spindler started a flower enterprise in Ruiru - a small town roughly 22 miles outside Nairobi- not many believed she would make it in a largely male-dominated Kenyan floriculture industry. All she had then, she says, was just a vision and intent.

More so, the neighbourhood of the flower farm was largely dominated by coffee plantations. Being largely a coffee-growing region, coffee would then have, by all means, seemed much more profitable to invest in. In these surroundings, a flower farm would certainly have looked oddly out of place.

Back then, Dr Spindler reminisces, those who witnessed her efforts did not pay her much attention. Perhaps believing that nothing much would yield from those efforts.



Redlands Roses founders Aldric and Isabelle Spindler plant a tree for environmental sustainability programme. Photo | Allan Muturi.

But that wasn't to be the case. Roughly 27 years later, Redlands Roses is today one of the leading flower enterprises in Kenya, mostly by the quality of its flower products. Its specialty is in growing and exporting spray roses, garden roses, and mini roses as well as hybrid tea roses of premium quality. The farm produces these flowers in a range of more than 200 varieties.

With support from her husband, Mr Aldric Spindler, who joined her later on, the couple has transformed the flower farm into an enterprise that currently employs more than 500 employees. Producing high-quality roses is their hallmark.

The Ruiru-based flower enterprise has managed to achieve these through incorporating a haute couture approach in its processes. It produces, sorts and packages each of its roses uniquely.

Traceability mechanism

In addition, the traceability mechanism that it deploys guarantees the quality of each bunch of flowers that leaves the farm for the market.

REDLANDS ROSES - BIEVENUE FROM THE FOUNDERS

At 28 acres and still growing, projected to grow to at least 44 acres in due course, the flower farm holds many firsts in the country's floriculture industry according to Dr Spindler.

"We were the first farm to fully go soil-less for cultivation of flowers, the quality of our flowers is top-notch, our flower varieties remain in sync with the constantly changing dynamics of the floriculture markets. We remain the trailblazers in adopting new flower varieties to satisfy the markets and our environmental and sustainability practices are exceptional," Dr Spindler reveals.

Her views are echoed by Jane Ngige, a former Chief Executive Officer at Kenya Flower Council (KFC) where she worked alongside Dr Spindler, who was then the treasurer of the Council from 2004 to 2018.

Ms Ngige describes Dr Spindler as someone she has learnt a great deal from when it comes to integrity, hard work, accountability and commitment to a cause -- whether at KFC or at Redlands Roses.

Strict and straightforward

"Despite being strict and straightforward in nature, I know Dr Spindler as someone who is generous with any information on the industry and always available when needed. She is cooperative in practically all aspects and is always ready to listen and offer guidance in the flower industry when required," Ms Ngige says.

She is also forward-looking, especially when it comes to innovation and technology adoption, a factor that would explain the numerous innovations at Redlands Roses, Ms Ngige adds.

For instance, through its solar project -- made up of solar panels installed on parking sheds and other buildings within the farm -- the flower establishment has managed to cut its electricity dependency by up to 38 per cent.



Isabelle Spindler and Disha Copreaux the new CEO of Redlands Roses holding flowers at the farm. Below, one of the selections of red roses grown at the firm's greenhouses.

The farm has also deployed a one hundred percent hydroponics system in its flower farming and production processes and recycles the water it uses in the greenhouses. This saves up to 50 percent of their water consumption.

It also incorporates Integrated Pest management (IPM) mechanisms to control pests in the greenhouses. This ensures there is minimal use of pesticides whenever required.

Further to these, in its expansion processes, the flower farm has consistently invested in non-arable land, which is not good enough for crop cultivation. This guarantees that the available arable land remains designated for other crops -- food crops and coffee -- and hence



She is also forward-looking, especially when it comes to innovation and technology adoption, a factor that would explain the numerous innovations at Redlands Roses



The farm consequently deploys soilless medium -- pumice, in this case -- in its flower production activities as it expands. Flowers grown in pumice can easily be fertigated and the resultant waste water undergoes recycling for further use.

All these among other factors have been, according to Dr Spindler, key in the flower enterprise's success. Ms Ngige readily agrees.

In fact, most of these green practices have contributed to making the farm acquire global recognition for environmental conservation and carbon reduction causes.



BANANA CROP UNDER THREAT FROM SOIL BORNE PESTS AND DISEASES

Addressing the diminishing banana orchards and the novel Bananapack in curbing low productivity of banana crop in East and Central Africa.

By Dr. Taiti Mwaniki, Commercial Manager, JUANCO SPS LTD.

To address pest and diseases as the principal challenges in banana production, JUANCO SPS LTD has developed a new innovation for a clean, healthy and productive banana crop.

Banana crop is a major staple food in East and Central Africa. It is mainly grown by smallholder farmers but in recent years the crop has gained popularity among the medium and large-scale producers for commercial purposes. In production, both conventional and modern (tissue culture) propagation methods are employed within this region. Amid the endeavor to produce both for subsistence and for income generation, the crop yields have been on the decline due to a heavy build-up of soil borne pests and diseases.

The popular and widespread use of conventional propagation by small and medium holder farmers, where farmers use suckers from own farms is a major contributing factor to pest and diseases prevalence as this provides a means of disease buildup and spread through the use of infected planting materials. This has culminated into low yields, poor crop quality where some small holder farmers abandon the crop for other profitable farming enterprises.

To address pest and diseases as the principal challenges in banana production, JUANCO SPS LTD has developed a new innovation for a clean, healthy and productive banana crop. The three-way Bananapack of products offers a novel solution to efficient and effective management of insect pests, diseases and nutritional challenges. The banana pack addresses the challenges of soil borne pests such as nematodes, banana weevil, grubs, and soil borne diseases such as fusarium wilt. Bananapack poses a great potential in enhancing banana production in East and Central Africa.

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The magical leguminous crop

With a lifespan of up to seven years, desmodium can be planted (intercropped) along a wide variety of other crops - cereals such as maize, sorghum, as well as permanent tree-crops like coffee, avocado, macadamia, mangoes and pawpaw.



Desmodium is among the most important leguminous crops known to man and which offer an array of benefits.

KEY FIGURES

DESMODIUM

The plant does well in regions lying 30° South and 30° North of the equator and range between 25 and 30 degrees centigrade in temperature.

Rainfall; 3,000mm annually.

17 tonnes of fodder per hectare per year

May provide upto 250 bales of hay per year, per acre with an average selling price of Sh300 each.

By JAMES NDERITU

Just like anywhere else in the world, Kenya currently continues to bear the brunt of the adverse effects of climate change, given the rain-fed agriculture model that is largely employed in many regions across the country.

With parts of the country lying just at the fringes of the perennially drought-stricken Horn of Africa region, Kenya's full agricultural productivity continues to remain compromised.

Other than crop farming, another key sub-sector that has for long been affected by this phenomenon is the dairy and livestock industry.

While the country hosts quite a considerable amount of livestock from which farmers earn an income – especially dairy farming climate

change is steadily becoming a major challenge. This is especially so when it comes to the provision of livestock feed. Kenyan farmers continue to grapple with a perpetual fodder shortage.

Farmers' challenges are compounded by other climate-related issues including deteriorating soil conditions due to erosion, long dry spells which affect crop cultivation, lack of water – especially in the arid and semi-arid regions, and diminishing arable land sizes as effects of urbanisation heighten. All these issues make both livestock-keeping and crop farming a challenge.

Important crop

That notwithstanding, legumes are emerging as an important crop in not just livestock production, but also crop farming. Essentially, these plants play an important role across different value chains in the larger agriculture sector.

Legumes help in enhancing indigenous nitrogen production, besides supplementing our nutritional demands for proteins and energy, and also restore soil natural matter. These plants also help in checking the spread of pests and diseases, especially when used in rotation with other non-leguminous crops.

Furthermore, legumes are particularly ideal for organic nitrogen fixation, which

remains the most environmentally-friendly way to infuse sufficient amounts of nitrogen nutrients in the soil.

Desmodium is among the most important leguminous crops known to man.

The plant offers an array of benefits including – but not limited to – providing quality supplementary leguminous forage for livestock due to its high protein content, among others. It carries all the benefits that legumes have to offer.

“

Essentially, these plants play an important role across different value chains in the larger agriculture sector.

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For starters, desmodium is a tropical plant that does well in regions that lie between 30° South and 30° North of the equator and range between 25 and 30 degrees centigrade in temperature.

The plant does well in varied altitudes ranging between 300 to 2,500m above sea level. It prefers a rainfall regime of between 700 and 3,000 mm annually.

It is a plant that was originally from Central America and was introduced in Kenya in the 1970s. There have been numerous research and outreach efforts supporting its adoption due to the benefits it offers.

Desmodium has many benefits

With a lifespan of up to seven years, the crop can be planted (intercropped) alongside a wide variety of other crops. These include cereals such as maize – where it also controls impacts of fall armyworms and Striga weeds – and sorghum, as well as permanent tree-crops like coffee, avocado, macadamia, mangoes and pawpaw.

The benefits, in this case, are numerous. For instance, it covers the soil and hence keeps temperatures lower, which in turn cuts on moisture loss through evaporation. This is ideal for both rain-fed and irrigation-based agriculture.

It also enhances minerals including nitrogen in the soil. Additionally, the plant protects the soil from erosion and leaching. The estimated nitrogen fixation from desmodium is estimated



Cultivating the crop: A plus for the crop is that its slow rate of nitrogen fixation results in less loss of the minerals due to leaching and runoff caused by rainfall.
Photo | File

to be up to 125 kgs of nitrogen per hectare, per year. This is equivalent to the nitrogen provided by about 14 bags of DAP fertiliser.

A plus for the crop is that its slow rate of nitrogen fixation results in less loss of the minerals due to leaching and runoff caused by rainfall. This is unlike in the case of artificial application of nitrogen.

When it comes to livestock feed-provision, though dependent on the prevailing rainfall regime, desmodium offers up to 17 tonnes of fodder per hectare per year. This fodder is rich in plant protein (32 per cent), and other important nutrients. It also contains tannins that help in food absorption in livestock's rumen.

Desmodium-based livestock feed can also be value-added to make feed pellets that last longer, are easier to store, and may be enriched with other requisite minerals.

That said, it is notable that investing in desmodium is an economically viable venture in the long run. Other than the highlighted benefits in improving crop farming, the plant may provide up to 250 bales of hay per year, per acre with an average selling price of Sh300 each.

With such returns, farmers could ease challenges associated with not just poor farming conditions, but also the shortage of quality livestock feeds.



The legumes can adapt to a wide range of soils from sands to clay loams and tolerate slight acidity but not salinity. Photo | Farmerstrend

Desmodium-based livestock feed can also be value-added to make feed pellets that last longer, are easier to store, and may be enriched with other requisite minerals.



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Kenya government's 2023 focus crops

- avocado
- mango
- papaya
- banana
- pineapple
- garden peas
- African birds eye chilli

Benjamin Tito, AFA Horticulture Crops Directorate Director, had a chat with our reporter CLIFFORD AKUMU on some of the emerging priority crops and what the government is doing to scale up their productivity.



The agriculture sector remains the mainstay of Kenya's economy, contributing 29.3 per cent to the Gross Domestic Product (GDP) and accounting for 80 per cent of national employment.

According to the Kenya Economic Survey 2020, the leading sub-sectors were dairy, horticulture and tea. The domestic value of horticulture production in 2020 amounted to Ksh285.4 billion compared to Ksh269.68 billion in 2019, equivalent to an increase of 5.8 per cent. Over the same period, cultivated area decreased by 6.7 per cent from 483,094 ha to 453,636 ha while total production increased by 7.4 per cent from 7.9 million tonnes in 2019 to 8.5 million tonnes in 2020.

Meanwhile, the directorate is working towards diversifying the horticulture markets as it seeks to cut reliance on the European market which could hurt Kenya's produce if it becomes volatile.

Why is the government putting more effort towards the "priority crops" in the horticulture sector?

The government has evaluated the need to prioritise some of the value chains in the horticulture sector with the aim of expanding the export market and creating new niche markets. The focus is on five priority fruits – avocado, mango, papaya, banana and pineapple. Vegetables like garden peas and the

AFA Horticulture Crops Directorate Director, Mr Benjamin Tito, gestures as he talks to HORTInews reporter during an interview in his office.

For the last two years, Kenya has surpassed South Africa in avocado exports and for that we are now position one in Africa and six globally in terms of export.

African birds eye chilli are also in the focus list. Although avocado has taken the lead in this, we are slowly registering new entrants that earlier commanded little attention.

The avocado sub-sector is a story of learning from our mistakes. What have we done so far to command position one in Africa?

Avocado is becoming a major fruit across the globe and not just in Kenya. There is a rising demand, starting from the United States to China that is driven majorly by the need to take the fruit because of its properties that we know such as being low fat.

The fruit can be taken in its fresh form, and oil extracts from it can also be used in the cosmetic industry. Its remains or waste - like the skin, seeds and the rest can also be used to make fertiliser. A lot of research has been done on the health benefits of the avocado. Indeed, Kenya has done a lot to develop the avocado sub-sector. It's really coming up as the new frontier in horticultural export business. For the last two years, Kenya has surpassed South Africa in avocado exports and for that we are now position one in Africa and six globally in terms of export.

Could you paint for us a picture of the evolution of avocado as a fruit of priority?

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Kenya government's 2023 focus crops

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The directorate is working towards diversifying the horticulture markets as it seeks to cut reliance on the European market which could hurt Kenya's produce if it becomes volatile.
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In the early days, avocado farming was a preserve of the former central province areas. Today, even the most arid areas such as Ukambani practise avocado farming. There is also Uasin Gishu, the lake region of Kisumu and western parts of the country. This means the clones that are currently being grown are widely adaptable.

The management costs for someone doing avocado farming in Uasin Gishu might be lower than a farmer in Kirinyaga because of disease management. We are getting more fruit from the west of Rift Valley than you would get from the east of Rift Valley where traditionally that has been the domicile area for avocado farming. Places like Laikipia – where there are big range lands are now turning to be the new frontiers of avocado farming. Loitokitok in Kajiado County has the biggest single farm of avocado in Kenya with over 41,000 trees, an area where nobody thought avocado could flourish.

We also need to map out the avocado productivity and production so that we can be able to look for a consolidated market for our products not forgetting the value addition component.

Currently, we have a few processors in the country that are able to extract oil from the avocado fruits. Most of this oil is not even marketed in the country because of its premium price. The main export markets for the oil are the US, New Zealand and Australia and the demands are not even sustainable because we are exporting a lot of our fruits that should have been used to extract the oil. In short, the fresh fruit, the grade two has a niche market and whatever remains can be crushed to form a basic fertiliser.

There has been a shift in the prices of avocado fruit. For example, four years ago we used to buy avocado for Sh5, currently the prices are ranging from Sh20-Sh40. The awareness creation around the benefits of the fruits has been the driving force. Because of its seasonal nature and the growing expanded market out of the country, most of it goes to export and the little that remains is faced with the natural forces of demand and supply.

Why is the government gaining interest around the new vegetable crops such as garden peas and African birds' eye chilli?

In the vegetables category, we have two priority crops – the garden peas and the African Birds eye chilli (ABEC). The latter is coming in because of the value addition aspect. Its biggest biggest advantage is that it's being supported because it adopts quite well to the drier areas and it will not be in competition with other vegetables that require a lot of water.

Interestingly, African birds' eye chilli would take a tenth of the amount of water that is used by cabbage. ABE chilli is a reserve of the drier areas such as Kilifi, Tabita, Isiolo and Kitui. The leading producer of ABEC is Kilifi county. And these priority value chains are distributed across the entire country.

Meanwhile, there has been growing interest on ABEC from the international market. It's treated as a spice, a flavouring for food. For example, the temperatures of Belgium and the Netherlands are very cold so every meal must have chilli to raise temperatures and “keep the body warm.” Kenya is shipping a lot of chilli to Italy; because it has the highest population of old people.

Most of this oil is not even marketed in the country because of its premium price. The main export markets for the oil are the US, New Zealand and Australia and the demands are not even sustainable



Among the 2023 focus crops are, from left to right, African birds eye chilli, pineapple and garden peas.



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Promises galore in innovative potato-breeding technology

Technology will enhance the crop's production in Kenya

By BRIAN OKINDA

Potato is a crop whose importance has, over the years, been largely overlooked in Kenya's food security discourse. This is despite the crop's great importance in the country's fight against food and nutrition insecurity, according to nutritional and food security experts in the industry.

The National Potato Council of Kenya (NCPK), which is the country's potato value-chain stakeholders umbrella body, indicates that potato is the second staple crop in Kenya after maize, a factor that has largely remained ignored by many across the country.

This food crop plays a key role in the supply of our requisite food energy needs. It is a fat-free source of carbohydrates, vitamins C and B6, numerous micronutrients, and also fibre. This is the more the reason its consumption is encouraged.

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Kenya has the potential to profitably produce potatoes in both great quantities and quality
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It would, therefore, mean that the crop is accorded an equally important role to play in addressing Kenya's food insecurity, and also promoting diversification of the country's diet. Across the country, however, many still hold divergent views, perhaps due to the traditional notion largely supporting maize, cereals, and similar crops' cultivation. But this notion is about to change given the innovative technologies coming up in the potato value chain.

As it happens, data from the NCPK shows that at the very least, 800,000 farmers in Kenya grow potatoes. This earns them roughly Sh46 billion annually, which benefits up to 2.5 million people.



Selecting the best from a potato harvest: The potential in the growth of potatoes is expanding by the day.

Photo | File

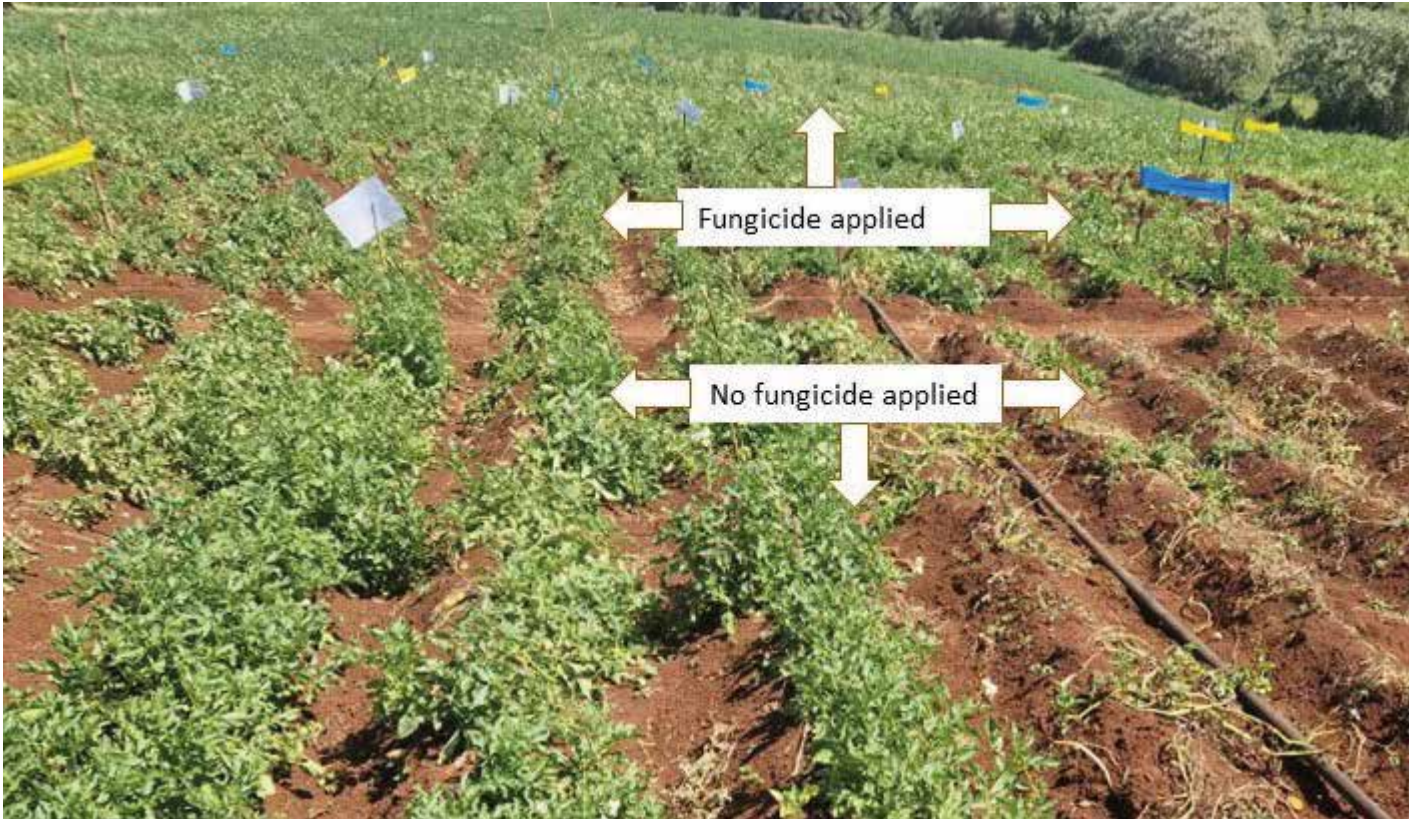
While the crop, by all means, is a key contributor to a nutrition and food-secure Kenya, poverty eradication, and economic development in the country, it still continues to face numerous challenges in its quest to actualise its full potential.

Shortage of quality seeds, inappropriate farming practices, sub-standard planting materials, a disconnect among the players along the crop's value chain, marketing problems, and pest and disease issues continue to be the biggest obstacles to its full potential.

Rain-fed conditions

According to NCPK Chief Executive Officer, Wachira Kaguongo, other than these challenges, the bulk of the country's potato production is done under rain-fed conditions which increases its vulnerability to the prevailing erratic weather conditions.

“Kenya has the potential to profitably produce potatoes in both great quantities and quality. But prevailing challenges mean we get very low yields,” Mr Kanguogo notes, explaining that the country generally produces yields of about 10 tonnes of potato harvest per hectare, compared to other countries like Egypt



A potato demonstration farm with distinct areas of fungicide application shown.
Photo | File

“
The company’s Hybrid True Potato Seed (HTPS) system is a flagship seed potato production technology that has continued to prove great potential in transforming the potato industry, not just in Kenya, but across the continent, and the globe by extension.
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or South Africa, which produce up to 35 tonnes for the same size of land.

The quality of the commodity is also often sub-standard, which perhaps would explain fast-food franchise, KFC’s decision to import the commodity for its Kenyan outlets. This revelation in 2022 caused quite a stir among farmers and the general public in the country.

There have, however, been efforts to address most of these issues, and innovative technology, especially in seed production, has remained consistent in these efforts.

Netherlands-based Solynta is a company that has been at the forefront of developing and progressing innovative ideas that seek to enhance potato breeding and production.

It is worth noting that hybrid breeding is perhaps the most important development that has happened in plant-breeding, and Solynta has consequently continued to invest in targeted efforts to develop more superior hybrid potato varieties.

The company’s Hybrid True Potato Seed (HTPS) system is a flagship seed potato production technology that has continued to prove great potential in transforming the potato industry, not just in Kenya, but across the continent, and the globe by extension.

It is a technology that has previously been successfully piloted in several African countries including Mozambique, Zambia, Zimbabwe, South Africa, Malawi and Kenya, among others. The Wageningen-based, Solynta’s HTPS technology has, according to industry experts, proven to be capable of addressing disease challenges and enhancing the yields in potato crops.

One problem with buying tubers from just any seed potato companies, according to one farmer, is that farmers oftentimes end up ‘importing’ crop diseases into their farms alongside the planting materials that they buy. This has been a leading issue for many potato growers.

Potato late blight

A major disease of the crop is the potato late blight. A 2021 research conducted on Irish potato production practices and the disease’s management in Nyandarua County, conducted by the Journal of Agricultural, Food and Environmental Sciences (JAFES) revealed that late blight is a leading threat to overall potato production in Kenya.

To be continued in the next edition

Top five profitable crops to grow in 2023

Planning the Year Ahead early is the way to go on horticultural crops

By THEURI KAHUTHIA

As farmers prepare for the first growing season in 2023, horticultural crops are a great way to make a profitable yield. Most farmers are already laying down their plans in the Mt Kenya region by preparing seedbeds and tilling the farm.

The end of the year has always been the best time to plant something profitable in the region. Although predicting seasons has become quite challenging, horticultural crops such as cabbage tend to fetch good prices in the early months of the year.

These are some of the crops you can grow successfully up to July 2023. Check them out.

Potatoes

Potato farming is an undervalued high-value crop that most farmers ignore. Most farmers either grow it for consumption or commercially during the rainy season on a small scale.

January and February in most parts of the Mt Kenya areas such as Naro Moru, Timau, Mweiga, Endarasha, Isiolo, and parts of Meru has always been associated with extended dry spells. This means that smaller volumes reach



Above, a healthy spinach crop at the Oserian Fair Trade farm. Below, cabbages are also among the crops that should be targeted this year. Photo | File

the market in March and April. The shortage in supply translates into a hike in prices. From previous similar seasons, you can expect the prices per bucket to range from Ksh450 to Ksh1,000.

With good care, timely irrigation, and proper control of pests and diseases such as early blight, an acre can yield about 30 to 100 bags. There is a high chance of a 50kg bag of potatoes selling from a range of Ksh2,500 to Ksh4,000 or even higher.

This a good amount within a short time.

Cabbage

Cabbage farming is one of the few agribusinesses that can guarantee a net profit of over Ksh200,000 per acre in less than four months. This is after deducting expenses such as labour, seeds or seedlings, pesticides, fertilisers and management costs.

Generally, cabbages take between 75 to 120 days to mature, although this may vary depending on the variety. An acre can accommodate approximately 19,000 pieces of cabbage. In March/April, one cabbage sells at about Ksh30 up to Ksh50. Selling 15,000 pieces at Ksh35 will fetch a gross amount of Ksh525,000 and a net of Ksh 375,000.

The cabbage prices may be influenced by various factors such as supply at a particular



period, weather conditions, demand at the market, size of the heads, and how healthy the produce looks.

The supply is relatively low in Feb, March, April, and early May due to the low rainfall from January to late March. For this reason, less produce gets to the market, and production costs are relatively high, making most farmers abandon the crop. This is the best time to start preparing the farm and seedbeds.

Spinach

As we all know, spinach needs a lot of water to grow. Due to the high rainfall and increased volumes of “kienyeji” greens such as “terere” and “managu”, spinach prices are relatively low. At the same time, diseases such as powdery mildew and leaf spot are high. Currently, a kilo sells at the range of Ksh15 to Ksh22 in most farms.

From January to April, the rainfall declines in most areas, production reduces due to the high need for irrigation, and most greens wither. When this happens, there is a high chance that the demand and prices of spinach will rise to the range of Ksh15 to Ksh25 per kilo. The prices of spinach tend to increase when there is less or too much rainfall. In the dry season, the prices are high since few can produce. When there are heavy rains, diseases are more prevalent hence less supply in the market.

An acre can yield about 30 bags (100kgs each) per harvest if top-dressing and manure are applied regularly, which equates to about 90 bags per month if harvested after every 10 days. With enough irrigation water, spinach is a high-value crop worth trying. One can make an average of Ksh135,000 per month selling at Ksh 15 per kilo. They have a long lifespan; and can be harvested continuously for five months or more.

Kale (Sukumawiki)

This is an easy-to-grow vegetable common in most households. Its demand is high throughout the year. Sukumawiki is one of the few crops you can harvest weekly for up to five months.

Like spinach, its demand and price are higher during the dry season. At the peak in March to May, the prices can rise to Ksh28 per kilo. Harvesting 10 bags (100kgs each) per acre will total 40 bags per month, totalling to about Ksh112,000 per month.

Sukumawiki is highly affected by aphids and requires regular top-dressing and manuring. It's also prone to pests such as caterpillars and whiteflies.



French beans in full bloom: This is another crop that farmers should target in 2023. Photo | File

KEY FIGURES

Potatoes
An acre - 30-100 bags
50kg bag will go for
Ksh2,500 to 4,000.

Cabbage
An acre can accommodate 19,000 pieces.
In March/April, sells at about Ksh30 to 50.
Selling 15,000 @Ksh35 will fetch Ksh525,000 and a net of Ksh375,000

Spinach
An acre can yield 30 bags (100kgs each) @15kg a kilo, one can average Ksh135,000 per month.

Kale (Sukumawiki)
At peak, Ksh28 per kg. Harvesting 10 bags (100kg each) will total 40 bags per month, totalling Ksh112,000 per month.

French Beans or Mishiri
Prices range from Ksh50 to 100 per kilo. An acre can yield about 5,000kgs per season. At Ksh70per kilo, one can fetch Ksh250,000, after Ksh100,000 total expenses.

French Beans or Mishiri

Commercial production of French beans (mishiri) is not new in Kenya. However, not all farmers make profits from the crop. Since local consumption is relatively low, French beans are mainly grown for export and the demand is inconsistent. It's likely to result in huge losses if produced during the low season.

With the good ecological conditions of the Mt Kenya region, it's also easy to make hundreds of thousands or even millions from French bean farming. Planting on February 1, guarantees harvesting in late March or early April, which is in the high season. Depending on the variety, the crop takes about 55 to 75 days to mature. At this time, the prices range from Ksh50 to 100 per kilo.

An acre can yield about 5,000kgs per season when proper management practices are employed. Assuming the market prices will be Ksh70 per kilo, one can make a clean Ksh350,000. After deducting expenses, which are about Ksh100,000, profit will be Ksh250,000. Late February planting will still ensure high prices in late April or early May, when the prices are at the peak.

Wrap Up

If seeking to make a good fortune from horticultural crops in 2023, this is the best preparation period. Vegetables and potatoes mostly have a ready market during the dry season. The prices are high, and diseases are less. So, why not get started? Other crops that may be worth a try are garlic, capsicum, coriander, tomatoes and lettuce. Conducting more research on the crop and assessing soil first before planting is highly recommended.



An estate in the city environs: Lack of a policy on the protection of agriculturally - rich areas has led to more land falling into the hands of real estate moguls. Photo | File

Tentacles of real estate ring death knell for agricultural land

Further division of land is the cancer that will eventually kill our agricultural production

BY ELIJAH K. SAMUEL

Land is an important factor of production, and in Kenya, we have three major types of land ownership – public, private and communal. In addition, most of the now defunct County Councils had clearly demarcated land by use, for example, residential, agricultural and commercial land.

Traditionally, like most other sub-Saharan African countries, Kenya has been heavily reliant on rain-fed agriculture, dating back to the pre-independence period.

As a result, agricultural activities have generally defined human settlement and activities including development. As an example, nearly 30 million (close to 60%) Kenyans reside in 27 counties, considered naturally agricultural-rich areas and which only translate to 16% of Kenya's land mass.

These 27 "naturally agricultural rich areas" are labelled so based on multiple factors including the following land characteristics: texture, alkalinity (reaction), salinity, drainage, vegetation and soil moisture.

Some examples

However, in recent years especially in the past 15-20 years; these counties have witnessed increased investment in real estate with land brokers taking over the sale of various tracts of land.

The largest part of the once massive Juja Sisal Farm which occupied nearly 15,000 acres in Kiambu County has since been slashed into small pieces of plots, with nearly 50% being unoccupied and most of the owners using the plots for speculation. This definitely means that only limited economic activity is ongoing after the purchase.

Coffee estates in Kiambu County are increasingly turning into commercial land, again with the bells of “buroti maguta maguta” ringing every minute.

In Nyandarua and Nakuru counties, the once-thriving cotton and pyrethrum farming is no more.

In Laikipia and Narok counties, the once booming wheat farming is fading away driven by multiple factors such as climate change, but also facing a major threat from the sub-division of land and hence making commercial agriculture less viable.

Current situation

Some of the most advanced agricultural countries where we import our primary staples such as Ukraine, Russia, India, China among others have clear law ordinances that protect agricultural lands and keep it intact and protected.

Ethiopia, which is on the verge of overturning wheat production deficit, has adopted the clustered farming. This is basically pulling land together from small scale farmers for common agricultural production.

Unfortunately, in our nation, we are now subdividing every fertile land and hence limiting viable agriculture.

Others are abandoning agriculture to demarcate their land into smaller plots for sale with no long term economic advantage.

KEY FIGURES

Juja farm, with nearly 15,000 acres has been slashed into small pieces, 50% being unoccupied. Where I came from in Nyeri (Tetu), my father had inherited about three-quarters of an acre from my grandfather, and now imagine the same being sub-divided into three amongst my two siblings and I? That would be a quarter-of-an-acre per person. Then, I have four children who will inherit and sub divide my quarter acre further, making it a plot of less about 50x40 or thereabout. Imagine the same pieces after being inherited by my children also being sub-divided further among their own progeny? Certainly not sustainable. The piece of land will barely be termed as plots by the third generation after my father,

The issue of further sub division of land into tiny, uneconomical pieces of land for inheritance has also played a role in the dwindling of available agricultural land.

Unpopular and emotive as the issue may be, this sub-division in the name of inheritance is not sustainable.

More examples

Where I came from in Nyeri (Tetu), my father had inherited about three-quarters of an acre from my grandfather, and now imagine the same being sub-divided into three amongst my two siblings and I? That would be a quarter-of-an-acre per person.

Then, I have four children who will inherit and sub divide my quarter acre further, making it a plot of less about 50x40 or thereabout.

Imagine the same pieces after being inherited by my children also being sub-divided further among their own progeny? Certainly not sustainable. The piece of land will barely be termed as plots by the third generation after my father,



There is need to rethink the land laws and, where possible, develop a zoning programme urgently -- and also ensure strict enforcement. Develop strategies and explore how to tap into the potential that is in Northern Kenya and Coastal regions



What is then the way forward?

There is need to rethink the land laws and, where possible, develop a zoning programme urgently -- and also ensure strict enforcement.

Develop strategies and explore how to tap into the potential that is in Northern Kenya and Coastal regions; both in agricultural land, and also pushing more population in the North through development,

Seriously re-think the attachment we as Kenyans have on ancestral land (unpopular as this may be), but data clearly indicates that some rural areas are turning into rural slums fast.

Vihiga's population density is merely 1,000 per square kilometre, Kisii, Nyamira, many parts of Mt. Kenya and others. And in most of these counties, this sub-division can only last for 30 -70 years.



The allure of get-rich schemes and government inactivity has turned rich agricultural land into concrete jungles. Photo | File

Scenes from the Avocado Society of Kenya Excellence Awards, 2022



AVOCADO AWARDS



Logistics company unveils Sh30m modern vacuum cooling service

Mitchell Cotts has set up the facility in collaboration with two other firms

By JOEL CHACHA

Logistics firm Mitchell Cotts Freight Kenya Limited has unveiled a Sh30 million modernized vacuum cooling service at the landside of an air cargo terminal within the Jomo Kenyatta International Airport (JKIA) to enhance the preservation of horticultural exports and to reduce losses.

The facility, which has been set up in partnership with logistic firms Perishable Movements Kenya Limited and Fresh Handling Kenya Limited, is designed to aid exporters of perishable products such as fresh flowers, herbs and vegetables. It is also aimed at aiding in the extension of the shelf life of their produce and to help comply with the stringent quality requirements of international markets.

Vacuum cooling

The vacuum cooling service is also expected to boost the country's export earnings and increase the competitiveness of Kenya's exports in the global fresh produce market. Post-harvest losses in Kenya range from 10 to 50 percent, depending on the type of farm produce. The vacuum cooling service, therefore, spells good tidings for the horticulture sector.

"Overall, with the installation of the vacuum cooler at our cargo terminal, we are confident it will help horticulture farmers maximise their profits," said Daniel Tanui, Managing Director Mitchell Cotts Group. "The service is expected to improve the efficiency and reliability of fresh produce exports from Kenya to international markets and will be available to customers who book their cargo through either of our partners," he added.

"We have invested heavily in the development of the service and are confident that it will help to increase the quality of fresh produce exports from Kenya," Mr Silas Kashindi, CEO Perishable Movements Kenya Limited said.

The equipment can cool up to 2,000 kilogrammes of fresh produce per hour, and it is expected to help Kenyan horticulture exporters meet the growing demand for fresh produce



Daniel Tanui, Managing Director Mitchell Cotts Group speaks during the unveiling of the sh30m cooling system at the JKIA air cargo terminal.

exports in Europe, the Middle East, and Asia.

Vacuum cooling is a fast and efficient way to cool down the temperature of the product quickly and evenly, helping to maintain the freshness and quality of the product. Leveraging the service will help to reduce spoilage and extend the product's shelf life, making them ideal for export. Additionally, the cooling service will reduce the risk of contamination, which is especially important when exporting perishable goods.

Horticulture industry

"The vacuum cooler is an innovative solution that rapidly cools freshly harvested produce, preserving its freshness. It will also help reduce waste, keeping produce fresher for longer," said Esther Kabugi, Head of Operations, Fresh Handling Limited.

The horticulture industry is one of the significant contributors to the Kenyan economy and employs over 1.2 million Kenyans. The sector has been driven by increased demand for Kenyan produce in international markets, as well as the development of innovative technologies such as vacuum cooling, improved production and post-harvest management practices. All these are designed to ensure that the products arrive at their destinations in perfect condition, thus increasing demand and boosting exports.

Vacuum cooling is a fast and efficient way to cool down the temperature of the product quickly and evenly, helping to maintain the freshness and quality of the product.



Associations

Associations	Country	Phone	Email
Kenya Flower Council	Kenya	254-733639523	info@kenyaflowercouncil.org
Fresh Produce Exporters Association Of Kenya	Kenya	254-20 205160333	info@fpeak.org
Tanzanian Horticultural Association	Tanzania	255 (27)2544568	info@taha.or.tz
Ethiopian Horticulture Producers Exporters	Ethiopia	251-116636750	info@ethionet.et
Kenya Horticulture Council	Kenya	+254-731588513	info@khc.co.ke

Flower Farms in Kenya

Region	Altitude	Region	Altitude
Lake Naivasha Region	6178ft	Mt.Kenya Region	6358-7057 ft
Nakuru Region	6070ft	Limuru-Rumuruti-Olkalau Region	6024-7802 ft
Nairobi Region	5515ft	Kericho-Kitale-Eldoret Region	6060-6995 ft
Athriver-Kajiado Region	5649ft	Thika-Juja-Kiambu Region	5649 ft

Breeders / Propagaters

ORGANISATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Dummen Orange	Flower Breeder	Mr.Steve Outram	254-733-609863	s.outram@dummenorange.com
Schreurs East Africa Ltd.	Flower Breeder	Mr.Haiko Backer	Tel:+254 203566135	sales@schreurskenya.com
Wac International	Flower Breeder	Mr.Richard MCGonnell	254-722-810968	richard@wac-international.com
Florensis Hamer	Flower Breeding	Mr. Eddy Verbeek	020 50010	verbeek@florensis.com
Interplant Roses	Flower Breeding	Mr.Gavin Mouritzen	254-729-406668	info@interplantea.co.ke
United Selections	Rose Breeder	Mr.JellePosthumus	254-2-3656135	jposthumus@united-selections.com
Solo Plant Kenya Ltd	Breeding	Tomer Weiss	+254 (0)715 631 373	tomer@soloplant.co.ke

Lake Naivasha: Altitude 6178ft

ORGANISATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Florema(K) Ltd	Begonia	Mr. Pertter Maina	254-050-2021075	
Carzan Flowers	Carnations	Mrs. Carol Manji	254707110030	info@carzankenya.com
Loldia	Cut flowers	Mr. Gary	0721 237936	
Longonot Horticulture	Cut flowers	Mr. Shado rai	254-050501473	
Blue Sky	Cut flowers	Mr. Mike	0720 005294	info@blueskykenya.com
Indu Farm	Cut flowers	Mr. Wesley Koech	0715 546908	
Leekem Holding ltd.	Cut flowers	Mrs. Margaret Muthoni	254-720-267004	leekement@gmail.com
Rainforest	Cut flowers	Mr.Fabian Philippart	0716 686998	fphilippart@fleurafrica.com
Savannah Fowers	Cut flowers	Mr. Ignaitus Lukulu	0728 424902	i.lukulu@savannahinternational.com
Star flowers	Cut flowers	Mr.Dinkar	0722 203750	dinkar@vegpro-group.com
Subati	Cut flowers	Mr. Naren Patel	0712 584124	naren@subatiflowers.com
Wildfire Flowers	Cut flowers	Mr.Patrick Mbugua	254-722-204669	office@wildfire-flowers.com
Aquila Development Company	Cut flowers	Mr.Abhay Marathe	254-722-205368	info@aquilafowers.com
Beauty Line	Gypsophila	Mr.Peter Gathiaka	0722 676925	
Hamwe Ltd.	Hypericum	Mr.Adrew Khaemba	Tel: +254722431170	hamwe.production@kariki.biz
Sun Buds	Hypericum	Mr. Paul Kamau	Tel:+254 728339953	sunbudsltd@gmail.com
Oserian Development Company	Rose & Fillers	Mary Kinyua	Tel: +254 721299008	marykinyua@oserial.com
Oserian Flowers Limited	Carnations & Fillers	Mr.Hamish Ker	Tel: +254 722204701	md@oserialflowers.com
Colour Vision Roses Ltd	Rose Breeders	Mr.Peter Vandemeer	254-05050310	petervandemeer@terranigra.com
Rift Valley Roses	Roses	Mr.Peterson Muchiri	254-721216026	
Van Den Berg Roses	Roses	Loek Van Adrichem	+31 6 31 791 898	loek@bergroses.com

Lake Naivasha: Altitude 6178ft

Aquilla	Roses	Mr.Yogesh	050 506609	info@aquilaflowers.com
Bigot Flowers	Roses	Mr.Jagtap K	254-722205271	jagtap.kt@bigotflowers.co.ke
Bila Shaka	Roses	Ms. Judith Zuubier	+254(0)72 220 4489	info@zuubier.com
De Ruiters	Roses	Fred Okinda	+254(0)722 579204	fred.okinda@deruiter.com
Finlay's Kingfisher	Roses	Mr. Charles Njuki	Tel: +254-724391288	Charles.njuki@flamingo.net
Galaxy	Roses	Mr. Kiran		kiran@vegpro-group.com
Groove	Roses	Mr.John Ngoni	Tel: 0724448601	groovekenya@gmail.com
Harvest Flowers	Roses	Mr Phaniel Ochunga	0722 506026	phanuel.ochunga@gmail.com
Karuturi Flowers	Roses	Mr.Sylvester Saruni	Tel: +254 722873560	henry.muller@karuturi.com
Kongoni Farm	Roses	Dinkar	0728 608785	dinkar@vegpro-group.com
Larmona	Roses	Fiona	254 722 564 089	fiona@lamornaflowers.com
Maridadi Flowers Ltd	Roses	Jack Kneppers	07-3333289	jack@maridadiflowers.com
Mbegu Farm	Roses	Mr. David Mousley	Tel:0722 833 122	mbegufarm@iconnect.co.ke
Nini Farm	Roses	Billy	254 723 786 003	billyc@niniltd.com
Shalimar Flowers (K) Ltd	Roses	Export Manager	0722 811832	info@eaga.co.ke
Stockman Rozen	Roses	Mrs. Sarah Tham	0720 603990	info@srk.co.ke
Twiga Roses	Roses	Mr.Pius Kimani	0721 747623	pius.kimani@gmail.com
Panda Flowers	Roses	Charkara	0786 143515	chakra@pandaflowers.co.ke
Finlay's Flamingo	Roses and Fillers	Mr.Peter Mwangi	Tel:+254 722204505	peter.mwangi@flamingo.net
Colour Crops	Summer Flowers			
Esmeralda Breeding	Summer Flowers	Mr.Loui Hooyman	31-297-385444	info@esmeraldabreeding.com
Multigrow Investments	Summer Flowers	Mr.Peter Murimi Mbugua	254-724-977259	peter_murimi@yahoo.com
Kentalya	Cut Flowers	Mrs.Lynette	0733 549773	lynette@kentalya.com

Nairobi : Altitude 5515ft

ORGANISATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Black Tulip Group	Cut Flowers	Mr.Mohan Choudhery	254-722-825429	info@blacktulipflowers.ae
Caly Flora Ltd .	Cut Flowers	Mrs.Catherine Gichungu	254 725456930	info@calyflora.co.ke
Everest Enterprises Ltd.	Cut Flowers	Mr.John Karuga	254-722-720876	jdkaruga@everest.co.ke
Flora Delight	Cut Flowers	Mr.Marco Van Sandjik	254-722-384188	info@floradelightkenya.com
Particle Blooms Co. Ltd.	Cut Flowers	Mr.Caleb Amunga	254-704-040101	info@particleblooms.com
Phinna Flowers Ltd.	Cut Flowers	Mrs.Ruth Thuo	254-723-582476	phinnaflowers2014@gmail.com
Redhill Flowers	Cut Flowers	Mr.Isaac Bwire Ombunda	254-702-344047	redhillflowers@yahoo.com
Rose Bunk International	Cut Flowers	Mr.Nahashon Macharia	254-773-754140	nahashon@rosebunkintl.com
Sian Agriflora Ltd	Cut Flowers	Mr.Jos Van Der Venme	254-725-961961	info@sianroses.co.ke
The Flower Hub	Cut Flowers	Mr.Stephen Swainston	254-722-509970	info@theflowerhub.com
Tripple F. Agencies	Cut Flowers	Mr.Amos N. Wakiria	254-735-405982	wakiria@fagencies.co.ke
Van Kleef Kenya	Cut Flowers	Mrs.Judith Zurbier	254-722-364943	judith@vankleef.nl
Winchester Farm	Cut Flowers		254-0722-203630	info@mzurrieflowers.co.ke
Zaina Blooms	Cut Flowers	Mr.Michire Mugo	254-736-080070	zainablooms@gmail.com
Credible Blooms	Roses	Mr.Francis	020 2102019	info@credibleblooms.co.ke
Flamingo Flora	Roses	Sam	254-0721993857	s.ivor@flamingoflora.co.ke
Karen Roses	Roses	Mrs.Juliana Rono	254-722-717187	sales@karenroses.com
Kreative Roses Ltd.	Roses	Mr.Bas Smit	254 733501640	info@kreative-roses.com
Lakshmi Group Ltd.	Roses	Mr. Serghei	254 714551969	serghei.lakshmigroup@gmail.com
Magana Flowers	Roses	Mrs Ann Gitari	254-20-2017651	marketing@maganafowers.com
Magnate Flowers	Roses	Mrs.Gladys Muthoka	254-722-777051	magnateflowers@gmail.com
Mzurrie Flowers	Roses	Mrs.Irne Njeru	254-722-203630	irene@winchester.co.ke
Shallimar Flowers Ltd	Roses	Mrs.Elizabeth Wahogo	254-738-391832	elizabethw@eaga.co.ke

Mt.Kenya : Altitude 6358 - 7057ft

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Mount Kenya Astroemeria	Nanyuki	Cut Flowers	Mr.Edwin Van Der Veen	254-718-240581	info@mountkenyaalstroemerialtd.com

Mt. Kenya : Altitude 6358 - 7057ft

Bondet	Nanyuki	Erygium	Richard Fernandes		
Kariki Limited	Nanyuki	Hypericum		0722 50 99 19	info@kariki.biz
Live Wire Ltd	Nanyuki	Hypericum And Lilies	Mr.Esau Onyango	0728 606872	info@livewire.co.ke
Finlays Sirimon	Timau	Lilies	Ms.Purity Thigira	0733606411	puritythigira@finlays.net
Batian Fowers	Timau	Roses	Mr.G.Muriungi/Dirk Looj	0720 102237	dirk@batianflowers.com
Bloomingdale Roses	Timau	Roses	Mr.Sunil Chaudhari	0732 373322	sunil@bloomingdaleroses.com
Bogmack Farm	Timau	Roses	Mr.Anderson	0722 350020	kathendusn@yahoo.com
Equinox	Timau	Roses	Mr. Rod Jones	+254 722 204271	rod.jones@equinoxflowers.com
Fides Kenya Ltd	Embu	Roses	Mr.Francis Mwangi	254-06830776	info@fideskenya.com
Lobelia Farm	Timau	Roses	Mr.,Peter Viljoen	254-06241060	
Lolomarik	Nanyuki	Roses	Mr. Topper Murry	0715 727991	topper@lolomarik.com
Protea Farm	Timau	Roses	Mr.Philip		info@lobelia.co.ke
Sunland Roses	Timau	Roses	Mr.Peter Viljoen	254-702-095696	sales@sunlandroses.com
Tambuzi	Nanyuki	Roses		+254 (0)722 716 158	tambuzi.sales@tambuzi.co.ke
Timaflo Ltd.	Timau	Roses			info@timaflo.nl
Timau Flair	Timau	Roses	MR.Philip Ayiecha	254-723383736	
Uhuru Flowers	Timau	Roses	Mr. Ivan Freeman	Tel:+254722863252	ivan@uhuruflowers.co.ke
Vegpro-K Ltd	Timau	Roses	Mr.Vivek Sharma		vivek@vegpro_group.com
Kisima	Timau	Roses and Lilies	Mr.Martin Dyer	+254 (0)722 509 830	info@kisima.co.ke

Nakuru : Altitude 6070ft

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Bliss Flora Ltd.	Nakuru	Cut Flowers.	Mr.Shivaji Wagh	254-720-895911	shivaniiket@yahoo.com
Carzan	Rongai.	Cut Flowers.	Francis	254-0720 890920	info@carzankenya.com
Kudenga Flowers	Mau Summit	Cut Flowers.	Mr.Joseph Juma	254-0725 643942	kudenga.fm@kariki.biz
Molo Greens Ltd	Molo North	Cut Flowers.	Mr.Justus Metho	254-722-755396	info@mologreens.com
Molo River Roses	Muserechi	Cut Flowers.	Mr.Alice Mureithi	254-0724 256592	andrewwambua@yahoo.com
Roseto Limited	Rongai	Cut Flowers.	Mr.Yogheesh		farm.florenza@megaspingroup.com
Kariki Limited	Molo	Hypericum		+254 722 50 99 19	info@kariki.biz
Amor	Nakuru	Roses	Mr.Ketan Jerath	254-738-119774	flowers@xflora.net
Baraka Farm	Nakuru	Roses	Lucy	254-0720 554106	lucy@barakaroses.com
Buds&Blooms-Bliss Flora	Nakuru	Roses	Mr.Shivaji	254-0720 895911	shivaniiket@yahoo.com
Elbur Flora	Elburgon	Roses	Peter Kairu	254-51343473	eflora@africaonline.co.ke
Fontana Ayana	Nakuru	Roses	Mr.Gideon Maina	254-0721178974	gideon@fontana.co.ke
Fontana-Akina	Nakuru	Roses	Mr.Girish Appana	254 722728441	girish@fontana.co.ke
Kimman Roses Ltd.	Elburgon	Roses	Mr.Daniel Moge Maina	254-721-734104	kimmanexp@gmail.com
Mau Flora	Nakuru	Roses	Mahesh	254-0787 765684	mahesh@mauflo.co.ke
Milmet	Nakuru	Roses	Pravin		pravinyadav.29@gmail.com
Omang-Africa	Nakuru	Roses	Mr.Inder Nain	254 733724029	flowers@xflora.net
Porini	Nakuru	Roses	Mr.Pitambar Ghahre	254-0726 774955	porini@isinyaroses.com
Pp Flora	Nakuru	Roses	Prakash	254-0718 045200	info@fantasy-flora.com
Preesman Kenya	Nakuru	Roses	Michael Kikwai	254-0720574011	kikwai1980@yahoo.com
Ravine Roses	Nakuru	Roses	Mr.Peter Kamuren	254-0722 205657	pkamuren@karenroses.com
Redwings	Kabarak	Roses	Mr.Sayer Simon	254-0722 578684	sayer@redwingltd.co.ke
Subati Flowers	Subukia	Roses	Mrs. Jennifer Sassi	+254 742 144493	jennifer@subatigroup.com
Vankleef	Nakuru	Roses	Judith Zuurbier	254-0722 364943	judith@vankleef.nl
Xpression Flora Ltd.	Njoro	Roses	Mr.Mangesh	Tel: 720519397	info@xflora.net
Sian Agriflora (Sian Roses)	Nakuru	Roses/Lilie	Mr.Jos Van Der Venne	254 722203630	info@sianroses.co.ke
Jatflora	Gilgil	Summer Flowers	James Oketch	254 724418541	jatflora@gmail.com
Morop	Bahati	Summer Flowers	Wesley Tonui	254-0720 983945	
Flora Ola	Solai		Mr.Wafula	Tel: 0708382972	floraolaltd@gmail.com

Thika -Juja-Kiambu: Altitude 5649 ft

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Zena Roses	Thika	Carnations,Roses	Mr.Rakesh	Tel: 0724631299	info@zenaroses.com
Selecta Kenya/Kpp	Juja	Cut Flowers	Mr.Wilson Kipketer	020 352557	w.keter@selectakpp.com
Pollen Sygenta Ltd.	Ruiru	Cuttings	Mr Daniel Kisavi	Tel: 733603530	Daniel.kisavi@sygenta.com
Munyu Growers	Thika	Flower Grower & Exporter	Mr.Muthom Ngaru	254-721-956307	munyugrowers@gmail.com
Riverdale Blooms Ltd swiftkenya.com	Thika	Flower Grower & Exporter		Mr.Antony Mutugi	020 2095901 rdale@
Kariki Limited	Thika	Hypericum		+254 722 50 99 19	info@kariki.biz
Transebel Ltd	Thika	Roses	Brian Wahome	+254 722 255322	brianwahome@transebel.co.ke
Enkasiti Flowers	Thika	Roses	Mr.Thambe	Tel:+254 724722039	enkasiti@gmail.com
Gatoka Farm	Thika	Roses	Christopher Gacheru	+254 733 619505	chris@gatokaflowers.com
Penta Flowers Ltd.	Thika	Roses	Mr. Tom Ochieng	Tel:+254 733625297	tom@pentaflowers.co.ke
Simbi Roses Ltd.	Thika	Roses	Ms.Pauline Nyachae	Tel: +254204448230	Pauline@sansora.co.ke
Windsor Ltd	Thika	Roses	Mr.Pardeep	254-0674208	farm@windsor-flowers.com
Ever Flora Ltd.	Juja	Roses	Mr.Khilan Patel	Tel: 0675854406	everflora@dmbgroup.com
Kenflora	Kiambu	Roses	Mr,Aleem Abdul	254-722311468	info@kenflora.com
Valentine Kibubuti	Kiambu	Roses	Mrs. Suzan Maina	Tel:0203542466	info@valentineflowers.com
Red Lands Roses Ltd.	Ruiru	Roses	Mrs.Isabelle Spindler	254-733-600504	gm@redlandsroses.co.ke
Branan Flowers Ltd.	Thika	Roses Growers	Mr.Brian Wahome	254-734-424648	brianwahome@transebel.co.ke

Kajiado – Athi-River : Altitude 5649ft

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Carnation Plants Ltd	Athi River	Carnations	Mr.E.Fieldman	254-2045162	evi@exoticfields.com
Waridi Ltd	Athi River	Roses	Mr.Pd Kadlag	254-724407889	kadlag@waridifarm.com
Harvest Flowers	Athiriver	Roses	Monicah	+254 722294963	salesadmin@harvestflowers.com
Shade Horticulture	Isinya	Cut Flowers	Mr.Ashutosh Mishra	254-0722 792018	
Desire Flora K.Ltd.	Isinya	Roses	Mr.Rajaat Chaohan	Tel: +254 0724264653	rajatchaohan@hotmail.com
Isinya Roses	Isinya	Roses		+254 728 689 000	info@isinyaroses.com
Maua Agritech	Isinya	Roses	Mr.Kori	254-722206318	gm@mauaagritech.com
P.J. Dave	Isinya	Cut Roses	Mr.Ananth Kumar	254-729-405450	marketing@pjdave.com
Maasai Flowers	Kitengela	Roses		+254 714 065 245	
Charm Flowers	Kitengela	Roses	Sales Manager	+254 733 753149	admin@charmflowers.com
Maua Agri Tech Ltd	Kitengela	Cut Flowers		254 0722206318	kori@mauaagritech.com
Rose Plant	Kitengela	Roses	Mr.Atenus		
Sian Maasai Flowers	Kitengela	Roses	Mr.Andrew Tubei	254-722728364	atubei@sianroses.co.ke
Sian Roses	Kitengela	Roses	Mr.Jos Van Der Venne	254-0202170540	info@sianroses.co.ke
Afriscan Kenya Ltd.	Kiserian	Cut Flowers	Mr.Charles Mwangi	254-722-711925	charles.mwangi@afriscan.co.ke
Kordes Roses East Africa Ltd info@kordesroses-ea.com		Masai West Road	Roses	Mr.Christian Meuschke	254-0733 363642
Ngong Roses	Ngong	Roses	Mr. Charles Maina	020 2700660	ngongroses@capstoneonline.co.ke

Limuru-Rumuruti - Ol Kalou: Altitude 6,024 - 7,802 ft

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Tropiflora	Limuru	Carnations	Mr. Krasensky	254 0724646810	
Leekem Holdings Ltd	Nyandarua	Cut Flowers	Mrs.Margaret Muthoni	254-0720 267004	leekement@gmail.com
Tegmak Bloom	Nyandarua	Cut Flowers	Mr.Edward Kaguchu	254-722-292242	tegmakbloomsLtd@gmail.com
Highlands Plants	Olkalau	Cut Flowers	Mr. Leonard Kanari	254-0721345829	sales@highlandplants.co.ke
Aaa Roses	Rumuruti	Cut Flowers	Ms.Jennifer Sassi	254-20-4453970	sales@aaagrowers.co.ke
Terrasol	Limuru	Cuttings		254-0722 455996	
Black Petals Ltd.	Limuru	Roses	Mr.Nizra Junder	254-0722848560	nj@blackpetals.co.ke
Elbur Flora	Elburgon	Roses	Peter Kairu	254-51343473	eflora@africaonline.co.ke
Kimman Roses Ltd.	Elburgon	Roses	Mr.Daniel Moge Maina	254-721-734104	kimmanexp@gmail.com
Suera Flowers Limited	Nyahururu	Roses	Mrs.Peris Wanbui Mureithi	254-724-082797	perismureithi@yahoo.com
New Hollands Flowers	Olkalau	Roses	Mr. Francis	254-0700718570	
Golden Tulip	Olkalau	Roses	Umesh	254-0739729658	
Mahee Flowers Ltd	Olkalau	Roses	Vijay Kumar	254-020822025	info@eaga.co.ke

Limuru-Rumuruti - Ol Kalou: Altitude 6,024 - 7,802 ft

Africa Blooms	Rumuruti	Roses	Samir Chandokrk	254-0735-384552	
Primarosa Flowers	Nyahururu	Roses	Mr.Vishal Metha	254-734-88223	mvishal@primarosaflores.com
Flora Delight	Limuru	Summer Flowers	Mr.Hosea Andanyi	254-0724373532	hosndai@yahoo.com
Kemaks Blooms Limited	Aberdare Ranges	Summer Flowers	Mr.Peter Gakuna	254-792-705160	kemaksblooms@gmail.com
Hatabor Rainbow Blooms	Limuru	Limuru	Cut Flowers	Mr.John Ndungu	254-07213850959

Kericho-Eldoret-Kitale: Altitude 6060-6995 ft

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Maji Mazuri	Eldoret	Roses		+254 722 203631	info@mzurrieflowers.co.ke
Zena-Asai	Eldoret	Roses		+254 722 935 798	info@zenaroses.com
Zena-Sosiani	Eldoret	Roses		+254 722 935 798	sales@zenaroses.co.ke
Equator Flowers	Eldoret	Roses	Mr.Charles	254-0721 311 279	cmutemba@sianroses.co.ke
Sirgoek Flowers	Eldoret	Cut Flowers	Mr.Andrew Kosgey	254-0725 946429	sirgoek@africaonline.co.ke
Finlay Chemirel	Kericho	Roses	Mr.Aggrey Simiyu	254- 0722601639	aggrey.simiyu@finlays.co.ke
Finlay Lemotit	Kericho	Cut Flowers	Mr. Richard Siele	254-0721 486313	richard.siele@finlays.co.ke
Mount Elgon Orchards Ltd	Kitale	Roses	Bob Andersen	254 0735330592	info@mtelgon.com
Panocal International Ltd.	Kitale	Cut Flowers	Mrs.Mercy Njuguna	254-721-637311	mercy.njuguna@panocal.co.ke



Growers in Uganda

NAME	PRODUCT	LOCATION	CONTACT PERSON	PHONE	EMAIL
Rosebud	Roses	Wakiso	Ravi Kumar	0752 711781	ravi.kumar@rosebudlimited.com
Maiye Estate	Roses	Kikwenda Wakiso	Premal		premal@maiye.co.ug
Jambo Flowers	Roses	Nakawuka Sisia Wakiso	Patrick Mutoro	(254)726549791	pmutoro80@yahoo.co.uk
Pearl Flowers	Roses	Ntemagalo Wakiso	Raghib Sandhu	0772 725567	pearl@utlonline.co.ug
Aurum Flowers	Roses	Bulega-Katabi Wakiso	Kunal Lodhia Shiva	0751 733 578	kunal@ucil.biz
Eruma Roses	Roses	Mukono	Kazibwe Lawrence	0776 049987	kazibwe@erumaroses.com
Uga Rose	Roses	Katabi Wakiso	Grace Mugisha	0772 452425	ugarose@infocom.co.ug
Kajjansi	Roses	Kitende Wakiso	K.K Rai	0752 722128	kkrai@kajjansi-roses.com
Uganda Hortech	Roses	Lugazi Mukono	Hedge	0703 666301	mdhedge@mehtagroup.com
Fiduga	Chrysanthemums	Kiringente, Mpingi	Jacques Schrier	0772 762555	j.scherier@fiduga.com
Royal Van Zanten	Chrysanthemums	Namaiba Mukono	Jabber Abdul	0759 330350	j.abdul@royalvanzanten.com
Wagagai	Impatiens-Poinstia	Iwaka Bufulu Wakiso	Olav Boender	0712 727377	olav@wagagai.com
Xclusive Cuttings	Chrysanthemums	Gayaza-Zirowe Road	Peter Benders	0757 777700	pbenders@xclusiveuganda.com

FLOWER & VEGETABLE FARMS IN TANZANIA



Flower Farms in Tanzania

NAME	PRODUCT	LOCATION	CONTACT PERSON	PHONE	EMAIL
Kilifi Flora	Roses	Arusha	Jerome Bruins	255 27-2553633	jbruins@habari.co.tz
Mt. Meru	Roses	Arusha	Tretter	255 27 2553385	office@mtmount-meru-flowers.com
Tengeru Flowers	Roses	Arusha		255 27 2553834	teflo@africaonline.co.tz
Hortanzia	Roses	Arusha	Michael Owen	255 784 200 827	hortanziagm@cybernet.co.tz
Kilimanjaro Flair	Hypericum	Arusha	Greg Emmanuel	255 784 392 716	greg@kilimanjaroflair.com
Multi Flower Ltd	Crysanthemums	Arusha	Tjerk Scheltema	255 27 255 3138	
Fides	Crysanthemums	Arusha	Greg Emmanuel	255 27 255 3148	fides@habari.co.tz
Dekker Bruins	Crysanthemums	Arusha	Lucas Gerit	255 27 255 3138	info@tfl.co.tz
Arusha Cuttings	Crysanthemums	Arusha	Tjerk Scheltema	255 27 250 1990	tjerk@arushacutting.com



Flower Growers in Ethiopia

NAME	PRODUCT	LOCATION	CONTACT PERSON	PHONE	EMAIL
Lisen Flowers	Roses	Holeta	Peter Linsen		elinsenroset@ethionet.et
Hanja	Roses	Holeta	Holeta		peter.pardoen@karuturi.com
Alliance Flowers	Roses	Holeta	Navale		navele@nehainternational.com
Ethio Dream Rishi	Roses	Holeta	Holeta	011 23 72335	holeta@jittuhorticulture.com
Holeta Roses Navale	Roses	Holeta	Holeta		navele@nehainternational.com
Supra Flowers	Roses	Holeta	Kaka Shinde	0911 353187	kakashind@rediffmail.com
Agriflora	Roses	Holeta	M.Askokan	0922 397760	flowers@ethionet.et
Ethio-Agricerft	Roses	Holeta	Alazar	0910 922 312	alazar@yahoo.com
Addis Floracom P.L.O	Roses	Holeta	Kitema Mihret	0912 264190	tasfaw@addisflora.com
Enyi-Ethio	Roses	Sebata	Teshale	0911 464629	enyi@ethionet.et
Lafto Roses	Roses	Sebata	Andrew Wanjala	0922 116184	irrigation@laftorose.com
Eden Roses	Roses	Sebata	Vibhav Agarwal	0930 011228	vaibhavaggarwal1@hotmail.com
Ethio-Passion	Roses	Sebata			roshanmuthappa81@gmail.com
Golden Rose	Roses	Sebata	Sunil		
E.T Highlands	Roses	Sebata		0911 502147	bnf2etf@ethionet.et
Sharon Flowers	Roses	Sebata			saronfarm@ethionet.et
Selam Flowers	Roses	Sebata	Etsegenet Shitaye	0913 198440	etsgshita@yahoo.com
Joy Tech	Roses	Debra Zyeit	Mulugeta Meles	0911 302804	mulugeta@joytechplc.com
Dugda Froliculture	Roses	Debra Zyeit	Sayalfe Adane	0911 504893	general@dugdflora.com.et
Minaye Flowers	Roses	Debra Zyeit	Eyob Kabebe	011-9728667/8/9	minayefarm@ethionet.et
Bukito Flowers	Roses	Debra Zyeit	Anteneh Tesfaye	0911 615571	
Oilij	Roses	Debra Zyeit	Bas Van Der Lee	0911 507307	b.vanderlee@oilijethiopia.com
Yassin Flowers	Roses	Debra Zyeit	Tesfaye Gidisia	0911 897856	kamevision@yahoo.com
Z.K Flowers	Roses	Debra Zyeit	Abebe Mamo	911526529	abemic/2006@yahoo.com
Friendship Flowers	Roses	Debra Zyeit	Edwin	(251) 911304967	friendship.flowers@yahoo.com
Evergreen Farm	Roses	Debra Zyeit	Hiwot	0912 125065	Hiwot.Ayaneh@yahoo.com
Rainbow Colours	Roses	Debra Zyeit	Tedessa Kelbessa	0911 389729	rainfarm@yahoo.com
Sher	Roses	Ziway	Ramesh Patil	0912 131940	braam.roses@hotmail.com
Braam Farm	Roses	Ziway	Ben Braam	0920 746270	
Sher Koka Farm	Roses	Ziway	Alemitu Biru	0912 097824	
Ziway Roses	Roses	Ziway	Ermiyas Solomon	0921 094373	ermiasziwayroses@yahoo.com
Herbug	Roses	Ziway	Hubb		hubb@herburgroses.nil
Aq	Roses	Ziway	Wim		wimjr@aqroses.com
Margin Par	Hypericum	Ziway	Hayo Hamster	251 911505845	marginpar@ethionet.et
Tal Flowers	Gypsophila	Ziway	Uri		uridago@walla.co.il
Ewf Flowers	Hydragium	Ziway	Humphrey	0920 351931	production-manager@ewf-flowers.com
Red Fox	Pelargoniums	Ziway	Michael Zevenbergen	0911 490023	m.zevenberge@ethiopia.redfox.de
Abssinia Flowers	Hypericum	Ziway	Sendafa		ggh_link@ethionet.et
Ethiopia Cuttings	Geraniums	Koka	Scoff Morahan		scott.moharan@syngenta.com
Florensis Ethiopia	Buding Plants	Koka	Netsanet Tadasse		firdnsis@ethionet.et
Maranque	Crysanthemums	Merjetu	Mark Drissen	(251) 221190750	md@maranqueplants.com
Freesia Ethiopia	Freesia	Sebata	Ronald Vijverberg	(251) 115156259	freesia@ethionet.et
Yelcona	Hypericum	Sebata	Andreas	0921 146930	Andreasndieolens@hotmail.com



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