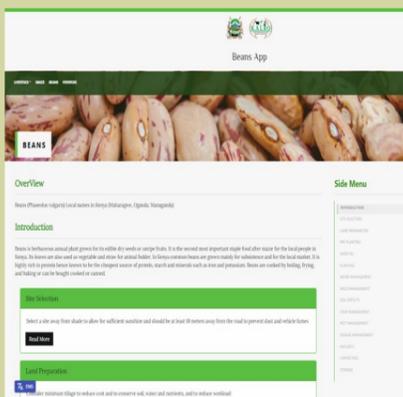




Mobile App to Revolutionize Agricultural Extension in Laikipia



Agricultural officers being trained on E-extension App in Nanyuki last week. Left: the e-extension viewed from a mobile phone



By Nahashon Maina

Laikipia has unveiled a mobile phone application that allows farmers to access technical information on the palm of their hands, almost instantly.

The County Government of Laikipia in partnership with Kenya Agriculture and Livestock Research Organization (KALRO) developed the E-extension value chain App which will transform the way farmers practice agriculture.

It can be accessed through:

<https://kalro-cropslivestock.web.app/>

The development of the mobile app was informed by a research that was conducted April last year by the Department of Agriculture, Livestock and Fisheries in collaboration with ICT4Agriculture. From a sample size of 400 farmers, the study established that extension services did not reach most of them.

Since the county do not have enough extension officers, they had to find a solution for this existing gap and ensure that the service is available in digital space.

Earnings

The county will leverage on technology to provide the much needed advisory services to farmers to improve productivity and incomes for better quality life.

“The mobile app will have a huge impact on agricultural sector as farmers will access expert advice on different aspect of their economic activities,” KALRO officer Morris Gatheru said.

Farmers will be able to improve their production and increase their earnings since all the information needed to turn around their farming activities as well as market information will be available on the palm of their hand.

For instance, a farmers planning to grow beans will be able to get information on the app about

on-site selection, land preparation, pre-planning, beans varieties, planting, water management, soil fertility, maturity, harvesting and storage.

They will be advised on modern and smart farming practices. It has the benefit of ensuring a large number of farmers are able to access extension services digitally and with little effort.

Systems

The App is a major relief to the Government. About 40 percent of agriculture department staff are set for retirement in the next one-and-a-half years and may not be able to reach the ratio of 1:400 recommended globally.

The savings on wages and operation costs for extension officers could go towards increasing irrigation technicians to support water for production.

Use of technology-based systems is a key plank of the Governor Ndiritu Muriithi’s strategy of growing the county economy from Sh100 billion to Sh400 billion a year. The county’s economy has been growing at an impressive rate over 8.8 percent.

E-extension is expected to bridge these gaps.

The App will link up farmers to share relevant information that arises even if they are not in the same locality. Armed with expert’s opinion and advice, the farmers are expected to demand better prices for their farm produce when selling.

In return they will become motivated and be-

come more productive as there will be an increase in their earnings.

It will eliminate the middlemen who sometimes control the pricing leaving the farmers to earn little in their ventures. They will be more informed which will ensure that they make decisions that elevate their life.

“Extension services are changing, there is need to adopt technology and research to achieve better output,” county officer in charge extension services Mr James Mung’ere says.

The App, he adds, will be a focal and reference point when seeking current, up to date information. Farmers will send queries on technical matters that need interpretation, and get instant reply. This will solve many underlying problems in the sector.

Farmers sometimes complains of lack of timely advice on farming practices.

The app will also achieve the goal of ensuring that farmers’ livelihood is improved by connecting them with ready market for their produce. This will in turn increase their earnings and avail the presence of certain produce in a specific location.

According to Mr Mung’ere, there could be a farmer complaining for lack of market for his/her produce but on the other end someone is looking for the same produce.

It creates a problem if both have no idea of the existence of one another. He notes that the app will eliminate this by linking farmers to market.

Why Health Ministry Is Impressed by Laikipia UHC Model



Community Health Volunteers (CHVs) were provided with motor-bike during the cervical cancer screen celebration to improve their mobility

By Muriithi John

Laikipia's Universal Health Coverage Model has won the admiration of the Ministry of Health which is now eager to ensure its implementation to other parts of the country.

Dr Pacifica Onyancha, a director at the directorate of Preventive and Promotive Health at the Ministry said the directorate will be partnering with Laikipia County in implementation of the UHC Model.

The model focuses mostly in increased investment in promotive and primary health institutions with community health volunteers playing a key role. This model goes against the traditional model where a lot of health investment happens at the top level institutions at the expense of those primary level.

Dr Onyancha said that CHVs have a critical role in the success of the UHC since they provide the link between the government and the community. Her directorate will be supporting the training of CHVs at a cost of Shs 42 million per year.

Dr Onyancha spoke when the country marked the 3rd National Cervical Cancer Awareness Week at Nanyuki's Central Park on January 19, 2021.

"Laikipia is a health-oriented county. No wonder it is the leading county on NHIF enrollment. I appreciate Governor Muriithi for having given health a priority in his manifesto which is ensuring health coverage for Laikipians," said Dr. Onyancha.

She also congratulated the County First Lady Maria Mbeneka who is also the CFLA chair for her *Hongera Mama Kit* initiative. She applauded the county for the successful implementation of UHC model with 67% of the residents have been enrolled in NHIF cover.

The ministry of health will be partnering with the county government to achieve full coverage by ensuring there is support in the

primary health care.

The national government through the ministry of health has also adopted Laikipia's model in the delivery of universal healthcare throughout the country.

Director of Preventative, Primary Health care in the Ministry of Health, Dr. Pacifica Onyancha, described Laikipia as a health-oriented county. She says uniquely, the county was not among the initial 4 counties that carried out the pilot model on UHC, it is so much ahead in the implementation stage.

The Cervical Cancer Awareness started at Nturukuma Dispensary to emphasize the importance of primary health care. Primary Health care involves the most basic package of essential health services and products needed to prevent disease, promote health and manage illness. Residents need to visit their nearest health center for screening of cervical cancer.

The primary health care is seen as the most important component of achieving the UHC as most diseases will be managed through early detection. The county is keen in ensuring that all health centres in the county are adequately equipped to achieve that.

"Dispensaries are the first link for the community health volunteers in their work," Dr. Onyancha notes. She adds that functional CHVs are able to provide actionable data to the health centres.

To note is that currently, 90% of public facilities are

offering the cancer screening services which brings them closer to all Laikipia residents. One does not need to go to the referral hospitals for the basic screening but only needs to visit the nearby dispensary.

According to Governor Ndiritu Muriithi, it is important to ensure health facilities at the grassroots level offer these services and are easy accessibility of the health services to all Laikipia people.

"UHC is 95% dependent on primary health facilities, hence the need for strengthening and equipping of such facilities," said governor Muriithi. He adds that to achieve UHC, there is need to excel at primary health care.

To eradicate the cervical cancer, and generally all cancers, there is a need to early detection before the condition spreads beyond treatment levels. This will save many families the high cost of treatment which can be avoided by early interventions.

Governor Muriithi says that his aim is to ensure that every resident is reached by most of health services that the county can be able to offer in a cost-effective manner. According to him, this will enable Laikipians to seek health services that do not lead into catastrophic financial ruin to them.

"As Laikipia, we know that the key pillar of UHC is financing health, for that we are partnering with NHIF and other private insurance firms to achieve this," Governor notes.

Some of the cancer survivors are witnesses on the need for early cancer detection for better medication and recovery. Winnie Wambui, a survivor, urges everyone to be screened to save on the costs that comes with cancer treatment.

Governor Ndiritu Muriithi, First lady Maria Mbeneka and Dr Pacifica Onyancha inspecting cervical cancer screening equipment



Beyond 'Buloti Maguta Maguta', Destination Laikipia Has More to Offer



tential.

The county is richly endowed with wildlife, which is widely distributed in the semi-arid lands extending to Aberdares, Samburu, Meru, and Mt. Kenya wildlife corridors/ ecosystems.

Another unique characteristic of Laikipia is that it has the greatest number of wildlife outside of the gazetted protected areas in the country. It is home to all the Big Five – elephant, lion, rhino, buffalo, and leopard. It also offers different camping activities like bird watching, canopying, and zip-lining in the Ngare Ndare, Marmanet, and Rumuruti forests.

The county receives over 86,000 visitors (tourists) annually and generates annual gross revenue of over Kshs 1.5 billion. With ongoing local and international branding and marketing initiatives, the number of visitors is projected to increase by a minimum of 14 percent annually in the next three years.

Laikipia tourism generates approx. 2.5 % of the total national tourism revenue for Kenya annually. The tourism sector in Laikipia contributes to the wider social and infrastructure development in the region by investing approximately 72 million Kenya shillings annually.

Through direct and indirect employment about 6,500 people are dependent on tourism.

Laikipia has the best places for tourism destinations. The terrains and plateaus make the land to have views, attractive to local and foreign tourists. Being a rather sunny area, the county offers an escape plan for the tourists when other countries are on winter season.

Laikipia County has expansive views, stretching across a vast and wild plateau to the north and west from Nanyuki. It was ranked among top 50 places to visit globally in 2017 by The New York Times.

Snow-capped Mount Kenya is a core element of the Laikipia experience, visible from most parts of the region on a clear day. Though the mountain does not touch Laikipia County, it from Laikipia that one gets the best view of the mountain. The county also offers the some of the best routes to climb the mountain.

Laikipia also boasts spectacular views into the Great Rift Valley and from the magnificent escarpments which descend into the wilds of northern Kenya. The river systems of the Ewaso Nyiro and Ewaso Narok are a core physical feature, providing excellent tourism product po-

Nanyuki Open-Air Market: Conducive Business Environment, Higher Productivity, Increased Incomes, Quality Life



Photos
By Alice Mbaki

Vibrant businesses are the heartthrob of any growing economy. Relentless efforts to improve business environment will lead to higher productivity, incomes and better quality of life for Laikipia



Laikipia Turns to Innovative Financing of Transformational Projects

As it implements a strategy focused on turning Laikipia into a manufacturing economy, the County Government of Laikipia has identified several enabler projects that will drive the transformation.

The projects revolutionize the economy of Laikipia and ensure that the standard of living goes up. The strategy goes along with innovative ways of financing the projects to accelerate their realization.

The projects will create necessary conditions for prosperity and enjoy services that drive and ensures residents become more productive. Here are some of the projects targeted to bring change.

Water for production

This is intended to accelerate the area under irrigation, establishment of feedlots and fish production. Availability of water will enable Laikipia households start kitchen garden not only to improve on their nutrition but also for sale.

This will elevate residents who will have adequate water to carry out economic activities such tomato growing in Wangwachi, Gatirima and Kariunga. The project will increase access to water in a county is a scarce commodity in the county.

With enough water for production, Laikipia will be taking advantage of its vast land to grow enough crops and rear adequate numbers of livestock for local and export markets.

This will in long run ensure that the county is food secure, create jobs and enable Laikipians to be economically empowered.

Roads networks

Opening up transport corridors across Laikipia will enhance connectivity. This will create a good linkage between farmers and the market in order to ensure they access market with ease. Achieving all weather roads in the county will reduce the travel time and enable faster movement of perishable produces from farms. Transport infrastructure is a key enabler of the economy takeoff. A robust transport network



Smart town project changing the face of Rumuruti town /Photo: Steven Kariuki

will also attract investment in the county. The strategy target a minimum of 1,000 kms of agricultural roads.

Smart towns

Well planned, people friendly urban centres will have manufacturing zones and trigger urbanization. This will trigger high consumption of agricultural commodities as well as robust service industry.

The county government through its smart town initiative has been making deliberate effort of improving business environment in all towns and ease of doing business in Laikipia.

Smart towns will ensure that they are well planned for population growth that put strain on the existing infrastructures.

Sewerage expansion

Nanyuki, Nyahururu and Rumuruti towns sewer systems will be expanded to be in tandem with the growing population and the general process of urbanization. While achieving smart towns is the end

goals, there is need to have smart towns that have good sewer system. It will improve urban planning as it will equip them with a proper hygiene waste disposal system.

Good sewer system improves the value and quality of land, solve sanitation problems and creates a conducive livable environment.

Feedlots

This initiative will cement Laikipia as a leading beef producer. The project will be based in Laikipia North where livestock production is the main economic activity. Feedlot involves modern technology where animals are reared in a zero-grazing unit with the goal of rapidly fattening them.

Investing in this 5,000-acre venture will be rewarding in the sense that animals in feedlot are fed on hay and supplements while in an enclosed space and hence gain the desired weight within a short time.

Laikipia also is a leading hay producer. Investment in feedlots will also spawn other industries along the livestock value chain such leather.

The county will be a center for beef production after the adoption of this technology. This is the most economical way of raising a large number of cattle for beef animals in a small area. It will also intertwine technology and innovation in the sector.

This project will also go a long way in solving cases of cattle rustling which sometimes lead to deaths, loss of properties and enmity.

Tomato processing factory

Rumuruti will benefit from a factory that will ensure that farmers are protected from after harvest loss due to rotting of tomatoes.

This will involve installing a cooling plant for storage and preservation of their produce which prevent them from going to waste. The effects of good storage will cascade down to the farmers who will be assured that their produce is processed.

Horticulture is an emerging sector in the county and investor will have a piece of this and will be rewarded as they will have enough produce to process. Also, farmers will also enjoy increase in their earning.



Survey for a sewer line extension being conducted by Nawasco near Nanyuki Old Market Photo: Alice Mbaki

For Daniel Maina, Wood Stumps Drip Designed Profits



By Muriithi John

His unique craft of converting tree stumps into adorable furniture has earned Daniel Maina the nickname “Maina wa Ithuki.”

The nickname is popular in Laikipia especially in Nyahururu and its surroundings. Maina is an innovator whose art of in curving out a living from tree stumps.

He has a background in self-trained carpentry and joinery after his high school education. His passion saw him continue with the same work for 12 years. However, competition became stiff and he had to be innovative to remain relevant in the market.

The background knowledge helped him in being creative and using available materials from felled trees to make more worthy commodities. He started making simple structures like stools and hawking them in Nyahururu and Nairobi.

His business, registered as Wood Drips Designs has since grown and has a capacity to cater for 30 customers concurrently.

“Currently, we have a capacity to manage 30 customers at a go. We are very professional in what we do and customers are confident,” said Mr. Maina.

The business has directly employed two workers after training them on the skills of making durable products. The two help Maina in making the different types of furniture. Other non-permanent workers that get manual jobs from the enterprise are the ones who may excavate the raw materials. These people come from the area the material are

people come from the area the material are and get their wages upon completion of the task.



According to the innovator, getting people to acquire the right skills to convert tree stamps to admirable products require patience and concentration. Some people who have been enrolled have given up on the way before getting to a stage of making unique equipment from the raw materials.

“One of the persons I have trained and who really helps me at producing these products is my son. I am happy that there is an assurance of continuity of this enterprise in my family,” says Maina, adding that his son is one of his employees despite him being in a higher learning institution.

Maina, who joined the Laikipia County innovation programme in 2018, is hopeful of starting a training institution as he would like to help more people in acquiring the skills that lack in other learning institutions.

“We would like to start a training institution that will help us in equipping more people with our unique knowhow to help making use of tree stamps found across the country. Such material should never be left to decompose in the shamba, rather should be used to make useable and durable furniture,” he said.

He cites lack of certificates or documentations to show that the enterprise has trained an individual as the main challenge for him not starting the learning institution.

When it comes to marketing, Wood Drips Designs is never out of customers as their unique designs attract customers. Most customers come from referral from a single person.

“When one person buys our products, others ask of the people who designed it and add to our customer base,” says Maina.

For an experience of the unique products from the Laikipia innovator, contact **Maina wa Ithuki** on 0728 948 715.

Enrollment Doubles after Upgrade of Igwamiti ECDE Classroom



Julia Wachira, Igwamiti ward

Construction of a better classroom at Igwamiti ECDE centre has yielded an outcome that presents a textbook case of what is expected of government projects.

Last year, the centre had 20 learners. All the learners, regardless of age or class, shared one classroom.

With the construction of the new classroom enrolment has increased to 42 learner. The new classroom has made it possible to split the learners into two classrooms unlike before.

The classroom was constructed last year when pupils were home during the COVID-19 pandemic. It was a great delight when they resumed classes and had a new and spacious room for a classroom.

The number of students has more than doubled compared to last year's class.



Clockwise: the old classroom, the new classroom with a 1000-litre water tank and children learning in the new and spacious classroom



There is a 1000-litre water tank in the school and children have access to ample water supply.

This enables them to wash their hands frequently as per the MoH directives.

Pupils are really enjoying the new facility and the teacher anticipates more parents will keep bringing their children to the center.



A Peek into New look of ECDE Centres in Laikipia



Milimani ECDE classroom, Umande ward before its renovation (left) and newly built classroom (right)



New St. Loius ECDE classroom Igwamiti Ward.



The County Government of Laikipia continues to renovate and building new ECDE classrooms at ward level. This is will offer good learning environment and increase enrolment.

The presence of enough ECDE classrooms has enabled the county to successfully implement the directive of ministry of health on COVID-19 protocols when schools opened this January.

According to CO Education, Sports and Social Services James Mwangi, his department has installed enough water points to promote hand-washing among the pupils.

This will ensure that pupils observe the Ministry of Health guidelines of preventing spread of Covid-19 including maintaining social distance in schools. The department has also distributed learning materials to all the grade one, two and three pupils.

The department will also engage the board of managers in the schools and train them on proper management of the ECDE centers.

Relentless Pursuit of Water for Production Continues



Great progress has made in making water for production a reality in Laikipia.

Several boreholes across the county have been drilled, and installed with the necessary equipment to allow the usage of the underground water.

Being a rather dry area, the county receives minimal rainfall, which necessitates the government to devise mechanism of ensuring her people do not lack the vital commodity.

Taking advantage of the sun as a source of energy, the county government has equipped boreholes with solar panel, which is cheaper than diesel, petrol, generators and electricity in pumping the water. Again, solar energy is a renewable resource.

In this financial year, 2020-2021, some of the programmes undertaken to avail clean, adequate and reliable water for production are as highlighted below:

In Marmanet Ward, the department has completed solar equipping of Limunga-Baraka borehole. The borehole has been equipped with submersible pump, installed with solar panels, and a 10M³ plastic tank installed on a 6M high steel structure tower. Six hundred people are benefiting from this project.

Ndaragwiti borehole in Salama ward has been equipped with solar panels. Further, equipping the borehole with submersible pump, and installation of a 10 M³ plastic tank on a 6M high steel tower structure is already complete. Construction of two community water points and installation of security floodlight in the area facilitates water accessibility 24 hours a day. At least 1,500 people are under direct assistance from this project.

Ndaragwiti borehole in Salama ward has been installed with solar panels and a 10Ms plastic tank this FY

Kite borehole in Igwamiti has been equipped with submersible pump, solar panels, and a 10M³ plastic tank on a 6M high steel structure tower. A 2km piping extension has also been constructed and a valve chamber installation. For easy accessibility of the water to the 1,000 residents, the department has completed the construction of three community water points.

In Ol-Moran ward, the Department of water has equipped Mbogo-ini borehole with submersible pump, installation solar panels, on top of a 10 M³ plastic tank. The project is helping 800 residents through the two water kiosks constructed. A 1km long piping extension has been completed.

Solar equipping of Olmunichoi borehole in Mukogodo West has a beneficiary of at least 200 households. This is after Equipping the borehole with submersible pump, installation of solar panels, and installation of a 5m³ plastic tank. Two community water points have also been constructed for easy access of the water.

Milimani borehole in Githiga ward is now helping 600 residents after repairing of the

borehole, replacement of pumping unit and other electrical accessories were completed in this financial year.

Mukogodo West's Ilpolei borehole is now supplying water to 400 households after the department completed repairing it and replacing the pumping unit and other electrical accessories.

Repairing of Nkando borehole in Nanyuki ward is now complete with a beneficiary of 1,000 people. This is after repairing of the borehole, borehole flushing, pump testing, replaced submersible pump and inverter was done.

The deliberate move by the county government to avail enough clean and reliable water to Laikipia residents is meant to upgrade their lives.

The government has moved from concentrating on inputs and outputs, to ensuring positive impacts.

Laikipians are now able to practice irrigation for both household use and commercial purposes, which has increased the quality of life.

The county statistics show that this is the county with the highest life expectancy, standing at 71 years, way above that of the country.

Laikipia Weather Forecast Available on Online Platform

By Nahashon Maina

Farmers in Laikipia can now be able to access weather forecasts for the next 14 days and also observe the same pattern for the last 10 days.

This is courtesy of Laikipia Agriculture Observatory Platform (LAOP) which uses weather variables and give advisory to farmers.

The platform is unique in the sense that, it has been designed and customized specifically for Laikipia county.

It contains weather prediction data for all the wards and villages in the county.

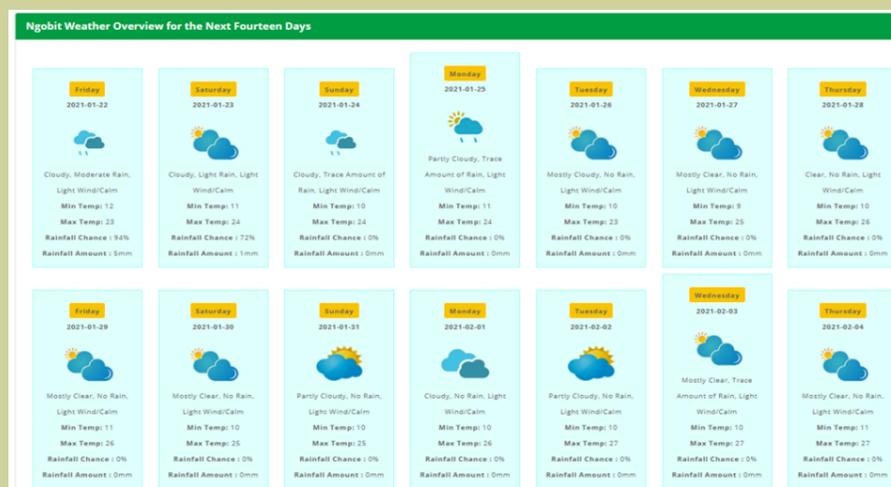
It gives weather forecasts, Agronomic advisory and Agricultural insights.

The farmers will register and be able to observe climate information in their locality. They can also be able to receive a message through mobile phones on the same.

LAOP give real-time and historical records of all relevant weather variables including short-term weather forecasts.

The agronomic will ensure that farmers have the right information to monitor and predict the current situation hence they will be well prepared.

The insight into the climate information provides actionable information and predictions that helps farmers in making better decisions.



Weather data for Ngobit ward as shown on the Laop platform

Farmers data in the LAOP will enable the department to have all the necessary information on farmers and send targeted message on what need to be done. This will help in improving on communication.

Going forward the department will not be guessing who these farmers are, where they can be found or what farming practice they are carrying out. That information will be available to them and ensure proper execution and dissemination of information. Already 45 extension officers and 55 farmers have been trained on how to use the application and they are expected to train other farmers on the

same.

Each trainer has a target of 50 farmers in order to bring on board a total of 5000 farmers in the next three months.

The platform gives farmers to observe climate information on where they are. Laikipia which is located in semi-arid and arid area have different weather patterns.

Unlike other weather forecasts, LAOP is tailored to serve and cover every part of Laikipia county. It is much detailed, in case of Ol-Moran, the crop advisory is to ensure to plant climate smart crops and varieties that are drought and heat tolerant, disease resistant, early maturing and nutrient reach. On livestock advisory: Monitor weather data especially at ward level and act to preserve water forages and grazing fields. Ensure to vaccinate and deworm animals to reduce vulnerability if weather conditions remain unchanged. <http://codetulip.com/laop/index.php>

Ol Moran Farmers Align with County's Strategy of Maximizing Production and Manufacturing



Planting of grafted mango and avocado seedlings at a farm in Ol Moran ward. The grafted seedling mature faster and produce more compared to other traditional varieties.

This is an enterprise that will empower farmers after the mango and avocado harvest.

It will also create employment as well as improve nutrition to the community as the county shifts its focus on production and manufacturing.

