The Excellent Farmer is a Public Relations Publication for the Agricultural Development Corporation.

THE EXCELLENT FARMER

Excellence in Agriculture

EDITION 1 2023

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Cover Picture: Seed Maize Farms & Agroforestry
at ADC Chorlim Farm ,Kitale Region.

THE EDITOR'S WORD

After a long wait and a period of uncertainty, The Excellent Farmer is here, a testimony of resilience and passion. This edition should be a special edition because it comes after a long period of uncertainty due to the Covid-19 and a long electioneering period. This edition should be a testament of hope and belief that if we stand strong we shall always overcome, we shall always emerge stronger and better than we have been before if we believe. The excellent famer has emerged to be a better version of itself and we believe it has captured the aspirations of the Agricultural Development Corporation and all who take pride in the activities of the corporation.

I would like to sincerely thank all writers who responded to our appeal for articles in this edition as your contributions have helped create a masterpiece which captures our imaginations, beliefs and aspirations. I can confidently say that a cross section representation of all our units has been penned down in the Excellent Farmer. However, I would like to encourage a writing culture amongst the ADC fraternity as this has not been fully emulated amongst the ADC staff. In the words of Robert Stacy McCain, "Writing is a skill, not a talent, and this difference is important because a skill can be improved by practice." The famous quote should awaken our writing zeal and this publication should be a platform to put our creativity to test, a platform for open expression, an avenue for documenting our journey and a guide to our future. Evolving from a lineage of early man who documented his achievements through hieroglyphics and rock art paintings, we can do better with technology and all the advancements.

This edition captures the journey in the post Covid era through a captivative manner complete with pictorial representation. We have ensured high quality editorial standards and hope that this edition will be a charm to your knowledge quest

Enjoy your reading and we would surely love to hear from you, your feedback is critical in motivation and improving our future publications.

Thank you and have a fruitful year.

Jacqueline Kibe

Public Relations Manager/

Managing Editor.

contents

Reflections from the Chairman

ADC Chair of the Board of Directors Dr Joseph Rotumoi sets the ball rolling for the New Board.

It is with great pleasure and a sense of responsibility that I address you as the Chairman of the Board of Directors. As we navigate the ever-evolving landscape of agriculture, it is essential to reflect on our accomplishments, challenges, and the promising future that lies ahead. The commitment to sustainable and innovative practices that support the growth and prosperity of Kenya's agriculture industry is at the heart of our corporation. We recognize the crucial role agriculture plays in our country's economy, employment, and food security, and we are unrelenting in our commitment to positively impacting these sectors. We are streamlining our operations towards contributing to the Kenya Kwanza's government manifesto on Agriculture and a keen focus towards the realization of the Bottom Up economic Transformation agenda (BETA). We have mapped out increased investment in agriculture, empowering small scale farmers, encouraging sustainability, collaboration, value addition, technology transfer and increased market access as our areas of focus towards the realization of the government agenda.

ADC has worked to revolutionize the country's agricultural business by empowering local farmers and helping them to increase productivity through access to excellent seed, new technologies, and customized solutions. We have created a collaborative environment that supports information sharing and the exchange of best practices by cultivating links with farming communities and out growers across the country. We acknowledge the need of adopting technology improvements in addition to our commitment to transformation. We aim to increase yields, optimize resource allocation, and streamline operations by leveraging on cutting-edge innovations such as precision farming, data analytics, and automation. Our corporation is at the forefront of agricultural technology adoption, constantly looking for innovative ways to improve efficiency and output.

None of our achievements would be possible without the tireless efforts of our dedicated team who are the backbone of our organization. From the top Management to our junior most employees who work passionately to transform challenges into opportunities and make a lasting impact on the agricultural landscape of Kenya. Their steadfast dedication to excellence and their drive to effect positive change continue to inspire us all. Looking ahead, we remain committed to achieve a thriving corporation with focus on ensuring food security for the nation. We are excited to explore new partnerships, embrace emerging technologies, and forge ahead with innovative ideas that will revolutionize the industry. Together, we will continue to empower farmers, contribute to national food security, and create a brighter future for our nation.

As the Chairman of the Board of Directors, I extend my heartfelt gratitude to our stakeholders, partners, employees, and, most importantly, to you, our valued readers. Your unwavering support and trust has been instrumental in our journey thus far, and we look forward to your continued collaboration as we pave the way for a prosperous Agricultural Development Corporation.

Dr. Joseph Rotumoi -Chairman,
Board of Directors ADC.

Inspiration from the Managing Director

ADC Managing Director Mohammed Bulle EBS shares His vision for the Corporation.

The year 2023 is a year of rebirth, a year of rebirth of a new health system, a year of rebirth of a new administrative system, and we at ADC have not been left behind; we are making great gains toward the fulfilment of our corporate goals and the fulfillment of government objectives. As a corporation in the vital area of agriculture, I can confidently state that we have the capacity, technology, and human resources to take substantial steps in agriculture and live up to our motto, "Excellence in Agriculture." We have set our sights on attaining climate smart agriculture in accordance with global trends, and we intend to lead the pace not just in the country but also in the region.

Recognizing the crucial role we play in achieving the Bottom Up Economic Transformation Agenda (BETA), we have realigned our goals to provide a critical boost to the pillars of Agricultural Transformation and Inclusive Growth. I'd want to thank the government for intervening through the Ministry of Agriculture in the form of subsidized fertilizer for this planting season. This has set the ball rolling in terms of reducing seed prices which will be transferred to the local mwananchi and the hustlers. Further we have increased land under production as we seek to bridge the food production gap and have a robust technology transfer plan through engagement with farming communities around us.

We have made tremendous progress in sustainable agriculture, with a particular emphasis on technology such as hydroponics, tissue culture, artificial insemination, and aeroponics. In order to satisfy food security and nutritional needs, we imported 38 bulls from renowned breeders in South Africa, increasing monthly sperm output from 30000 to 50000 doses. This has gone a long way toward cutting farmer expenses and increasing capacity for our five-year-old Bull Centre, which has grown to become the top Semen production center with nationwide distribution networks. We have also worked to secure ADC property through digitization particularly in the areas of survey, GIS and mapping which has been important in preventing land grabs. Through collaborations with relevant agencies, over 6000 acres of grabbed land has been recovered by the Corporation.Mechanization has also been key in increasing our production output as we have invested heavily in modern farm implements, equipment and technology notably in the use of motorized and aerial sprayers to control fungal and viral diseases. Understanding the critical role we play in food security, we have increased acreage under seed production through partnerships with public and private players and we are undoubtedly the largest seed maize grower in the country by more than 50% of the seed maize grown in the country. Behind all this is a well remunerated and motivated workforce and this is a work in progress even as we strive to achieve higher standards.

To my colleagues and staff at ADC, I congratulate you for the good work done and invite you to propel this institution to greater heights and global recognition. On my part, I shall continue to provide focused leadership towards the realization of our mission and goals. Let us work together and make ADC a pacesetter of excellence in Agriculture.

Mohammed Bulle EBS - Managing
Director ADC.

What Does The Law say?

The Corporation Secretary puts legal matters into perspective

The Corporation Secretary's office is divided into two. The Board Affairs office and Legal Affairs office include offering secretariat services to the Board of Directors of the Corporation. The Corporation Secretary is also the Legal Advisor to the Board and reports to the same. The Legal Affairs office is part of the Management and charged with all legal matters of the Corporation. From Litigation, Contracts & Leases, Joint Ventures, Investments, Projects, Acquisitions, MOU's Human Resources issues, Insurance, Survey and Transport.

In the year 2022-2023, the Corporation Secretary office has been able to break the perennial cycle of extremely hefty legal fees paid to external lawyers by handling most of the court cases internally. Despite the current state of understaffing in the Division, we are trying to build our internal capacity to a status of a mini law firm to be able to salvage the high cost of litigation and conveyance. Going forward, we intend to see a robust, stable and competent Legal Division able to attract and retain the best brains in the profession. This is the only way ADC will be able to protect itself against external and internal threats to its operations and existence.

Rodgers Karumpu- Corporation Secretary/ Head of Legal affairs

Security Check!!!!

Security Manager shares the department's vision for the Corporation

The Kenyan Constitution acknowledges the vital role of security agencies in maintaining public safety and order. At ADC, our duties are clearly defined in our terms of reference. Our security department aims to prioritize the safety of employees, property, and stakeholders. We're committed to safeguarding all of the Corporation's assets. I'm pleased to introduce ADC Security's vision, mission, motto, and terms of reference, which serve as a benchmark for measuring our progress towards strategic goals.

Our vision is to excel in security and safety within sustainable agriculture. Our mission is to protect ADC's assets, employees, and information, promoting agricultural excellence. Our motto is "Service with Dignity and Confidence." Our terms of reference outline security mandates and objectives aligned with ADC's transformation agenda. During implementation, we'll focus on tasks such as developing security policies, safeguarding assets, implementing security systems, reporting security issues, and more. We're dedicated to fully implementing these objectives and have an implementation strategy in place. This strategy guides our Regional Security Officers, Zone 'A' and 'B' Security Officers, and farm/unit security heads, emphasizing results-based management and individual performance tracking for efficiency.

I encourage all ADC security officers to familiarize themselves with our security objectives and terms of reference. Your dedication is essential to delivering high-quality, accessible, responsive, professional, and accountable services to the entire ADC community.

Benson Okello - Security Manager

Lets Get Technical

The Technical Manager walks us through ADC from a technical perspective

The Technical Division can be described as the hallmark of the corporation's business that ensures the mandate, set out in ADC Act cap 444 of promoting production of the country's commercially viable agricultural inputs, including hybrid seed maize, seed bean, cereal seeds, potato seed, pasture seed, canola, vegetable seed, pedigree cattle, sheep, goats, pigs, poultry and bees is driven. The mandate is critical in supporting the Agriculture and Livestock Sector which contributes an average 21.2% of the overall GDP, accounting for the largest share in GDP (Kenya Economic Survey 2023). The Corporation has continued to play her role effectively in the production and supply of seed maize, seed potatoes, seed grass, pedigree breeding stock (Dairy, Beef and shoats) as well as supply of cattle semen to the industry.

The division also provides technical guidance on technical procedures, technologies of best practice and ensures the Kenyan farmers access quality products and services. Coupled with the ever increasing population, the division has responded appropriately to ensure production of food items to match with the ever-rising national agricultural food demand. Drought has affected most parts of the country and severely affected agricultural production. As a result, Maize production decreased from 36.7 million bags in 2021 to 34.3 million bags in 2022 while the quantity of milk production decreased from 801.9 million litres in 2021 to 754.3 million litres in 2022 largely due to scarcity of fodder for livestock (Economic, survey, 2023).

In this current season, the corporation expanded area under seed maize production from 2897H to 4503H. and we anticipate to achieve 11250M Kilos of clean seed which translates to Ksh.990M up from last season of Ksh.838M. This is all in support of the government initiative to increase production and reduce on cost of food products. ADC also targets to produce 2,000tons of certified potato seed in this FY which will be sold annually to over 100,000 potato farmers and beneficiaries including counties. In addition, ADC being the custodian of the national livestock studs continues to ensure that there is continued existence of all breeds and availability of pedigree breeding stock sold to farmers in the country at affordable prices. The dairy and beef sub-sector is supported by the livestock Genetic Centre (LGC). Since inception, the center has produced over 1.5M straws of Semen of which 1M has been offloaded to the market. The Centre plans to sell over 300,000 straws in this FY. The Corporation targets to provide more animal feed concentrates and fodder through expansion of leys, acquisition of more machinery and upgrading of ADC Feed mill and Driers to produce over 3,500tons annually.

The Corporation has recorded remarkable achievements but there are constraints holding back the effort aimed at reaching its full potential. These include high input costs, unreliable weather-related challenges of climate change, lack of capacity to fully adopt irrigation systems in order to reduce over reliance to rain fed agriculture and need to upgrade appropriate infrastructure for post-harvest handling, cereal/hay storage, cold storage, transportation, low uptake of modern research/ICT technologies, and porous borders) among many.

Through the Division, the corporation has adopted technologies in modern precision farming such as use of drones for spraying, conservation tillage, hydroponics production, ET livestock production among others. However, limited financial resources is slowing the progress. The success in production at the corporation will ultimately depend on; our ability to generate the necessary financial resources required for the implementation of set targets, consider diversification and capacity to work SMART, coupled with improved agricultural Technologies, Innovations, and Management Practices (TIMPs).

Under the division there are 4 departments namely; Engineering, Crops, Livestock and Research and Development. The technical team is composed of Technical managers, Regional managers, Research officers, Technical officers, Unit managers and field supervisors and personnel, who work tirelessly in ensuring high quality of products and services in collaboration with various partnerships among them; Ministry of Agriculture and Livestock (MoA), Kenya Seed Co, KALRO, Kenya Plant Health Inspectorate Services (KEPHIS) and other stake holders is achieved.

Samuel Bundotich - Head of Technical Department.

Which Way ADC?

Head of Corporate Planning & Administration shares insights from planning to implementation.

In the world of business, success is a result of careful planning and strategic decision making. It is at the heart of this process where planning department lies. In ADC, the Planning department plays a pivotal role in shaping the direction and the trajectory of the Corporation by formulating comprehensive strategies and meticulous monitoring of performance. It provides long term vision and ensure coordination and collaboration, optimal resource allocation and risk management. By leveraging expertise in forecasting, data analysis and problem-solving the department help the Corporation make informed decision.

Specifically the department;-

i. Co-ordinates formulation and implementation of strategic plan.

ii. Monitors and evaluates Corporate performance as well as ensure cascading of the target to individual employees.

iii. Economic and technical evaluation of all operations and make appropriate recommendations.

iv. Drawing agreed operational plans and programs for the Corporation.

v. Monitoring performance against the set budget.

By analyzing trends, industry changes, customers demand and internal capabilities the department formulates strategic plans that guide Corporation growth and success. Scanning environmental changes allows Corporation to adapt to changing circumstances, mitigate risk and capitalize on emerging opportunities.Additionally the department provides framework for coordination and collaboration among different departments ensuring that every employee goals are aligned toward the common Corporate vision.The department establishes sequence in which goals should be realized so that the Corporation can reach stated vision through work planning and performance contract. Fostering effective communication and cross-functional team work, the department enables smooth execution of strategies and initiatives.

ADC planning is a significant component of result based management. Performance management which is a critical role performed by the department involves identification of performance indicators and annual targets as a way of improving service delivery and productivity in all Corporations enterprises.

Performance management in ADC is premised on;

“What get measured get done”.

“If you cannot measure results, you cannot tell success from failure.”

“If you can’t see success you can’t learn from it and if you can’t recognize failure, you can’t correct it”.

The department is in the process of formulating of 5th generation strategic plan to ensure the corporate strategies encompasses the effects of changing business, industry, legal and regulatory conditions. Specifically the strategic plan under formulation will reflect the strategic changes and conform to evolving global, regional, socio-economic and political landscape in the country. It will take cognizance of transformative government development aspirations envisaged in the medium term plan IV of the vision 2030, Public finance act as well as the Bottom up economic transformation agenda (BETA).By leveraging on our expertise in focusing, analysis, problem solving the department helps the Corporation in making informed decisions overcome challenges and seize emerging opportunities.

Dr. Winnie Macharia- Head of Corporate Planning & Administration

Money Matters

The Financial controller walks us through the money journey.

In the intricate web of an organization’s operations, the Finance Division plays a multifaceted role that extends far beyond the conventional tasks of handling payroll, managing income, and tracking expenses. Its responsibilities encompass not only the day-to-day financial affairs but also include a strategic vision for the future. One of the key strategic roles of the Finance Division is to establish and maintain a solid financial foundation for the organization. In today’s ever-changing business landscape, this entails much more than just balancing the books; it requires a comprehensive understanding of the organization’s financial health and a proactive approach to ensure its stability and growth. Within the Finance Department, several critical functions contribute to achieving this strategic vision. First and foremost is accounting, which serves as the bedrock for informed decision-making. Through meticulous bookkeeping and the preparation of income statements, the Finance Division provides the management with a reliable financial register that is instrumental in making suitable business decisions. Furthermore, the examination of financial statements and the reporting of economic trends are essential tasks. This involves not only reviewing past financial performance but also projecting into the future, identifying potential investments, and fostering long-term business plans. The division synthesizes financial analysis information to assist in making informed and strategic decisions. Another crucial function is the preparation and forecasting of budgets. The Finance Division is responsible for planning and implementing financial year budgets, conducting research, and collecting data that aids in both short-term and long-term financial forecasting. This information is instrumental in planning for various aspects of the organization’s growth, including staff training and asset procurement.

Efficiency and innovation are at the forefront of the Finance Division’s responsibilities. It plays a significant role in acquiring, updating, and maintaining the latest operational systems to improve overall efficiency. This may entail the automation of various processes or the digitalization of certain organizational systems, all aimed at enhancing the organization’s effectiveness.In addition to technical expertise, the Finance Division relies on a set of essential skills to fulfill its responsibilities effectively. These include problem-solving, clear communication, analytical thinking, attention to detail, and persuasiveness. These skills are essential for navigating complex financial situations, conveying financial information comprehensively to stakeholders, deciphering data, ensuring data accuracy, and advocating for financial strategies and budgeting tactics.

Looking ahead to the next five years, the Finance Division has a clear focus. Its vision includes ensuring that all enterprises in which the organization is engaged become profitable. This goal will be achieved through thorough cost and revenue analysis, ensuring that each venture contributes positively to the organization’s financial success.Moreover, the Finance Division envisions a robust asset renewal strategy, aiming to replace assets every four years. This proactive approach ensures that the tools and infrastructure required for growth remain modern and efficient, keeping the organization competitive.

Finally, the creation of a sinking fund is part of the Finance Division’s vision for the future. This fund will serve as a financial safety net, providing the organization with a buffer against unforeseen challenges, ensuring its ability to weather any storm and continue its path of prosperity.In conclusion, the Finance Division stands as a cornerstone of financial governance within the organization. It blends technical expertise with strategic vision and essential skills to steer the organization towards a brighter and more prosperous future. With precision as its compass and innovation as its sail, it charts a course towards financial excellence.

Jonathan Keitany – Financial Controller

Feature story

ADC TAKING MAJOR STRIDES IN HYDROPONICS MISTING AND AEROPONICS .

Story by Mike Kiambi

IN A BID to keep with speed in the global changes in Climate smart Agriculture, the Agricultural Development Corporation has made significant strides in terms of technology and investment even as it eyes to be a market leader in the country and the region. With expansive land resource, favorable climate, well trained staff and government support, ADC has all it takes to soar to heights of agricultural excellence through innovation and technology. Aware of the changes in the global markets and disruptions brought about by other factors such as the Covid -19 pandemic, ADC has set it eyes on the future through massive investment in technology, innovation and research with focus on climare smart Agriculture .

ADC SIRIKWA FARM has total land acreage of 66 hectares with a total of 19 greenhouses. The farm practices rotation farming with maize, potato, wheat and barley being the main crops cultivated at the farm. The farm also rears livestock for consumption by the staff. The main mandate of ADC Sirikwa is propagation of in-vitro potatoes under hydroponics technology. In vitro plants are brought in from the tissue culture lab in ADC Molo, left for one week for hardening and they will be ready for transplanting into greenhouses. ADC sirikwa also engages in producing apical rooted cuttings through rapid multiplication of potato. In this technology, in vitro plants from Molo constitute the mother plants that are harvested then rooted on coco peat medium different from the sand medium used at ADC Molo. The source of coco peat is grounded coconut husk. The preference of coconut husk is due to the low rate of degrading and its sterility since it comes from non potato growing regions. The mother plants produce the apical cuttings which are then replanted on to the coco peat medium and allowed to grow for two weeks ready for replanting directly into the farm.. This technology increases the speed of propagation from a period of three years to up to three months and allows the farmer to plant high status material into the farm.

THE IN VITRO plants are usually placed in a greenhouse to mature under the normal maturity period like a normal crop in the field with the crop being maintained with a focus on all the agronomical aspects required by the plant. The plants are fed, protected from pests, watered, fertigated

till they reach maturity. Once the crop has reached maturity, it is dehomed by removing the upper leaves so that the mini tubers can harden properly. At this stage the crop is also not watered and left to dry. During harvesting, the potato and the medium is poured on a collection surface with the potato being selected from the medium. The expected output is an average of 20 minitubers from every plant. An average greenhouse at ADC Sirikwa with a population of 11000 plants therefore can produce up to 200000 minitubers which can be planted in a land area of up to 3 hectares. ADC Sirikwa produces up to 2 million minitubers annually to sustain the local demand.

At Sirikwa greenhouses, misting technology is also practiced by forcing water by means of a high pressure pump through specially designed misting nozzles creating a fog of ultra fine water droplets with an average size of less than 10 microns. The greenhouses have a capacity of up to 11000 plant rates good quality, high yield high status material propagated for in vitro plants which are fed through misters. The misters provide food and water required by the plants. This technology has proved to be efficient in the application of nutrients since a dam liner underneath the plants is used to collect the water and nutrients for recycling to be reused by the plants.

The growth room hosts up to 250000 in vitro plants aganist an intake of 20000

TISSUE CULTURE IS practised at ADC as one of the smart agriculture technologies with focus on improving gene qualities and maintaining high quality gemes for the nation and beyond. Tissue culture is practised at the ADC tissue culture laboratory at the potato complex in Molo. In a move to keep up to speed with global changes in Climate smart Agriculture, the Agricultural Development Corporation has made significant strides in terms of technology and investment even as it eyes to be a market leader in the country and the region. With expansive land resource, favorable climate, well trained staff and government support, ADC has all it takes to soar to heights of agricultural excellence through innovation and technology. Aware of the changes in the global markets and disruptions brought about by other factors such as the Covid -19 pandemic, ADC has set it eyes on the future through massive investment in technology.

THE ADC TISSUE culture lab was officially opened on 31st July 2009 to enable research and preservation of various plan genes. The lab specializes in potato with precautions being observed to ensure non contamination of fragile potato seed. These include proper dressing (the prescribed laboratory dressing), sterilization and maintenance of high quality standards during the handling process. Specialized equipment is put in use in the lab such as the magnetic stripper (used in medium preparation and mixing), PH Meter (used in callibaration and measuring of PH) and the Autoclave(used in sterilization) . The autoclave is a heating machine used to heat media at 121 degrees celcius for 15 minutes. At this temperature it's known

LEFT
Aeroponics technology at ADC Molo.

RIGHT
Hydroponics technology at ADC Sirikwa.

that no living organism can survive, the medium is then cooled under a water bath.

ONCE THE MEDIUM has been sterilized in the inoculation room it is labeled capturing the date the media was done with the media being preserved for at least one week before its utilized. Preservation is done to eliminate the chances of reintroduction of pathogens if any. The medium is added jelly form to make it solid so as to provide support to the plants. The tissue culture process kicks off once the media is ready. This involves mass multiplication of disease free potatoes. The mass multiplication process involves getting apical cuttings from each and every process. This process is done with highly sterilized equipment. The process involves getting of nordal cuts with each segment having a leaf being set aside as a complete plant. This therefore means that for a single stem with 10 nods, up to 10 plants will be extracted therefore enabling mass propagation of potatoes. The nods are then inoculated in a medium; Inoculation involves planting of the potato seedling in the medium previously prepared in the ADC tissue culture lab. Inoculation is done in a clearly labelled denoting the date it was done; the variety, the source of the material and the number of subcultures done and the date the material was introduced. The subcultures are captured so as to ensure that no more than seven subcultures are done.

INOCULATION IS DONE in an upright posture and left for one week. The inoculated potato is then taken into the growth room which is the potato incubation room for growth/ propagation under controlled conditions. The controlled conditions include sterility as the growth room is fumigated to get rid of pathogens, temperature which is maintained at 18 Degrees Celsius ideal for potato growth. This is achieved through remotely controlled state of art air conditioners which are computer monitored to detect any variation and stabilize it. Lighting is also controlled automatically with 16 hours of lighting and 8 hours of no lighting. The ADC Molo growth room is fully automated with the process happening seamlessly.

THE ADC GROWTH room contains thousands of in-vitro plants grown for three weeks in preparation for the outside environment. The plants are referred to as in vitro plants since they are grown inside containers. With an unmatchable capacity, the growth room hosts up to 250000 in vitro plants on full capacity against an intake of 20000 in vitro plants for ADC greenhouses. While on full capacity, the growth room can have in-vitro plants enough to serve the entire East Africa region with 22 varieties being kept in the room; these include new varieties and released varieties. Through research and innovation, the capacity is coming up with drought, saline, irrigation and soil tolerant varieties. The main varieties at the facility are Shangi which is the market leader locally, dutch robjin (the only Kenyan variety used for crisps production), chips varieties (wanjiku, conjo and nyota) and Kenya karibu

ADC LANET FEEDLOT

Walking through the steps of dairy production, focus on ADC Lanet feedlot.

Story by Dr. Francis Obwogi

ABOVE
Boran Bulls at ADC LANET feedlot

ADC LANET FEEDLOT is located in Nakuru county, Bahati Sub County, approximately 18 kilometres from Nakuru town. The farm setup is a mixed farm engaging in both livestock and Agriculture. The farm cultivates maize, potatoes, hay and oats and is located on an altitude of 200 meters above sea level and receives up to 1000 milliliters annually. The farm has a total land acreage of 1500 hectares constituting the grazing and the livestock area. aciduisi.

MAIZE PRODUCTION

Maize is a major crop at the ADC Lanet feedlot with ADC Seed KH60023A being preferred for the region due to its ability to adapt well to the climatic conditions of this area. The maize variety is also preferred due to its ability to grow large and huge over a short period of time thus a high tonnage during processing. Maize production at ADC Lanet is carried out on a land acreage of 65 hectares with 50 hectares being meant for Silage for internal use at the farm while 15 hectares is sold as commercial maize.

POTATO PRODUCTION

At ADC Lanet feedlot, seed multiplication of potato seed is done after the production has been done at ADC Molo complex. Potato seed at ADC Lanet is planted in over 14 hectares with Kenya Mpya, Shangi and Kenya Sherekea being the preferred seed for this region

SORGHUM PRODUCTION

Sorghum is cultivated at ADC Lanet which is then used in production of silage production for livestock for

internal use. The total land acreage under sorghum is a total of 18 hectares.

DAIRY PRODUCTION

ADC Lanet feedlot is an award winning dairy farm with various dairy breeds being kept at the farm notably Guernsey, Ayrshire, Friesian, Brown Swiss and dairy crosses. The Guernsey breed constitutes the highest population with up to 69 animals being reared while 49 Ayrshire cattle are reared, the Friesian breed are 37, Brown Swiss are 7 and the dairy crosses total 22. Out of the total 184 dairy breeds reared at the farm, 54 animals produce milk with an average milk output of 16 litres per cow. The highest milk production per animal is 29 liters while the lowest is 9 litres during the dry season. Due to the high demand of milk and the proximity to Nakuru city, all the milk is bought at the farm and on high production, the surplus is sold to Kenya Cooperative Creameries (KCC) .Currently all the milk is bought at the farm level with the output on average being between 30,000-34,000 Kenyan shillings per day from the sale of milk. Milk production at the farm is a success owing to the favorable terrain at the farm since hay and silage is made at the farm. With new technologies, the farm is aiming at receiving sexed semen therefore breeding more heifers to get more milk in order to meet the insatiable milk demand.

Out of the total 184 dairy breeds reared at the farm, 54 animals produce milk with an average milk output of 16 litres per cow

The farm also uses hormones to induce heat to the animals before being served so that there are no passenger animals in the farm; so that many animals, at least 40% of the animals are on production.

GRASS

The farm also cultivates grass for internal grazing with up to 184 hectares of land being assigned .Boma Rhodes grass is the preferred grass at this farm. However only 64 hectares of the grass is maintained while the rest is used for rough grazing being in the fourth and fifth year. Gras at ADC Lanet feedlot is raised for four to five years before groundbreaking to allow for crop rotation with other crops such as maize.

OATS

ADC Lanet feedlot cultivates Oats due to the highly nutritious nature of oats especially in dairy farming, particularly milk production with up to 6 hectares being set aside for oats cultivation at the farm.

Enchili farm

ADC ENCHILI FARM IS TAKING MAJOR STRIDES IN MIXED FARMING .

Story by Davidson Chesaina & Simon Masikonde

ADC Enchili farm is located in Tipis, Njoro Subcounty Nakuru County and covers a total area of 800 hectares. ADC Enchili farm was acquired in 2011. ADC Enchili farm is a mixed farm engaging in both farm animals and crop cultivation. ADC Enchili farm core mandate is seed potato production and is one of the largest government seed potato production farm in Kenya. The farm is located at an altitude of 3000 meters above sea level, an altitude favorable for potato production. The farm directly employs more than 100 employees directly and more than 10000 employees indirectly especially during the high season.

POTATO FARMING

Potato seed is grown at Enchili farm on a targeted area of 250 hectares with an output of up to 3250 tons for every annual season. Potato is Kenya's second most important/ largest food crop in the country after maize. Enchili farm cultivates various potato varieties among them Shangi as the main variety, Kenya karibu, Kenya Mpya, Dutch Robjin and Unika. The farm has also recently introduced new varieties including Wanjiku, Conjo and Nyota.

SHEEP FARMING

Sheep rearing is practiced at ADC Enchili with the Romney Mash being the preferred breed. The Romney mash breed is preferred because of the favorable weather thus favoring rapid multiplication. Sheep is kept at Enchili for commercial purposes (mutton production) and for gene storage for farmers and continuity. The farm has a flock of up to 700 sheep and is targeting to raise up to a flock of 4000 in two years time.

CANOLA FARMING

ADC Enchili cultivates Canola as a rotational crop on its vast farm. This has been successful through partnerships with institutions such as Agventure. The Canola variety cultivated at ADC Enchilli is the Aiyola variety.

CROP ROTATION

ADC Enchili has sizeable land acreage favorable for crop rotation. Crop rotation is practiced at ADC Enchili as a weed mitigation practice and to allow for the reformation of the soil structure. ADC Enchili farm cultivates wheat , Barley and Canola as rotational crops

LEFT
Dairy feedlot at ADC Lanet.

CENTER
ADC Enchili farm .

RIGHT
Romney mash sheep at ADC Enchili .

ADC Kitale Region; the Agricultural Powerhouse

Kitale region hosts over 10 regional units that have been at forefront of Agricultural production .

By Elvies Kibisu

LEFT
Friesian cattle at ADC Namandala Complex Kitale.

ABOVE
ADC Kitale Region Office.

KITALE REGION IS the home to a number of ADC farms and is unagurably one of the biggest producers of seed maize in the country. The region comprises of various farms engaging in different types of enterprises. At the forefront of this agricultural symphony stands

ADC SABWANI, A veritable giant in the field. Acquired in 1969, Sabwani Farm boasts a vast expanse of 2913 hectares (7198 acres) in Trans Nzoia County, Kwanza sub-county, Endebess constituency, Endebess ward. Nestled at an altitude of 1360 meters above sea level, the farm is graced with a mean rainfall of 1034 mm and a temperature range of 10-30 degrees. Its diverse soil composition includes red loam, sandy loam, and black cotton soils, providing the canvas for a myriad of agricultural wonders.

THE STORY OF ADC Olngatongo Complex is one of unity and vision. Originally owned by European settlers Haran Testabourne and John Luck, these three farms merged in the years 1970-1971 to form the Olngatongo Complex farm. This colossal farm spans 1923 hectares (4807 acres), with over 90% of the land dedicated to agriculture. Located in Trans Nzoia County, Endebess subcounty, Endebess ward, off Kitale Endebess road, it sits majestically at an altitude of 1800 meters above sea level. The farm enjoys an annual rainfall range of 950-1200 mm and a temperature range of 10-35 degrees. Its soils tell a story of fertility, featuring red alluvial soils, sandy loamy soils, clay soils, black cotton soils, and murram soils.

ESTABLISHED IN 1981, ADC Feedmill and Driers have been a cornerstone of Kenyan livestock agriculture. Located just 12 km from Kitale town, this unit is not just the sole government feed manufacturer in the country but a lifeline for farmers. Initially established to capitalize on maize from ADC farms and the Kenya Seed Company, in 2005, it expanded its services to external farmers. Today, ADC Feedmill and Driers provide feeds not only to ADC farms but also to farmers beyond, sustaining the nation's livestock industry.

The ADC Seed Unit, a relative newcomer established in 2013, is a guardian of agricultural potential. Situated within ADC Sabwani Complex, it encompasses research, seed production, processing, and sales. Here, every seed is nurtured with care, ensuring that farmers receive not just seeds but the promise of prosperity.

A name inspired by the Suam River, this farm engages in citrus production and more. Nestled along the natural boundary between Kenya and Uganda, ADC Suam Orchards adds a refreshing dimension to the region's agriculture, with its bounty of citrus and other enterprises

The story of ADC Japata Complex, acquired in 1969 from Pattison Collins, is one of agricultural excellence. Located in Trans Nzoia County, Endebess Sub County, Chepchoina Location, and Ward, it cultivates Seed Maize, Commercial Maize, Leys, Coffee, Sugarcane, and Nuts. It's a testament to the diversity of agricultural enterprises thriving within the ADC Kitale Region.

Acquired in 1969 from G.P Long, ADC Nai Farm is a tapestry of agriculture spanning 1578 hectares (3945 acres). Located in Chepchoina ward, Endebess Subcounty, Endebess constituency, Trans Nzoia County, it receives an annual rainfall of 950mm and rests at an altitude of 1869-1969 meters above sea level. With its red loamy soils and pockets of black cotton soils, Nai Farm embodies the spirit of agricultural diversity.

The youngest unit within the region, the Livestock Genetics Centre, emerged from ADC Sabwani Farm. It boasts a storied journey, starting construction in May 2014 and culminating in its official launch in January 2022. Armed with pioneer bulls, advanced laboratory equipment, and cutting-edge technology, this center has made its mark in the world of livestock genetics. Currently, it houses 70 bulls across 12 dairy, beef, and dual-purpose breeds, producing a remarkable average of 650 doses per week. A true game-changer, it controls 30% of semen distribution in the country.

With its acquisition in 1971, ADC Namandala Complex added another jewel to the region's agricultural crown. Encompassing 1355.7 hectares (3350 acres), this farm is located in Trans Nzoia County, Kwanza Sub County, Kwanza constituency, Kapomboi ward. At an altitude of 2026 meters above sea level, and with a mean rainfall of 1200mm, it's a fertile haven for agriculture, blessed with loamy and black cotton soils, and an average temperature of 20 degrees.

Established in 1990, ADC Engineering Services plays a crucial role in supporting ADC farms. From contract services to machine repairs, transportation, design and fabrication, this unit is the lifeline of mechanized farming. It also serves as a central store for spares, chemicals, and fertilizer, ensuring that the wheels of agriculture keep turning.

Other units keeping alive the excellence in agriculture mantra is Chorlim farm and the Kitale regional office which is a testimony of solid foundation of agriculture in the region.

The Irrigation Success at

ADC Kiswani

Furrow irrigation along River Sabaki is revolutionalizing agriculture at the farm only a year after its inception .

By Dr. Oroni Bernard.

THE ADC KISWANI irrigation project was initiated in November 2022 with only 5 acres under okra and watermelons. With financial support from the head office towards the purchase of more irrigation pumps, the project has been expanded to 70 acres with further expansion ongoing to achieve 150 acres under irrigation.

GAINS

The project has made significant gains with up to 70 acres of horticulture under irrigation. The profit generated from the project is being used to lay down more infrastructure for the expansion of the project. Crops currently under irrigation include: watermelons, okra, pumpkin, Butternut, sweet potatoes, Tomatoes, pawpaw, cabbage, capsicum and onions.

CAPACITY

ADC Kiswani has close to 1500 acres of arable land suitable for irrigation agriculture due to the proximity to River sabaki which is a perennial river. The unit intends to invest in future on Pivot irrigation system to cover more area and maximize on returns.

ADC Kiswani is the place to invest with guaranteed returns on investment considering the arable land in the Unit and high demand of horticultural crops in the market. Optimum utilization of the land will keep at bay potential land grabbers and enhance food security in the region and beyond. The unit intends to partner with other development partners through joint ventures for the modern Pivot Irrigation system in future.Through the irrigation system, there is enhanced job creation in the unit through direct and indirect employment opportunities to members of the community thus minimized hostility from the community towards the corporation.

Benefits of the project include Food security , increased revenue, employment opportunities , elimination of land grabbing and optimum utilization by staff

BOTTOM LEFT
Butternut harvest at ADC Kiswani.

THE OTHER LEFT
Top- ADC Kiswani Complex Entrance

Bottom: Watermelon harvest at ADC Kiswani.

RIGHT
Irrigation Process at ADC Kiswani.

Embryo Transfer Technology in Kenya.

ADC Namandala has made significant strides in Embryo transfer and is eyeing to be a regional leader .

By Dr. Muchemi kariuki

Embryo transfer technology has been practiced in Kenya since 1987 when the first imported frozen cattle embryos were transferred to surrogate mothers at Manera and Wangu Emboli farms in Naivasha and Timau respectively. However, the holding rates were low (20%) and disappointing but the journey for ET Technology had started in Kenya.

Since then various groups/institutions including ILRI, Embryo Plus of South Africa, East African Semen and Embryo Transfer Association (EASETA), ADC, University of Nairobi and Makongi Farm have done conventional embryo transfer and Invitro Embryo Production (IVEP) with various amounts of success.

Embryo transfer is defined as the process of heat synchronization and superovulation of a donor cows of superior genotype to release many ova which are fertilized after normal artificial insemination using superior sire semen. The resulting embryos are flushed out of the donor uterus, graded under a microscope, loaded into embryo straws and transplanted to heat synchronized surrogate mothers which carry the conceptusto term (9 months after conception).

The process takes 24 days and includes the Selection of donor and surrogate mothers, heat synchronization of donors and surrogates, super ovulation of donors, AI of donors, flushing of embryos, sorting and grading of embryos under a microscope and finally transplantation of embryos to surrogate mothers and freezing of any surplus embryos

The advantage of embryo transfer technology is that it optimizes on the potential of cow, whereas a cow will release one ova or at most two and drop one calf per year. In embryo transfer a cow of good fertility and high genetic merit can be super ovulated using hormones to release many ova with average of 7 Grade 1 embryos after AI.The ovary of a cow has the potential to release over 200,000 ova in its lifetime and a donor cow can be used in an ET programme for 3 sessions in a year.

Hence a donor cow has the potential to produce 21 Grade 1 embryos and almost 13 calves in a year at a modest holding rate of 60%.Embryo transfer can also be used for conservation and preservation of ova or embryos from threatened species or breeds.

TOP LEFT
Embryo Flashing at ADC Namandala.

TOP RIGHT
Embryo Transfer at ADC Namandala.

CENTER
Embryo transfer calves and their surrogate mothers at ADC Namandala.

"The ET bulls from ADC are very popular with farmers and whenever they have been used for breeding the progenies are among the top producers in the herds."

ADC imported 200 Holstein Friesian Embryos from USA in 1992. The embryos were transplanted to surrogate mothers in 2002 with a success rate of 45%.

ADC has been undertaking embryo transfer at its ET facility in ADC Namandala - Kitale on routine basis for the last 5 years and is in the process of developing an ET Herd whose progenies will in future be offloaded to the Farmers through sale of superior in calf heifers. The ET bulls from ADC are very popular with farmers and whenever they have been used for breeding the progenies are among the top producers in the herds.

The Corporation is also using Embryo Transfer Technology as a breeding tool for recruitment of bulls to its unit ADC Livestock Genetics Centre for mass semen production and distribution to Farmers through a distribution network of 38 Agents spread out in 27 Counties.

These efforts are geared to improving productivity of the national Dairy Herd and addressing the Food and Nutritional Security Agenda.

The Orchard Success Story at the Border

Situated a few Kilometres from the Kenya Uganda border, ADC Suam Orchards is making positive strides in production

By Dennis Gichana

Nestled in the picturesque landscapes of Kitale, ADC Suam Orchards stands as a testament to the triumph of agricultural ingenuity and unwavering dedication. Established in the annals of history in 1979, this remarkable farm has evolved from the illustrious ADC Japata Complex, spreading its wings to encompass a sprawling 2000 acres of fertile land that pulse with an array of enterprises, each more impressive than the last.

Diversified yet cohesive, Suam Orchards boasts a diverse portfolio of agricultural pursuits, including the cultivation of seed maize, the artistry of beef Farming, the finesse of Dairy Farming, the lush bounty of Citrus Fruits, the sweet promise of Sugarcane, and the staple glory of Commercial Maize. It's a symphony of agriculture where innovation meets tradition.

At the heart of this agricultural tapestry lies the crown jewel—Citrus Farming. Suam Orchards' Citrus Farming operation is a masterpiece, elegantly divided into three sections: the lofty Upper Orchard known as "Jensen," the serene Middle Orchard known as "Kerio," and the lush embrace of the Lower Orchard. Here, history intertwines with progress.

During its inception, the orchard embarked on a journey to nurture both Temperate and Tropical Fruits. However, the vicissitudes of nature led to the phase-out of tropical fruits, succumbing to the relentless grip of foot rot disease. Today, Suam Orchards thrives with about 15 varieties of citrus, including 4 distinct lemon varieties and an astonishing palette of 11 orange varieties. This magnificent orchard blankets an awe-inspiring expanse of 350 acres, a testament to the scale of its ambition and the depth of its expertise. The ripple effect of Suam Orchards' citrus excellence extends far and wide, drawing markets from the local populace to the bustling cities of Nairobi and Western Kenya. This is a testament to the quality and flavor that this orchard cultivates, nourishing the palates and economies of many.

But Suam Orchards' influence goes beyond fruits and citrusy delights. It serves as a sanctuary for livelihoods, providing gainful employment to at least 200 dedicated casual laborers every day. The toil and sweat of these individuals breathe life into the farm's labor-intensive citrus farming.

The orchestra of agriculture at Suam Orchards includes not only citrus but also a remarkable display of livestock prowess. The farm proudly hosts a thriving community of 240 animals, a harmonious blend of dairy and beef breeds. Amongst the dairy stars, the Brown Swiss and the Jersey breeds reign supreme, celebrated for their rich butterfat content. When it comes to beef breeds, Suam Orchards is renowned for its Charolais and Hereford breeds, a testament to the farm's commitment to excellence.

Suam Orchards, ever at the vanguard of agricultural innovation, embraces irrigation with an audacious spirit. The lifeline flows from the majestic River Suam, harnessed and channeled with precision. This streamlined irrigation marvel empowers the farm to achieve a staggering production capacity of 5000 tonnes annually, a monumental leap from its current 1000-tonne output. It's a testament to the farm's unwavering pursuit of excellence and its vision for a sustainable agricultural future.

In the heart of Kitale, ADC Suam Orchards stands as a beacon of agricultural prowess, an ode to resilience, and a testament to the boundless potential of human endeavor. It's not just a farm; it's a symphony of agricultural excellence, where each note resonates with the promise of a brighter, more prosperous tomorrow. In the fields of Suam Orchards, dreams take root, and the future blossoms with hope.

Here, in the embrace of nature's bounty, the legacy of ADC Suam Orchards continues to grow, shaping the destiny of Kitale's agricultural landscape and inspiring generations to come. This, dear readers, is not merely a farm—it's an institution of excellence, a marvel of innovation, and a testament to the enduring spirit of agriculture.

The Borans of Sabwani

Being the largest farm in Kitale region, ADC Sabwani is taking giant steps in Boran breeds and seed maize production

By Brian Kisaka

In the heart of Trans Nzoia County, where the fertile land stretches as far as the eye can see, lies a true agricultural titan: ADC Sabwani. A name synonymous with scale and excellence, this sprawling agricultural haven stands as the largest unit in the esteemed ADC Kitale region, proudly boasting an impressive 2700 hectares of agricultural magnificence.

Sabwani Farm, nestled in the picturesque Endebes region, is not just a farm; it's a testament to the potential of human innovation and agricultural prowess. Here, the earth yields not just crops but dreams of a bountiful tomorrow. Its influence extends far and wide, leaving an indelible mark on the agricultural landscape.

Sabwani Farm is a symphony of agricultural enterprises, each conducted with precision and finesse. At its core, the farm is a powerhouse of Beef Farming, showcasing a remarkable herd of 1700 Boran and Boran crosses, known far and wide for their resilience, impressive weight, and sheer size. These majestic creatures, from the bullying heifers to the lactating ones, find their way into the hands of farmers as steers, after a meticulous fattening process that ensures a minimum live weight of 300 kilograms. Some, after being well fattened, reach a colossal ton in weight. They grace international auctions, such as the prestigious Nairobi International Trade Fair, leaving a lasting mark on the global stage.

But Sabwani Farm is not just about cattle; it's a maize-producing powerhouse. Within its vast embrace, both Seed Maize and Commercial Maize thrive under the expert care of dedicated hands. The meticulous regulation of seed maize production falls under the watchful eye of KEPHIS, ensuring that quality is not a compromise but a commitment.

In the world of seed maize, Sabwani Farm stands as a guardian of purity. Here, six lines of seed coexist alongside two lines for males. The meticulous separation of male and female rows unfolds before harvesting, ensuring that the lineage remains unblemished. Post-harvest, a rigorous selection process ensues—a symphony of scrutiny aimed at enhancing the quality of seed destined for seed merchants. Rotten seeds, tassels, dead seeds, shriveled seeds, and off-types that defy conformity to required variety standards are swiftly eradicated. The seed then journeys to the seed dryers, where its potential is unlocked, and its destiny as a harbinger of agricultural excellence is fulfilled.

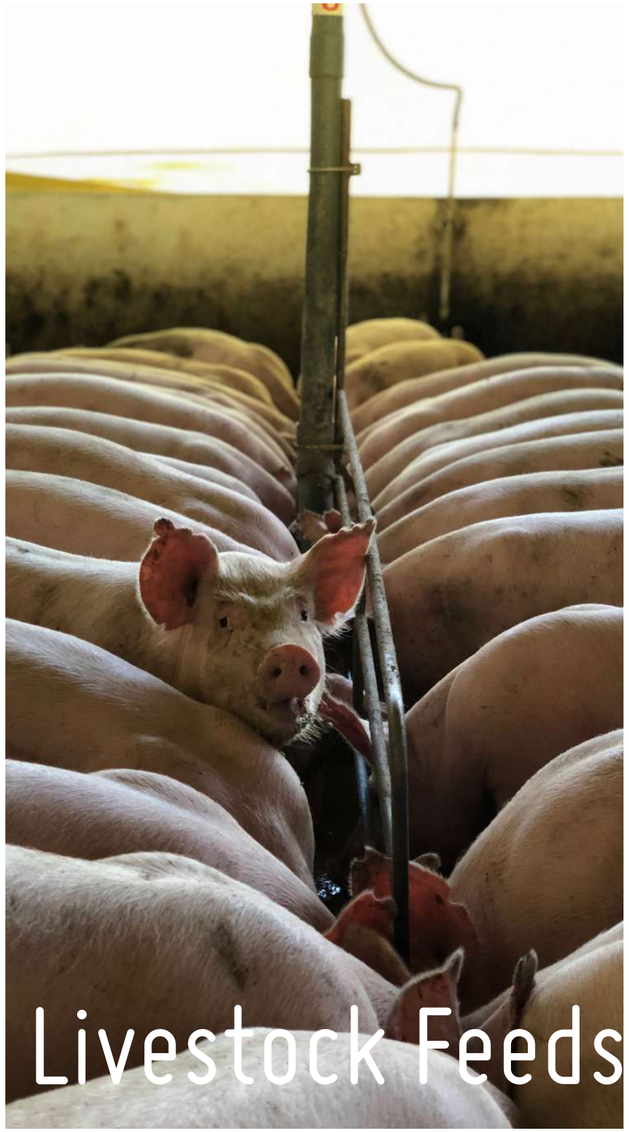
From Top to Bottom

1. Top Left (Citrus Orchards at ADC Suam Orchards)

2. Charolais Breeds at ADC Suam Orchards.

3. Hereford breeds at ADC Suam Orchards.

4. Boran breeds at ADC Sabwani.



Quality Check Points

Adc Feedmill has a well laid quality control infrastructure to enable production of quality feeds. Deliberate interventions are carried for the above to ensure compliance.

By . Stephen Thuo Menyi

ANIMAL PRODUCTION HAS been taking place over a long time, with the availability of compounded feed being a relatively recent innovation. Most livestock will grow on feeding systems consisting of a small range of components or even a single component, but production level maybe low and if the nutrient levels in feeds are not balanced, wastage of those present in excess will occur. In general, feeding costs make up 75-80% of the total costs of livestock production. Monitoring and close control of this aspect is essential for profitable projects. Studies on the composition of raw materials and formulations of feed are aimed at producing a balanced feed. This is a feed which is designed to provide the animals daily requirement of all known nutrients, and no more, and is intended to obtain maximum levels of production with minimum wastage of nutrients and at a minimum feasible cost . For intensively kept poultry and pigs, compounded feeds may be the only source of feed and must therefore be balanced. In some cases, for example dairy cattle, compounded feed may be a supplement to other feeds such as forages and roughages. In this case, it should be formulated in such a way that complete ration will be balanced. The Manufacture of compounded feed is therefore a service industry in that the end product contains only those components added in the raw materials or as supplements and additives. It must be kept in mind therefore that the cost of production and distribution of compounded feed must not exceed the increase in value of animal production from balanced feeds compared with that from unbalanced, or single component feeds. If it does, then it is not providing a useful service . While it may be difficult to quantify the differences in production levels and hence the acceptable cost of compounded feed production, consideration of this point emphasizes the importance of taking all possible steps to ensure optimal formulation, adequate quality control and minimization of equipment and operating costs at all stages.

QUALITY CONTROL IN FEED MANUFACTURING

QUALITY HAS BEEN defined variously as “fitness for use” or “meeting an expectation” or “degree of excellence or “conforming to standard”. feed manufacturers are often forced by circumstances to focus on short-term concerns such as how many tonnes are produced, how many customers are there or how much time was used in production. While important, short term problem can cause manufactures to focus on solving problems rather than pursuing the Company’s mission (Frank Jones). The overall mission of feed formulation and manufacturing might be “to provide customers with efficiently manufactured feeds that are correctly delivered to their facilities and consistently contain the available nutrients required by animals for body maintenance, growth and reproduction”. To satisfy this mission. Manufacturers need Materials (feed ingredient, fuel, power etc.) , machinery (formulation equipment, feed delivery systems, feed storage equipment, feed milling equipment etc) , people and procedures. Feed quality control program is defined as “All actions directed towards ensuring the products meet the specifications established by the Manufacturer” Andrens (1996) has described feed quality control program as “ A system for making sure that proper standards are maintained through use of periodic inspections”. A good feed quality control program contains four components: ingredient quality, process control, finished feed quality and control of toxic substances including pathogenic micro-organisms.

INGREDIENT QUALITY

INGREDIENTS ARE DESCRIBED in terms of analytical values and secondly in terms of physical characteristics. Manuals providing of these information are available from KEBS (Kenya Bureau of Standards). Commitment to quality begins with you-quality and not price should be foremost, what you want in ingredients and put it in writing i.e. specifications-physical and analytical specifications, examine all incoming ingredients thoroughly (test for moisture, weights, mycotoxins, rancidity etc), laboratory analysis, communicate often with your suppliers about quality, adjust your formulae to reflect on the assays you are receiving and file (records) for every deficiency claim .

PROCESS CONTROL

The process by which high quality ingredients are made into high-quality feeds within the feedmill involves personell, machinery and prcedures These three components must be blended together for efficient production of high quality feeds.

FINISHED FEED QUALITY

This provides final report on how well the quality was controlled. Finished feed problems can be addressed by considering the following : Is the assay correct, How was the sample taken ,Is one nutrient level out of control or several ,Was regular crew operating the mill when feed was produced? Check inventory records; check the scales for correct adjustments, check ingredients and finished-feed bins, recheck the mixing time, check ingredient assay values and checking formula matrix. If problems are consistently adressed as they occur, the mental image of dedication to quality will become fixed in the minds of people involved. This image can only work for the betterment of the organization.

TOP LEFT
Pigs in a sty.

TOP LEFT AND BOTTOM RIGHT
ADC Feeds in an exhibition.

TOP RIGHT
Sheep in a pen.

CONTROL OF MYCOTOXINS

MYCOTOXINS INCLUDING PATHOGENIC microorganism lower production even for perfectly formulated feeds. These must be controlled by ensuring quality checks for all ingredients. ADC Feedmill has a well laid quality control infrastructure to enable production of quality feeds. Deliberate interventions are carried for the above to ensure compliance. Our ingredients suppliers are continuously engaged to ensure materials supplied are as per specifications.

At Adc Feedmill and Driers, we dare to live by the famous business saying “Quality is not expensive, it is priceless”(Frank Massey).

THE WHISTLING THORNS OF GALANA

The Galana Ecotourism project is turning out to be an Oasis of conservation within the drylands with wildlife harmoniously coexisting with livestock and cultivation giving a fresh breath of life to the ranch.

By . William Kemei

RIGHT PAGE
Swimming pool at ADC Galana

RIGHT PAGE BELOW
Boran herd at ADC Galana

IT IS ALREADY 9am in the morning travelling on a straight road reroute to northeastern side of Galana Ranch on a daily routine visit to Livestock Bomas. The sun is already hot and the road seemingly not dusty. Suddenly the warthogs cross the road speedily and as curiosity takes toll, we stop to check them as they scamper into the bushes. Stepping out, the eye meets the beautiful guinea fowls, as beautiful as the numbers can tell, well arranged and not moved by the presence of an intruder. Far beyond some distance is a group of giraffes browsing on the shrubs and not seemingly far is a herd of elephants brown in colour that you can mistake them for the beautiful brown anthills undisturbed and in harmony with the nature and the ecosystem. A group of antelopes, gazelles and Kudus can be seen grazing as if the morning serene atmosphere is favorable for them. The Dik Diks run fast our point jumping elegantly as if they are welcoming us, dully in harmony with the natural selection. They are paired that they have history with them.

AS YOU STOP to wonder the beauty of nature, you hear the whistles from the whistling thorns acacia plants. The whistle is so rhythmic that one can wonder how nature plays a role in making the thorns just to whistle. The rhythm continues and makes the place so relaxing and soothes the mind; you just feel relaxed.Back to the Livestock Bomas are the beautiful Boran Cattle in various categories all representing a gene bank of our country. The gala Goats and Dorper Sheep are not left behind all traverse this beautiful Ranch browsing and grazing. The Staff are highly motivated, all keenly in line with the Corporation's mission of Agricultural resource development.

RIVER GALANA MEANDERS through the Ranch making the banks so green that from far you can see the beautiful green meander downstream. Along the river are the eco-lodges making ecotourism something to reckon with They are systematically arranged, well designed and left for visitors to choose which destination to visit and have humble time to watch the Hippos and the famous crocodiles of Galana among other wildlife around at the time.The ranch has a vast potential to develop ecotourism and wildlife conservation. The visitors are welcomed to the view of wildlife and ecosystem

Machinery & Equipment

From top left to right

1. *Combine harvester*
2. *2 row potato planter*
3. *Sprayer*
4. *Moulding machine*
5. *Potato harvester*
7. *ADC Tractors*
8. *Trailers*

Maintaining the Winning Culture At ASK National Shows 2022-2023

ADC scooped awards for the Supreme Cow of the Show and the Junior Champion Heifer.

By . Elvies Kibisu

AFTER A THREE year silence on the ASK show, a beam of hope arose with the Nakuru ASK show beckoning agricultural enthusiasts to a return to normalcy. The dusty stands that had been deserted since 2019 were now a buzz of activity being brought back to life by exhibitors at the show. But first let's take a leap back into 2019, September 4th to 8th at the Mombasa international show, the close of the show would turn down the curtains on the ASK shows for a unanticipated two years, reason; the Covid-19 pandemic. Now this came at a time when agricultural fanatics were in high gear putting together mistakes of the last show so as to place the best foot forward in the next show but all this turned out to be a two year plan. Maybe too long to wait or long enough to plan. We are well familiar with the public gathering guidelines towards mitigation of the pandemic but we were not all familiar with how long it would take. With restrictions in movement, working from home and limitation in public gatherings, the ASK show would only be a historic event to be referred to and someone would comically observe that three year olds would not be able to understand how a ASK National show looks like but maybe they would be too young to even comprehend a show. Of course one thing would stand out to them; the presence of crops, machinery ,animals and crowds, but from an agricultural enthusiast perspective the crème de la crème of our country's agricultural input would dominate their commemoration of the event. Now that's what happened at the ASK Nakuru National show!!! I.

BEING THE FIRST national show after a long break, I would admit the show was back with a bang, back like it never left and back with goodies. Let me confess that my agricultural thirst was sufficiently quenched as my eyes had a hard time focusing on the quality resources being put on exhibition but that's a story Ill delve into in another writing.

EVERYONE KNOWS THAT the relationship between ADC and the ASK shows is like a bride to a wedding, everyone is always on the lookout for the Excellence in Agriculture stand. Now let's get into the details you have all been waiting for. The ADC stand in the Nakuru show laid focus on the country's important food crops with maize and potato being a key crop on exhibition. You have definitely heard about quality ADC Seed and how appealing the ADC crop looks like. This was confirmed by endless guesses and exclamations by visitors making a stop at the stand entrance with maize and potato plants beckoning them to a welcome alongside a an artistic impression of ballast arrangements with the words "karibu" complete in ADC theme colors and at this point cameras had to click. Now you would think you have seen all until you take a turn into well-arranged oats not far from the wheat, barley, sorghum, Napier grass, Rhodes grass hay bales and fodder. I knew the difference between the two on this day!!! And for ladies named Grace, the barley named grace clearly stood out, literally from grass to grace. However the ADC attendant here reminded me that Barley (Grace) is used to manufacture bear, what a paradox! A step into the stand and you would be welcomed by well-arranged potato species, I remember Shangi, Kenya mpya, Wanjiku, Nyota, Kenya Sherekea Kenya karibu, Dutch Robyjn and Unica. A quick observation was that shangi and Kenya mpya were the slay queen version brown in appearance while the rest maintained a characteristic maroon colour. But just in case you are confused, the colours are on the outside peelings, not inside. A step further would invite you to potato apical cuttings and Cabbage species. Chips and crisps lovers and traders benefitted from various chips samples on display depending on the potato types and I must admit that I spent a considerable amount of time here, the reasons relate to appetite and something close to that.

CITRUS FRUITS WERE also on display with the Pumelo Long, Pumelo Round, Bear Lime and Eureka Lemons being showcased. I was about to ask about the origins of all these until a visual representation on the walls captured all the activities at corporation and by this time Dr Obwoge from the genetic center was beckoning me to the Artificial insemination center. The artificial Insemination center was very insightful with the entire process being captured complete with illustrations and equipment. By the time I was walking out to the Aeroponics center, my worries on the gigantic ADC bulls mounting my "not so big" cows were resolved, all it needed was an expert.

AT THE AEROPONICS center Mike Kiambi took me through the journey of planting potatoes in suspended air with nutrients being fed directly to the roots, seems magical? Doesn't it? The highlight of the show was the awarding of the best animals with ADC Lanet's champion cow Reward scooping the prestigious Supreme Dairy cow for the ASK Nakuru national show(Best dairy cow of the show). Reward a Ayrshire breed led the flock of animals being awarded while agriculture cabinet Secretary handed over the trophy to ADC Ceo Mr Mohammed Bulle EBS alongside the board of directors. ADC also scooped the award for the junior champion heifer

Pictorial & Events













Top right to left

1. Romney Marsh lambs at ADC Enchili.

2. Coffee farm at ADC Nai farm.

3.Seed Maize harvesting at ADC Sabwani

4. Charolais breeds at ADC Suam Orchards.

5. Planting season at ADC Kitale region.

6. Seed potato at ADC Sirikwa greenhouses.

7. Tissue culture lab at ADC Molo.

8. Subsidized gov't fertilizer in use at ADC.

9. Hay bales at ADC Enchili.

10. Seed Maize selection at ADC Sabwani.

11. Dairy Crosses at ADC Katuke.

12. ADC MD with staff at Eldoret Show 2023

13. Grenhouses at ADC Sirikwa.










1. ADC Board of Directors.

2. ADC Managing Director & Chairman.

3. Kitale Regional Manager Edward Ojode receives a trophy fron the Deputy president Rigathi Gachagua.

4. ADC staff at the Eldoret show.

5. Exhibition at the Mombasa show 2022

6. ADC Management meets Mombasa Cement Board.

7. ADC Board of Directors meet Trans Nzoia Governor George Natembeya.

8. ADC Staff at a meeting.

9. Animal Auction at Nairobi show 2022.

10. ASK Nakuru show 2023.

1. ADC Chairman , MD & Chairs of Board commitees.

2. Romney Marsh sheep delivers twins at ADC Enchili.

3. Feed production at ADC Seed unit.

4. ADC Board of Directors pay a courtesy call to Trans Nzoia Governor George Natembeya.

5. ADC LGC Staff

6. Agriculture CS Mithika Linturi presents a trophy to ADC Chairman & MD

7. ADC Chairman Dr. Joseph Rotumoi, Nakuru Region Manager Getrude Mutiso & staff with the Supreme Champion dairy cow at the ASKNakuru Show 2023.

Letters

Customer Service 101

By Joselyn Mercredi Radak

Organizations mark Customer Service Week every financial year as a tribute to the significance of customers in their daily operations. Regardless of whether these customers are internal or external, treating them with respect and courtesy remains paramount. A well-treated customer tends to not only return but also recommend the organization to others.

Have you ever wondered why, on a single street, numerous shops sell the same products, yet customers consistently prefer one particular shop, even if it means waiting in line? It's a thought-provoking question. As Maya Angelou aptly puts it, "I've learned that people will forget what you said, people will forget what you did, but people will not forget how you made them feel." This quote serves as an inspiration, emphasizing the enduring impact of the customer experience.

Recognizing excellent customer care within an organization involves several factors, notably: the reception and how customers are welcomed, Offering refreshments while they wait, time taken for a customer to meet with a manager or someone capable of assisting them, Providing updates and feedback during the waiting period, alerting the relevant personnel about a visitor and, if necessary, scheduling a more suitable time for their meeting, seeking references and referrals and consistently following up with calls and texts.

To enhance customer satisfaction and service delivery, consider: Welcoming customers with a warm smile, maintaining eye contact to establish a connection, Engaging in a friendly handshake, Remaining attentive to their needs, Using an appropriate tone of voice, Paying attention to one's general appearance, Employing suitable hand gestures and Maintaining a positive posture.

It's also crucial to be mindful of phrases to avoid while serving customers, such as:

- "No." - "I don't know." - "That's not my job" or "That's not my department."- "You are right – that is bad." - "Calm down."- "I am busy right now."- "Call me back."- "That's not my fault."- "You need to talk to my supervisor."- "You want it by when?"

Richard Branson emphasizes that "Good Customer service begins at the top, if your senior people don't get it, even the strongest links further down the line may become compromised."

Last but not least Customer service is not a department it's everyone's job.

Quality of life is not affected as much by the amount of free time you have, but on how effectively you manage this time at hand. So always be on time for work, meetings, church and any other event you have. It's better to be on time, than out of time.

- Joselyn Mercredi Radak

Whatever you do, do it dilligently with one heart, be motivated as if you are working for the LORD , rather than Man. Let us be guided by COLOSSIANS 3:23 in all our endeavours. **- Matthew Iregi Mwaniki.**

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