Rural populations are heavily dependent on agriculture as well as different social services for their livelihoods. Yet access to adequate knowledge, modern technologies, financial services and other relevant social services remains a critical issue. Kenya has been a leader in agricultural extension and advisory services in Africa. However, with the adoption of the devolved system of government in 2013, the sub-sector has taken a different direction, leaving gaps. The sub-sector is key to ensuring both food security and wealth creation for Kenyans. It remains the mainstay of the Kenyan economy, accounting for 74 percent of employment and 24 percent of GDP.

In a bid to revitalize the weakening sector, a non-governmental organization - the Forum for Agricultural Advisory Services - Kenya (KeFAAS) - has emerged. The Forum is a network organisation whose core objective is to bring under one framework all players in agricultural extension in the country and contribute to the development of robust extension and advisory services for improved agricultural productivity and food and nutrition security in Kenya.

The organisation was launched in May 2015 with support and leadership of the Ministry of Agriculture, Livestock and Fisheries, African Forum for Agricultural Advisory Services (AFAAS), development partners and other stakeholders and is now registered under the NGO’s Act.

KeFAAS is affiliated to AFAAS, the umbrella network organisation for agricultural advisory services in Africa and linked to the Global Forum for Agricultural Advisory Services - GFRAS. The objective of AFAAS is to create efficient, effective and synergistic linkages and partnerships among member countries to improve the delivery of these services to farmers.

The aim of KeFAAS as the Country Forum (CF) is to provide a mechanism for the diverse actors to exchange information, share lessons, and identify opportunities for developing innovative approaches to provide advisory services in their work domains.

Its vision is “Robust agricultural extension and advisory services in Kenya”, while the Mission is “To improve delivery of agricultural extension and advisory services by harnessing and developing capacities”. The Overall objective is to contribute to the development of extension and advisory services for improved agricultural productivity, and food and nutrition security in Kenya. The Forum continues to recruit members who play critical roles in extension services in agricultural and rural development. KeFAAS members will have the opportunity to contribute in shaping the destiny of this critical sub sector in the country. Members benefit as in the following ways:

- Training of staff from member organisations modern extension services
- Training on content development, packaging and dissemination.
- Free access to, sharing and dissemination of agricultural information, knowledge and technologies through innovative information platforms.
- Assistance and facilitation to upscale best practices, technology and innovations.

Continued on Page 2
The tail end of technology involving cellular has provided loci to spur a revolution of sorts in agriculture.

In the short span of two decades, Africa has witnessed a silent and yet dramatic paradigm shift moving from famine to liberalization to innovations. Critics of this development argue that this is a bubble that will further catalyze increased dependency seeing that Africa is far behind in internet connectivity and innovations in commerce, agriculture and industry. Be that as it may, the farmer in Africa for sure stands to touch the rainbow provided by a fast-tracked access to information jumped out of research boxes to the farm in real time, thanks to satellite.

In Kenya for instance, a farmer in a far-flung county such as Marsabit is being brought into mainstream agricultural activities by the power of a cheap cellular phone. A dairy farmer in Central Rift can access and make a choice on available drugs for his herd just as a fisherman in Busia can access the price for his catch by surfing the Wakulima Market price index. This development cannot be wished away by arguments that internet connectivity is largely underdeveloped.

Today, development agencies such as Access Agriculture place information critical to sustainable agriculture in the palm of the smallholder farmer in farmer own languages, in the pragmatic media streams of videos and web portals. Ten years ago, only a handful of enlightened farmers could perform the feat of proactively seeking and gaining what was then close-circuited innovations in agriculture. The world has simply shifted under the feet of apologists and the farmer is riding the wave of fast broadband networks. For the smallholder farmer, mobile phone technology could not have come sooner.

The centrality of locating what others are doing has driven the farmer to assume the role of principal risk taker, information seeker and investor in commercialized / entrepreneur agriculture. Hence the competition and complementation playing out among innovations to meet the demand for new communication platforms.

Farmers, unlike their urban folks tend to utilize cellular as a tool to seek information or to consult fellow farmers about vexing farm problems rather than a social media playground. This can only develop into mobile phones becoming personalized libraries to stock contacts, networks and consultancies between research and end user. A welcome dent in the frontier to making sense of the question of why everything in Africa has something to do with agriculture. To harness these evolving liberal approaches to agricultural extension will take the determination by sector players like the Kenya Forum for Agricultural Advisory Services to pursue programs that place great premium on freely accessible information platforms.

Bob Muchina is Executive Secretary of Access Agriculture & Chair of KeFAAS - muchina@accessagriculture.org

KeFAAS Membership

KeFAAS is growing remarkably and has already achieved some milestones that include:

- Call for proposals for AFAAS innovation grant out of which three proposals were funded.
- Development of a web portal http://www.kefaas.org/
- Commenced progressive recruitment of members
- Training of member staff on gender-based extension, ICT in extension and the CAADP processes.

Membership of KeFAAS is open to legal entities from the public and private sector providers of agricultural advisory services, namely national and county government departments, civil society organisations, Public Benefit Organisations (PBOs), farmer organisations, agricultural training institutions (universities and colleges), financial institutions, the media, research institutions, agro-processors, inputs and produce traders and any other stakeholders within the agricultural value chains.

By Richard Githaiga - Country Focal Person, KeFAAS
Delivery of agricultural information to clients who include farmers, agro-stockists, agro-processors, marketing agents and other players is an important undertaking by service providers in the sector. Over the years, agricultural service providers have used the terms ‘extension services’ and ‘advisory services’ interchangeably.

The term ‘extension’ has been widely used in Kenya since independence. Although it has not been stated explicitly, the terminology refers to a ‘top-down’ technology transfer system that delivers specific recommendations from source, primarily agricultural research to different consumers of the information. The approach generally uses persuasive communication methods to tell clients which practices along the value chains they should use to increase their agricultural production and productivity.

Due to increased knowledge and understanding of human communication systems in the last century, it became evident that effective communication is structured such that, there is constant feedback between the sender; in this case, the service provider and the consumer of the information. Effective communication in agriculture should be a two-way process where there is constant dialogue between the service provider and the consumer of the information.

The National Agricultural Sector Extension Policy recommends that agricultural information, technologies and innovations provided to farmers and other clients should be demand driven. This process calls for a two-way communication process between the services provider and the client. The use of agricultural advisory services is thus appropriate when used in this scenario. A good example of an agricultural advisory approach that has been widely used in the country is the Farmer Field Schools (FFS). In this approach, learning takes place in the field and knowledge is facilitated through experimentation, observation, data collection, analysis and final decision making. The entire process is guided by a field school facilitator. In the near future, it is envisaged that service provision in agriculture will be based on "knowledge systems" in which farmers and other clients will be seen as experts rather than adopters. However, in disseminating information on services like control of pests and diseases outbreaks where specific interventions have to be applied, the use of ‘extension service’ may be more appropriate.

In conclusion, both terminologies can be applied in reference to the organized exchange of agricultural information and the transfer of skills to help in the improvement of agricultural production and productivity.

Whatever terminology one chooses to use, service provision will be successful only when based on the interests and needs of the clients and at the same time tapping on their existing innovations.

By Timothy Gacheha, Ministry of Agriculture Livestock and Fisheries (MOALF)
He used to abhor planting seasons, as she had to contend with high input costs. Difficulties in accessing affordable credit have always been a strain on her small farm. This season, she was fortunate to get a Kilimo Bora loan after Sokopepe linked her to a micro finance institution.

Mrs. Emery Kawira, a smallholder farmer from Kiirua area of Buuri Sub County in Meru County was among the financially excluded farmers until three months ago when Sokopepe convinced her to start saving through Times U Sacco Society Ltd. Initially, she was unable to receive credit facilities as financial institutions cited her lack of proper book keeping as a barrier to receiving credit when evaluating her viability for accessing a loan.

She says that the training organised by Sokopepe’s Farm Records Management Information System (FARMIS) has empowered and enabled her to utilize the Kshs 20,000 Kilimo Bora loan to improve her agribusiness.

“The beauty of FARMIS is that financial institutions can review our records over a period of time to determine whether we are capable of managing credit,” says Mrs. Kawira.

She has planted maize, beans and potatoes on her 2-acre farm and recorded all the expenses in her farm book to ensure accountability. She is planning to apply for a bigger loan to invest in her farm to increase her productivity and profitability.

On her part, Mrs. Mary Kirima has also used her Kshs. 20,000/= Kilimo Bora loan to cultivate beans, maize and potatoes in her 3 acre farm. She almost quit farming last year after crop failure but Sokopepe’s Production Information Agents (PIAs) convinced her not to give up on farming.

“I am able to track all my agribusiness enterprises and expenses incurred. This has ensured proper use of the Kilimo Bora loans,” said Mrs. Kirima.

After saving for some time, she was able to apply and receive a Kilimo Bora loan from Times U Sacco. She used the loan to buy farm inputs and to improve her farm.

The Sacco charges Kshs 600 as registration fee and a farmer can borrow up to three times the amount saved. Times U Sacco will also train the farmers on financial literacy. The Kilimo Bora loan attracts a 9 percent interest rate. The repayment is after four months when the farmers have harvested.

Mrs. Jedida Karamuta notes that this year she has not struggled to get money for farm inputs and other expenses, unlike previous years, as she was able to receive the Kilimo Bora loan. She received Kshs. 20,000, which she has invested in her farm. Sokopepe has trained her on record keeping. She has also increased the acreage under potatoes, beans and maize to 3 acres unlike before when she used to cultivate only on an acre.

She says that most financial institutions are usually reluctant to lend to farmers but this has changed after training on record keeping and financial literacy.

“FARMIS has enabled me to track my expenditure for each farm enterprise. I have used the loan prudently as I have kept good farm records,” says Mrs. Karamuta.

Mr. Josphat Musenze, Sales and Marketing Officer at Sokopepe says that difficulty in accessing credit facilities has hindered the productivity of most smallholder farmers as they lack enough financing for purchasing farm inputs.

“We are leveraging on existing relationships within the value chains to ensure farmers access financial services sustainably while the financially excluded enjoy new possibilities,” says Mr. Musenze.

He reiterates that financial inclusion will ensure that there are more banked farmers. This will enable smallholder farmers to make informed decisions on financial products and services.

Sokopepe has been linking Meru farmers with financial institutions enabling them to explore their potential especially handling the high costs of inputs. The social enterprise is also working with financial service providers to build financial literacy for smallholder farmers as well as their financial capabilities. Financial inclusion is a powerful tool for achieving the Sustainable Development Goals in promoting economic growth and ending poverty. Smallholder farmers need access to financial services to generate income from their agricultural enterprises, build assets, and manage risks.

By Bob Aston, Sokopepe Trainer
Ltoponua Leldimain is a young farmer in Samburu County who heard an agricultural programme on Serian FM and wasted no time calling up the presenter Nicholus Lenyakopiro. Nicholus in turn referred him to Agriculture Extension Officer, Mary Lemaletian to answer specific questions about his bean farm. The rest, as the saying goes, is history.

Ltoponua has been inconstant touch with Mary and he is planning to fence the farm and introduce a variety of crops. “The best thing is being able to be food secure,” says the newly married livestock herder turned farmer. “His father shared out a portion of his land and gave him permission to grow his own food.

This is a complete turn-around in Ltoponua’s life. Not too long ago he drove his family’s large herd of cattle, goats and sheep across the plains of Samburu County, always in search of fresh pastures and water and today he anticipates an income from the farm even as he tunes in to the Serian FM weekly agricultural broadcasts.

He describes how he was able to overcome the challenges of a blight attack early on his bean venture by keenly following the recommendations from Mary, just as she had enumerated them during the radio programme. “I went and bought the recommended spray, and applied it according to instructions,” he says. Shortly after, he also overcame an aphid attack, thanks to what he learned on radio.

In its unique approach to agriculture programming, KiMI’s Farmer Voice Radio (FVR) model the reach of extension services in remote areas is vastly increased at lower costs per person receiving information. Farmers participate by calling or sending short messages (SMS) to the stations during the live broadcasts or following up later with the agricultural expert on the show.

There is a huge demand for agriculture extension services among farmers, and where previously officers were limited by resources and distances, extension via radio has greatly eased access to farmers on the one hand, created a diversity of choices and provided a timely and efficient way to exchange information between the departments of agriculture and their clients.

Ltoponua’s encounter with Serian FM is replicated across the five counties of Samburu, Marsabit, Garissa, Isiolo and West Pokot where KiMI in partnership with the Syngenta Foundation for Sustainable Agriculture (SFSA) is implementing a one-year project with the County Departments of Agriculture, Livestock and Fisheries to raise agricultural productivity in regions so far lacking major extension initiatives of this type. The participating radio stations include Serian FM in Samburu, Star FM Borana Service in Marsabit, Kenya Broadcasting Corporation’s Rendille, Borana and Somali services covering Marsabit, Isiolo and Garissa counties as well as a more national reach through its digital platform.

In Marsabit, farmers easily identify with Koopi Qaabare, Borana for Farmers’ Programme, a weekly live radio programme. According to Duba Nura, an Agriculture Extension Officer with the County Department of Agriculture, Livestock and Fisheries and a regular studio guest on the programme, the response is phenomenal: “The feedback we receive from farmers is overwhelming,” he adds, “but the most gratifying thing about Koopi Qaabare is that farmers listen to the programmes then go back to practise on their farms what they learn.”

This is the true meaning of e-extension, when farmers combine the two versatile technologies, mobile phone and radio and put to action the information acquired. Says Duba, “Our phones don’t stop ringing, and it is not just farmers calling but also stakeholders within the agriculture sector seeking ways to better reach farmers with products and markets.”

Continued on Page 6
Hanging garden technology is the growing of fruits and vegetables in containers that are hanged on cross bars or placed on shelves and platforms in a stair case formation. The technology maximizes the use of available space to produce food and is a low input garden activity suitable for households where land, labour and time is constrained. Hanging garden are best suited for crops which do not have extensive rooting systems and do not grow to heights greater than 75 cm. Examples of suitable crops are;

- Green leafy vegetables that include spinach, kales, onions, amaranthus, black night shade, spider plant and crotalaria
- Fruit vegetables like tomatoes, brinjals, capsicum and chilies
- Fruits such as strawberries and goose berries
- Herbs and spices like mint, coriander, celery, parsley, thyme and rosemary

Advantages of hanging gardens

- Grower generates income from sale of surplus produce
- It is more secure from theft as it is sited near the homestead
- It is time saving
- Growing of different vegetables and fruits is possible on the same structure at the same time
- It is possible to grow crops on clean root media when in polluted areas
- Continuous harvesting and replanting is easy
- Water utilization is efficient
- Design is flexible and applicable at ground level, balconies or at roof tops
- Some hanging gardens are movable hence they can be shifted from one site to another
- Hanging gardens have aesthetic outlook and can be incorporated in landscaping.

Disadvantages

- The technology is unsuitable for deep rooted plants
- Requires regular change of soil or growing media due to leaching
- Requires skills in choice and arrangements of the crops on the platform

Site selection and Planting Media

Any space receiving at least 6 hours sunlight per day is appropriate for hanging gardens. A media mixture of top soil with manure in the ratio of 2:1 is an ideal growing medium. A combination of loamy garden soil, sand and peat moss in the ratio of 2:1:1 also makes a good planting media. Depending on one’s preference, a commercial or synthetic potting mixture made from sawdust, peat moss, vermiculite and wood chips can be purchased and used to fill the planting containers

Properties of ideal planting media

- It should be free of diseases and weeds
- It should be lightweight and capable of holding moisture
- It should have good drainage capacity
- It should contain vital nutrients
- It should be locally available
Design of a 3 level (3m x 3m) hanging garden

As illustrated below, a 3m x 3m space is required but the design may also vary depending on the space available. A vertical 3m high strong post is firmly fixed at the centre and cross bars or stair cases are fixed on the post at 1m intervals above the ground. The containers filled with planting media are then hanged on the bars or placed on the stair cases and balanced to ensure stability of the stand. The seedlings/seeds are then planted in the containers. White containers are recommended because they reflect the sun rays and reduce evaporation.

Pests and disease Management

Companion gardening is highly recommended to keep insect pests away. Crops like garlic, onion, chilies or rosemary act as repellants and can be incorporated. However, in case of pests or diseases attack, use recommended control methods.

Production

Two-level hanging gardens can produce one and a half times vegetable produce compared to 2m x 2m garden.

Source; MOALF, 2013). “Urban Agriculture Technologies Booklet”.

Continued From Page 5

EXTENSION SPEAKS THE LANGUAGE OF FARMERS

At Kilimo Media International (KiMI), this question is approached from the standpoint that small holder farmers understand and appreciate concepts better when they hear them spoken in their local languages. One of KiMI’s major selling points is being able to deliver agricultural extension services to hard to reach populations, effectively giving extension officers and agricultural experts a large platform to reach a greater number of people in a less labour intensive manner. The extension officers all admit that using the radio has enabled them to increase efficiency and effectiveness in their work.

By Juliana Omale-Atemi, Kilimo Media International

Agtube is a new social media platform for rural farmers in developing countries, and all those with an interest in sustainable agriculture around the world. It is a place where you can upload and share your video clips in any language. For more visit; www.agtube.org
Partnership for agricultural development plays a complementary role. Public extension has strengths in strong networks, wide reach and covers broad spectrum of agricultural value chains. However public extension has manpower inadequacies in terms of ratio of farmers per extension worker, financial constraints and lack of updated information. On the other hand private extension has strengths in better quality service for high value crops.

However, it also has inadequacies due to limited reach in terms of farmers and value chains, inadequate networks and resource poor farmers are not covered adequately (due to their business model). Hence supplemental efforts with various institutions is the key to agricultural development where public extension partners with NGOs, farmer organizations, cooperatives, self-help groups, input dealers, research institutions, private enterprises and ICT companies in the provision of extension services.

The potentials areas where public private partnership has and continues to be applied successfully in agricultural extension include infrastructure support for production, technology dissemination, input supply, value addition, nutrition education and marketing.

The home economics programme is an agriculture extension approach with the role of promoting utilization of highly nutritious foods through nutrition education. To achieve this, the programme collaborates with various partners like the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT). The smart food campaign is a joint initiative of the Ministry of Agriculture, Livestock and Fisheries, the Ministry of Health and ICRISAT. The campaign seeks to promote crops that are not only highly nutritious but also hardy and can survive extreme harsh weather conditions. The joint initiative has branded sorghum, millets, pigeon peas, groundnuts, cowpeas and green grams as Smart Foods.

One of the activities of the project was the smart foods cooking show. Susan Kamau of Kenyan Kitchen was awarded a contract to conduct the show, jointly done by Strathmore University, Sankara hotel and ICRISAT. Strathmore University gave out the kitchen and also offered a scholarship to the winner to study hospitality in the university. This gesture attracted contestants for subsequent smart foods cooking shows.

By Jane Wambu, Agricultural and Rural Innovations Specialist

Homepage; http://networking.afaas-africa.org/
Kenya is urbanizing rapidly at 4.4 percent annually and it is estimated that urban areas will account for 54% of the population by 2030 (UN-Habitat, 2013; KNBS, 2009). The biggest challenge brought about by the increasing urban population is ensuring food and nutrition security as enshrined in the Kenya Constitution.

Several studies have revealed that urban agriculture (UA) could contribute significantly to urban food security in addition to employment and income generation (UNDP, 1996; Mougeot 2006). Globally, about 15-20% of the world food is produced in the urban areas (UNDP, 1996; Armar-Klemesu, 2000).

The Kenya Government recognizes the role played by UA in improving food accessibility for the urban populace as evidenced in several policy documents that include; the National Food and Nutrition Security Policy, the Draft Urban Agriculture, Livestock and Fisheries Policy and the National Urban Development Policy.

The Urban Project

The Ministry of Agriculture, Livestock and Fisheries is implementing the Urban and Peri-urban Agriculture Project (UPAP) in the three counties of Nairobi, Kiambu and Kisumu for the period 2013 to 2018. The main goal is to contribute to improved livelihoods and enhanced food and nutrition security for youth and women in urban and peri-urban areas. The project will contribute towards increasing employment and income generating opportunities through urban agriculture.

The projects key outputs include; to promote and disseminate urban agriculture, livestock & fisheries technologies applicable to urban youth and women, to stimulate urban business opportunities in crops, livestock and fisheries value chains for the youth and women, to promote youth investment in environmental protection and remediation business and to establish and strengthen partnerships and collaboration amongst stakeholders in urban agriculture value chains.

Among the technologies being disseminated includes; green house vegetable production; multi-storey gardening small-scale drip irrigation, Poultry, rabbit and dairy production, appropriate production structures, aquaculture, aquaponics, ornamental fish farming, Food safety and hygiene, Agroforestry and floriculture, Value addition and environmental management.

Key Achievements

- 2296 youths from Nairobi (Kibra, Mathare, Korogocho, Mukuru kwa Njenga) and Kiandutu in Kiambu informal settlements trained on urban agriculture under the Youth Empowerment programme of the National Youth Service (NYS) in 2014/15.
- 26,524 multi-storey vegetable gardens established which realized yield estimated at 795 tons of kales and spinach.
- Developed, printed and distributed 5,000 copies of “Urban agriculture technologies for income generation” Vol I & II.
- Established 2 pilot urban agriculture learning centres in Kiambu County at Kiambu Institute of Science and Technology and Jomo Kenyatta University of Agriculture and Technology in partnership with county government.
- Developed draft urban and peri-urban agriculture, livestock and fisheries policy and strategy

Lessons Learned

- With adequate legal, regulatory and financial support UA is a vital tool for alleviating poverty, enhancing food self sufficiency and employment creation particularly for the urban poor.
- UA has the potential to provide cheap, fresh and nutritious food
- Urban population provides a ready market for UA produce and products
- UA offers a means to convert underutilized or non-utilized urban resources into socially profitable component of urban development.

By Veronica Kirogo and Douglas Kangi - Ministry of Agriculture Livestock and Fisheries (MOALF)
Definition of innovation appear different and divergent, however we can describe it as about people, the knowledge, technology, infrastructure and cultures they have created or learned, who they work with, and what new ideas they are experimenting with. Innovation is not only driven by technological advances, but also through novel ways of organizing farmers and connecting them to the information they need.

Many smallholder farmers around the world still farm the same way their ancestors did thousands of years ago. Traditional farming approaches may continue to work for some, but new practices can help many to substantially improve yields, soil quality and natural capital as well as food and nutrition security.

Advances in technology are key to the future of agriculture as farmers strive to feed the world with limited natural resources. Our country has in the recent past faced frequent recurrent food security challenges resulting to spiraling food prices, high input prices, prolonged and severe drought and high inflation rate.

The three innovators have similar goals of developing content on areas with interest to farmers, sharing ideas with the extension officers, improving the already developed content and disseminating the information to farmers within their reach. The main channel of dissemination is mainly mobile phone, which is a tool accessible to majority farmers in Kenya.

The iCOW is among them whose main objective is to develop an Agriculture and Advisory Service (AAS) that is sustainable and scalable supporting farmer to farmer extension therefore growing the iCow network. Green Dreams TECH Ltd developed iCow with main motivation being to assist small scale farmers maximize their returns by addressing several issues throughout their cows’ lifecycle. iCow is accessed by farmers through their mobile phones or the internet.

KenTel is an ICT for Development nonprofit organization which has undertaken projects targeting farmers using various ICTs, the technologies they have used range from interactive voice systems, short text message services, social media and interactive websites. Animations and explainer videos is an area they have been privileged to create content for mass registration. The AFAAS call was an opportunity for them to pitch the use of explainer videos, illustrated drawings and animated graphics to create and share content using this technique for agricultural extension and services provision.

Lastly, there was the African Technology Policy Studies and Network (ATPS) which is a trans-disciplinary network of researchers, policymakers, private sector actors and the civil society that promote the generation, dissemination, use and mastery of scientific Technological Innovation (STI) for African development, environmental sustainability and global inclusion. One of their many project that will be tagged to this grant is; Improving Agricultural Productivity and Climate Change Resilience using the Landinfo Mobile App Technology.

One of the greatest achievements in life is to actualize a planned goal within a desirable frame work. In view of this the Forum for Agricultural and Advisory Service Kenya (KeFAAS) is putting efforts to upscale Agricultural Extension Services (AES) by promoting innovative projects. In mid October 2016 three innovators could not hide their joy after receiving their cheques from KeFAAS, they were among 15 others who had submitted their proposals to African Forum for Agriculture and Advisory Services (AFAAS) on innovation.

Millions of smallholder farmers live in remote areas, and are often isolated from market opportunities. Innovations in connecting these farmers to market are happening in many ways – resulting from social, technical and scientific advances. These advances help farmers find and share up-to-date market pricing information; protect and add value to their harvests; invest in their business; reduce and share risk; and access finance and training.

Sometimes, innovations to address these issues are taken to farms via extension training. Farmers themselves can be organized in innovative ways so they are reached more easily and effectively with information. The type and style of the extension itself has evolved much over time. For instance, advances in satellite mapping and information and communications technologies (ICTs) are transforming more traditional agricultural extension work today. Farming is becoming more precise and productive as a result.

The extension service is one of the critical change agents required for transformation of subsistence farming to modern agriculture. “

By Silvia Mburugu, CIKM-KeFAAS
MEMBERSHIP CATEGORIES AND SUBSCRIPTION RATES

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Bank Account Number: Cooperative Bank Ukulima Branch - 01128451920700

CURRENT KEFAAS MEMBERS

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KeFAAS has 20 individual members.

We welcome you to register for any of the above categories. You can access registration details through the KeFAAS website or by telephone using the contact details provided on the next page.
Millions of small holder farmers can now access verified and valuable agricultural content, thanks to the advent of mobile phone-based agricultural information platforms. iCow is one such platform, developed in Kenya by Green Dreams TECH Ltd. It is designed to be simple, cost effective and reliable and available over feature phones as well as smart phones. Farmers using iCow improve their skills through enhanced knowledge and in so doing reduce their risks and increase their productivity and incomes.

iCow hosts a variety of products. Farmers can either subscribe to iCow services where they receive scheduled messages or they can access the content any time they require it. The information farmers receive is in short message (SMS) format and in their language of choice. In Kenya it is available in English and Kiswahili and soon in Ethiopia in Oromiffo, Amharic and Tigringnia as well as Tanzania in Kiswahili.

The initiative is a comprehensive solution for farmers designed not only to support them with livestock and crop production but also to connect farmers to the vital players in their agricultural ecosystem. These include input providers, agricultural financial service providers, veterinary experts, agricultural extension service providers and government agencies.

iCow is packed with smart tools that help farmers manage their everyday risks. These include tools that help a farmer understand the soil type, identify problems affecting crops and even select the correct seed for geographical zones. The farmer is thus able to move from crisis managing to becoming more productive and sustainable. The iCow Farmer Library is designed so that farmers can search and find verified valuable agricultural content easily, quickly and cost effectively. In essence it is an offline agricultural wiki enabling farmers that are not connected to the world wide web access vital content.

It is expected that the services provided by iCow is will help small holder farmers across Africa become climate resilient and food secure. Building on the success of iCow in Kenya where over 50,000 farmers are benefiting, Green Dreams TECK Ltd is now starting the iCow Ambassador initiative that will nominate 50 exemplary iCow farmers across the country. The iCow Ambassador initiative will help these farmers build capacity to share their farms for demonstration in their communities. GDT recently won a grant from AFAAS to help support this initiative and is currently rolling out the same.

By Su Kahumbu Stephanou