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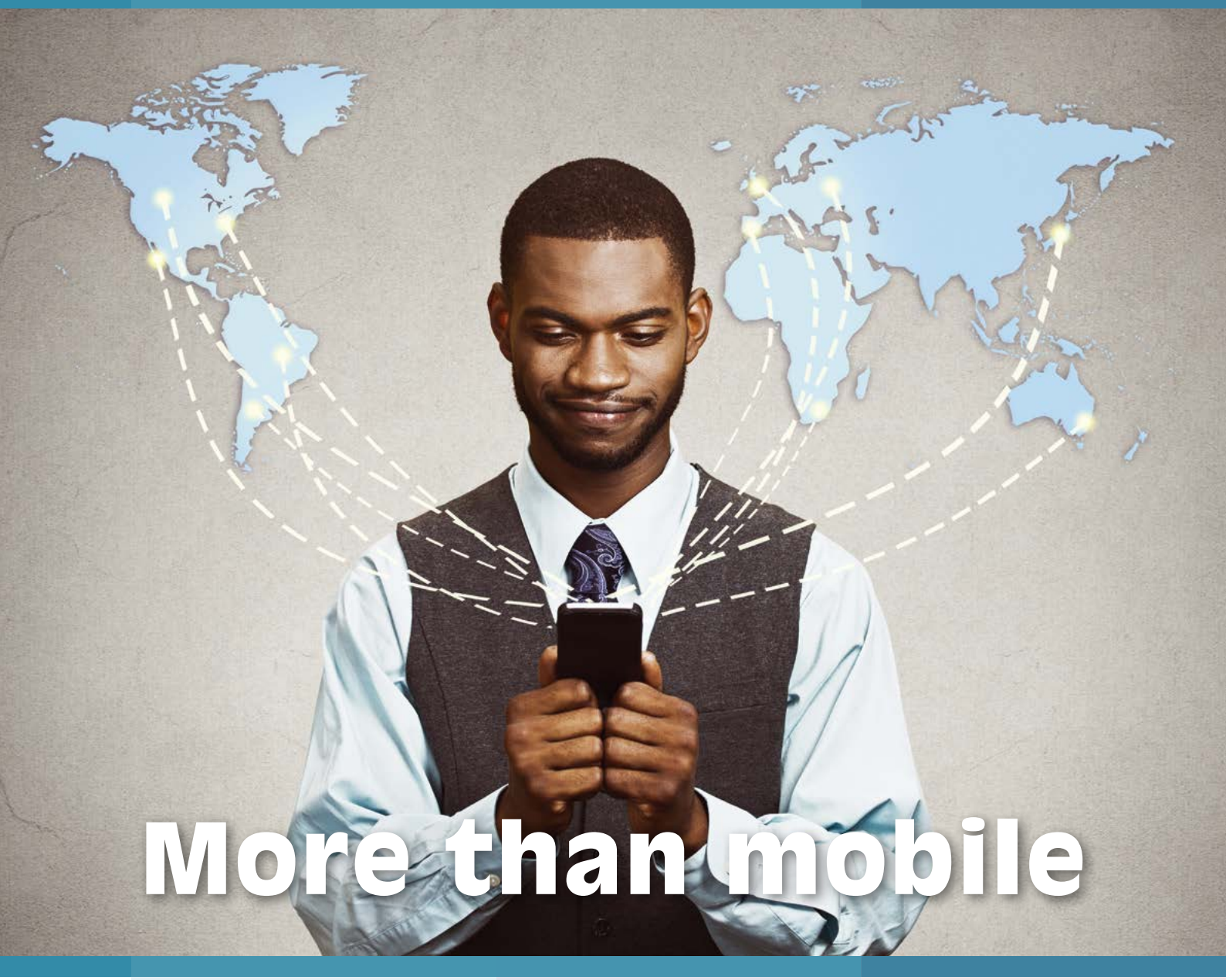
Using animated videos to deploy educational content to teach low-literate farmers

Academic institutions are well positioned to use a range of ICT delivery channels

The agricultural sector can make good use of the private sector's creativity



More than mobile

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ICT Update

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Guest editor

More than mobile

Mobile agriculture has contributed successfully to the current developments in ICT4Ag sector. This issue's guest editors predict further impact in the sector if cross-channel partnerships in ICT4Ag projects are achieved.

Across the African, Caribbean and Pacific group of states (ACP), almost 200 million people make their living directly from agriculture, most of them in sub-Saharan Africa. Many of these are smallholder farmers, representing some of the world's poorest people. Living outside urban centres, smallholder agricultural workers are hard to reach with services like agricultural extension support and formal financial services. ICTs can help to mitigate these gaps. Mobile offers a portable and relatively inexpensive communication mechanism which can be used to access information and financial transactions for previously underserved people. GSMA Intelligence estimates that almost 50% of the developing world population owned a mobile phone in the first quarter of 2015. However, mobile need not act in a vacuum. Creating mobile services that are strengthened by alternative media channels such as TV, radio and increasingly the internet can only expand the addressable market for much-needed services.

There is a willingness to collaborate between different channels to increase impact

The opportunity for mobile

There are three key areas where smallholder farmers are typically underserved and where mobile phones can play an important role.

First, mobile phones can help to address agricultural workers' information deficit. Smallholders rely on traditional sources of knowledge about crops, livestock, marketing and weather, which might not be easy to access and are often not reliable. Agricultural value-added services (Agri VAS) can help to overcome this challenge. In Tanzania, for example, mobile operator Tigo, a grantee of the GSMA mFarmer initiative, delivers agronomy information alongside market prices and short-term weather forecasts through its Tigo Kilimo service. The service had around 400,000 registered users in December 2014.

Mobile can also help to tackle supply chain inefficiencies: poor logistics and weak infrastructure in rural areas can cause waste of agricultural produce and other resources. Business-to-business (B2B) solutions like Syngenta's Farmforce allow agricultural businesses to manage the relationships and transactions with their smallholder suppliers via feature phones (SMS) and smartphones (apps), while increasing standards and efficiency of production and improving traceability through the supply chain.

Finally, mobile can facilitate access to financial services. Farmers do not always have ready access to capital, which makes it difficult for them to invest in new farming technologies. Mobile financial services (MFS) can offer loans, interest-bearing savings and e-subsidies for fertilizers, which target smallholders. Mobile agriculture insurance could reduce the risks associated with agricultural production, such as changing weather patterns and harsh weather events.

Driving adoption of mobile money in the rural market is a new and promising area for mobile operators, which also means that few examples of best practice are currently available in this space. However, mobile operator Vodafone are forging the way with Connected Farmer in east Africa, using M-Pesa to enable farmers to save and invest.

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The mobile agriculture landscape

The GSMA deployment tracker follows 124 live mobile agriculture (mAgri) services worldwide. Early mAgri services were predominantly in South Asia, with the first African services launching in 2008. The number of mAgri service launches began to increase in 2009, and peaked in 2013 with 27 mAgri services launched that year. The majority of the services in these regions are business-to-consumer (B2C) services providing information on local weather, market prices for agricultural products and information on crops and livestock.

In the four GSMA focus regions (sub-Saharan Africa, South Asia, Latin America and the Caribbean) there will be an estimated 47 million potential Agri VAS users at the end of 2015. Fifty-seven percent of these users, or 27 million, are in South Asia. Sub-Saharan Africa represents close to 16 million potential Agri VAS users. Latin America and the Caribbean follow with just over four million. As mobile operators and VAS providers focus more on underserved rural areas, the number of Agri VAS users is expected to almost double, from 47 million in 2015 to over 90 million in 2020, representing growth of 14% per year in this five-year window.

According to GSMA Intelligence analysis, India is the largest market globally with an addressable market of 22 million Agri VAS users in 2015. After India, the most potential lies in East Africa: Kenya, where GSMA is tracking 19 Agri VAS and Agri mobile financial services (MFS), and Ethiopia both have around two million estimated users.

In ACP states, two markets to watch are Ghana and Haiti. Ghana has benefited from the presence of pan-African technology and content providers like Esoko, whose services target smallholder farmers. If more operators embrace the mobile agriculture opportunity, the country could reach close to two million Agri VAS users by 2020. There is great potential for mobile to address the poverty challenge in Haiti. Mobile penetration approaches 75% of the population and over 50% of the active labour force work in agriculture. Mobile services targeting the rural population could play an important role in increasing agricultural productivity, which to date is extremely low with cereal yield at just over one ton per hectare.

GSMA's experience suggests that services are scaling more rapidly in those markets where the content ecosystem is more advanced. Public investment and public–private partnerships are becoming essential tools for extending connectivity, services and information. Partnerships between mobile operators, Agri VAS providers, content providers and government institutions, as well as agri-businesses and other value chain players, are fundamental to create these ecosystems. However, such partnerships are often complicated to broker, as different players bring different objectives to the table.

Beyond mobile

Ongoing activity at the Technical Centre for Agricultural and Rural Cooperation (CTA) in Wageningen, the Netherlands to build an Apps4Ag Database reveals a wide range of ICT solutions using ICT channels outside mobile such as video, radio, web, and animations. The initiative shows the highly diverse nature of ICT applications with little coherence in their development process, resulting in huge overlaps in the services offered in some areas and leaving gaps in others. Instead of maximising their target audience by leveraging several channels, most VAS focus on the power of a single channel to reach their users.

As within the mobile agriculture ecosystem, partnerships between ICT providers are not always easy: differing time scales, competition for resources, and clashes in organisational values and culture can inhibit these relationships. However, a CTA conference in October 2014 suggested that the outlook was hopeful for cross-channel ICT4Ag products. There is a willingness to collaborate between different channels to increase impact. Participants resolved to explore new ways to partner and generate learnings and insights that can be shared with the broader community.

Inspiration can be taken from projects outside of ICT4Ag, such as BBC Janala. This service driven by BBC Media Action combines a TV soap opera with a mobile learning platform across all the major network operators, as well as online and via printed resources. By offering a variety of channels BBC Janala has reached 28 million users, relying on a number of valuable partnerships with mobile network operators and content providers. Brokering partnerships between different organisations can be challenging, but where it can be achieved the potential impact for end users is greater. ◀

Using audio to deliver knowledge

Audio is an effective way of delivering agricultural extension information

Soon audio content produced for radio will be more efficiently repurposed for mobile phones.

More than mobile

If you wish to deliver agriculture extension information to rural farmers, an audio-based solution may be your most effective option, particularly if you are trying to reach the more marginalised or vulnerable farmers. Both Literacy Bridge and Farm Radio International (FRI) have been using audio to reach farmers for seven years and 35 years, respectively. FRI delivers audio content through its network of radio station partners, while Literacy Bridge does the same through its Talking Book device, a robust audio device designed to deliver health and agriculture recordings to rural villages.

Using audio for oral cultures

Most of the world's poorest farmers have never had the chance to attend let alone complete basic education and are therefore illiterate. Not only does this mean they cannot read, but they are also unable to take notes when they have the rare opportunity to learn from an extension visit. Many literate farmers in oral cultures also prefer to learn through audio compared with video or text.

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FRI and Literacy Bridge both create audio recordings of expert interviews as well as peer endorsements, songs, stories and dramas. Providing the same information in a variety of audio forms helps farmers to understand and retain more than through a single format.

When delivering this sort of audio content it is critical to get feedback and ideas from farmers. One of the ways FRI does this is by creating radio programmes that include a period of time for listeners to call and text-in to engage in a discussion with the agriculture experts or participate in radio polls. Literacy Bridge's Talking Books do not allow for this type of live discussion. Instead they allow farmers to record their questions and comments, which are reviewed monthly to guide future content. The Talking Book also captures usage statistics to allow Literacy Bridge and its partners to see exactly which messages are most popular and which communities are most engaged.

Running a successful agriculture education programme requires more than great technology and content. FRI and Literacy Bridge both work with community listener groups to engage listeners and promote group discussion. This is also a forum for the occasional need for a visual display. However, in oral cultures, visual display is far less important for most topics than in other cultures.

In some programmes, such as Literacy Bridge's collaboration with UNICEF in Ghana, Talking Books loaded with seasonally applicable content are provided to each and every household in a village for one week every month. This allows men, women, and children to listen and learn when their time allows. The approach has consistently demonstrated four to eight hours of listening per family each week. However, this type of programme has additional expenses compared to group engagement.

Why not audio over traditional mobile devices?

If the majority of your target audience owns a smartphone, providing audio over smartphone along with video enhancements would be worth exploring, but there are a few challenges to this approach. Smartphones must be kept charged in villages without electricity. Smartphones also have a limited volume that most groups strain to hear in the typical outside village listening environment. But the biggest problem with smartphones today is that many organisations are trying to reach people who do not already own them, and the cost of equipping each person with a smartphone is many times the expense of either radio or Talking Books.

Feature phones are much more commonly owned, but they have additional drawbacks. Mobile phone programs typically use content one minute in length. This can be enough to disseminate a concept, but is no substitute for the depth of instruction that one can achieve through a 10- or 20-minute interview or drama. There are three reasons typically given for why mobile voice content does not go much beyond one minute: the per-minute cost of a voice call, the administration of the billing schemes used by mobile network operators and the usability concerns from listeners after holding a phone to their ear for more than a few minutes.

In addition, while phone ownership may be relatively high across a district, one will find that the most marginalised people are the ones who do not own their own mobile phone. This is why the government of Ghana's 2010 census showed that only 11% of women in rural areas of the northern half of the country owned their own phone. Even today, many women rely on the use of their husband's phone, which inherently leads to reduced access to knowledge delivered over a mobile phone.

In time, many of these issues will slowly be resolved and more and more audio content **produced today for radio and Talking Books will be repurposed for mobile phones. But for hundreds of millions of people today, these realities have made radio and Talking Books a much more usable and cost-effective solution.** ◄

Video-based learning for rural communities

Rikin Gandhi and Aishwarya Pillai explain how video-based learning can encourage communities to be co-creators of knowledge and not just passive recipients.

Given the high illiteracy rates of smallholder farmers in developing countries and their lack of access to timely and relevant information for improved agricultural productivity, development agencies have been exploring the audiovisual medium to augment the impact of extension services targeted at this group. Although broadcast television, a trusted tool of traditional extension systems, has proven reach, the viewers' ability to connect with and actually use the information beamed at them can be limited. The need to give voice to and involve the community in content production and the distribution process for extension services to be truly impactful paved the way for the participatory video approach, an approach which empowers the community to create and share the information they require.

Digital Green has found that mediated screenings of localised videos can transcend the limitations of old-school extension systems in terms of generic one-size-fits-all content and sub-optimal communication skills of the extension agents. An evaluation conducted by Microsoft Research India in 2009, entitled *Digital Green: Participatory Video for Agricultural Extension* found that facilitated or mediated video viewing can motivate farmers to adopt new agricultural practices for about one-tenth of the cost of traditional extension services.

Localising videos is a way of encouraging communities to try new ways of treating seeds or ditching commercial pesticides. Digital Green's videos feature community members who typically belong to the same district as the viewers, demonstrating best practices in their own fields and homes, adding to the credibility of the messaging. The video screenings are mediated by trained community members who help to improve the audience's recall of the messages shared. These videos are produced on low-cost equipment by community members, so the videos are of, by and for the community.

Beyond video

The approach goes beyond videos, encouraging the community to co-create knowledge. Farmers are more likely to adopt solutions they are a part of. The approach must respond to community feedback, channelling data and feedback received from the community at the individual level (during video screenings) into the video production and screening and dissemination processes and overall programme performance.

Along with details like name and gender, the farmers' attendance at video screenings, interests, queries, comments and any impact on their behaviours as a result of adopting a new practice or technology are recorded. The farmers share their thoughts freely, from the videos they would like to watch to the viewing experience to the challenges they face in their daily routines. This feedback is used to inform further iterations of not just the videos, but also of essential background processes such as storyboarding, the messaging or even the way a screening is organised.

This community-driven content production and delivery process can be effortlessly integrated with existing public and private extension services, using functional local forums and units such as farmers' groups and women's self-help groups. Frontline agricultural and health workers who are part of existing development interventions can be trained to use community-sourced videos as job aids to change behaviours. The approach is fluid enough to converge with other ICT channels such as community radio, mobile messaging and interactive voice response (IVR) systems, laying the foundation for potential integrated ICT-supported extension and knowledge exchange systems with superior reach and depth of information on agricultural best practices. The video channel can be used to inform farmers of scheduled radio broadcasts, which in turn reinforce the practices promoted through the videos, while IVR allows farmers who have watched a video to share comments and queries, receiving a call back with relevant answers, vetted by experts.

Technology in itself, though, is not the solution for development issues. It can at best magnify human intent and capability. Digital Green's approach has been successful only through partnerships with organisations that already engage with farmers, where its technology helps improve the efficiency of their efforts and broadens the participation of the communities that they work with. It is thus critical for Digital Green to identify the right organisations to partner with – those that have existing community networks and extension services at scale, are engaged with a cadre of frontline workers and provide linkages to resources required for the promoted practices. For such a community-centric learning approach to work, it is also essential to identify and engage with key influencers, local individuals who are respected and trusted within the community, who will go on to feature in the videos as 'actors' promoting best practices or serve as mediators screening the videos and catalysing discussions which could improve behaviours impacting the community's well-being. ◀

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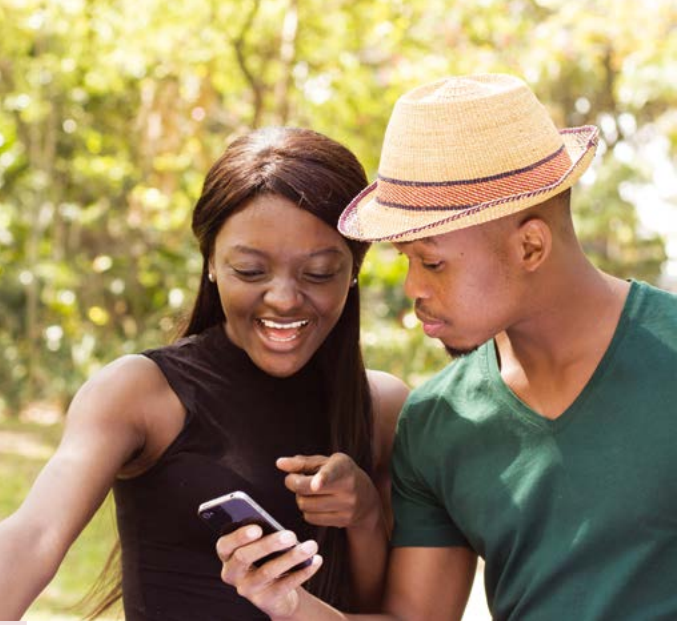

Scientific animations without borders

Julia Bello-Bravo and Barry Robert Pittendrigh outline an emerging strategy to connect local and global experts to create and deploy educational content for low-literate learners in the form of animated videos.

Bluetooth® and video-capable cell phones, along with other video-capable devices in the global marketplace, have made it possible to use new strategies, including two approaches to develop educational content: live-action filming and animations

More than mobile

One of the United Nations Millennium Development Goals is to eradicate hunger, with agriculture being a major pillar of this objective. Subsistence farmers in developing countries still lack access to agricultural information, however, a problem that is further complicated by the fact that many are low-literate learners who often speak different languages. The resources for addressing these issues, in relation to the magnitude of the problem, are miniscule. However, there are global changes occurring that may impact how knowledge can be shared with low-literate learners. The advent of Bluetooth® and video-capable cell phones, along with other video-capable devices in the global marketplace, has given rise to a variety of new strategies, including two broad-stroke approaches to develop educational content: live-action filming and animations. Even better, these approaches do not compete with each other: they are potentially highly complementary strategies to help deliver solutions.

The problems of educating subsistence farmers on improved agricultural techniques are vast compared to the financial resources available. So we must find ways to involve more players in the process of creating and deploying content related to agricultural best practices. The individuals and groups in this process can be broadly identified as 'insiders' and 'outsiders'. The insiders include those who are professionally involved full-time or even part-time in international development and have financial support. The 'outsiders' include those that can assist others in their or other communities, but are not financially supported or primarily focused on international development. These 'outsiders' could be small NGOs or volunteers. The 'outsider' community is vast and has been a traditionally untapped resource. So the question is, how do we connect the 'insiders' and 'outsiders' in an efficient and cost-effective manner to create and share useful content for subsistence farmers?

Animations emerge as a logical strategy to 'connect the dots' of people globally, in order to develop efficient and cost-effective content. Online interaction makes it possible to create scripts, storyboards, animations and voice-overs cost effectively in different languages. Animations can be entertaining and easily comprehensible, but most importantly they get around cultural and generational barriers. Once created, the content can be made available for organisations to use with target groups from highly divergent places, cultures and languages. In addition, content can be easily modified for new situations through online interactions of partners across the globe.

Bringing the groups together

Scientific Animations Without Borders (SAWBO) is an ongoing 'rethink' of how to bring together these 'insider' and 'outsider' groups to benefit end users. SAWBO relies largely on expert volunteers from around the globe to make sure its animations are accurate. Once created, animations are made freely available through multiple online and offline platforms. The organisation's approach also democratises access to information by making it available to all.

Diverse individuals and organisations have used these animations in their programmes and their deployment pathways. One example is a young man who lives in Burkina Faso. He downloaded animations onto his cell phone, which he then used to show the videos to farmers, who were able to understand and adopt the techniques shown in the animations.

SAWBO has also worked with larger NGOs, academic institutions and government organisations to create and deploy content. The organisation's animations have also been used on TV stations. Recently, SAWBO released the *Deployer App* for select Android devices. It allows users connected to the internet to find and access videos from the programme's complete library of animations, download videos one at a time, and store them on their cell phones for easy Bluetooth® transfer when the user is offline and in the field.

Although there is an emerging global community creating live-action and animated agricultural educational videos, the resources available to create such content are insufficient, especially if one considers the global needs of subsistence farmers. In the future, the 'outsiders' and the 'insiders' will be concentrating on ways of getting these diverse groups to work together to come up with solutions that address these needs. ◀

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Sustainable and scalable business models

Why is it important to consider different business models in ICT4Ag?
The ICT4Ag sector is still very much in its early stages. We are all still learning about what works best, and that means experimenting with products and business models. As we experiment, however, we need to make sure we are planning for long-term success, which means creating business models that are both sustainable and scalable. Sustainability is about making enough money to survive – ideally this is revenue from farmers, agribusinesses, or other private sector stakeholders, and not long-term funding from donors. Scalability is ensuring there are sufficient revenue-generating customers for your product, and that you can reach them in a cost-effective manner.

Most of the products that I see in the market today can be defined as either direct-to-farmer (the majority of products) or business-to-business (a growing segment). The direct-to-farmer model was the focus for many of the first generation of ICT4Ag products – many of which were donor or NGO driven, focused more on farmer impact than on sustainability and scalability. Direct-to-farmer products are exciting because of the large potential customer base, but very few businesses have been able to translate that potential into reality, even those with clear value and low costs. I think we will see more experimentation with alternative revenue models (those that do not depend on farmers paying for the service). The models that look at monetising farmer data and integrating digital financial services are some of the most exciting.

Business-to-business models targeted at agricultural business are starting to get more attention now. These businesses are often better positioned to understand and quantify the value of ICT solutions (e.g. transparency, visibility, farmer loyalty and cost of sourcing), and thus can justify paying for them. Even for ICT4Ag providers who are most interested in farmer data and farmer relationships, a B2B solution can be a great starting point – as agribusiness enrol their farmers in your platform, you are expanding your farmer user base. Per-farmer acquisition costs in this model are much lower than large-scale marketing and education campaigns.

How are business models being used in different ICT4AG sectors?
Much of the donor and NGO-driven efforts have focused on direct-to-farmer models – typically providing agronomy content, weather content, or market prices directly to farmers for a small fee or for free. Private sector players are a bit more varied – you have mobile network operators that are offering a similar direct-to-farmer content product, and are banking either on direct revenue from the product (via subscription or per-piece fees) or are looking for indirect benefits linked to their core business (e.g. more subscribers, stickier SIMs, mobile money transactions, reduced churn and increased average revenue per user). You also have private sector players using B2B models targeting businesses in the value chain – we have seen Farm Force, mFarm, Connected Farmer and others play in this space.

The reality is there are very few clear winners yet in the ICT4Ag space – few businesses that have achieved scale and sustainability. I think that many of the products that eventually succeed will be the result of PPPs – private sector owning the IP/product and contributing funds, donors contributing additional funds to buy down the risk, and NGOs providing initial technical assistance and field staff. The key is to have the private sector involvement at the outset and to ensure they contribute a sufficient portion of the funding – by having skin in the game, they will be incentivised to develop and own the business model.

How can business models increase the scale, sustainability and impact of ICT4Ag-enabled services?
I think we need to be more creative about how we go to market. It is easy to get excited about the large numbers of underserved farmers, but they can also be a challenging customer to acquire and monetise. We need to think about other value-chains actors, particularly businesses that will more easily understand the value of ICT solutions and have money to pay, and think about how to create products that serve their needs while also providing value to farmers. If we can leverage existing market actors to register farmers (by providing them value for doing so), we can drive down our farmer acquisition costs dramatically.

I am also excited about the possibilities for integrating digital financial services into ICT4Ag products. Digitising value-chain payments should be a quick-win – simply by moving existing cash payments onto mobile money or digital platforms, we can increase transparency and safety for businesses and farmers, and decrease costs of sourcing. We also drive transactions, which is a core revenue stream for mobile network operators and financial institutions. We should also look at integrating savings, credit, and insurance products that are leveraging mobile phones, as they can drive financial inclusion for farmers.

We also need to think through how to monetise the data we collect on farmers. An ad-based business model is probably not feasible in most markets today, but there are other ways to monetise data, some of which could have incredibly positive impacts for farmers. If we think about sharing ag-payment data with financial institutions, we have the potential to make those farmers creditworthy and drive financial inclusion for millions. Obviously we must be vigilant about misuse and privacy concerns, and I expect the industry as a whole to actively address this. ◀

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The web: a thing of the past, or here to stay?

How relevant and useful are web tools for ICT4Ag today? Are they on their way out, or on the contrary, is the web a nucleus from which other channels spread?

More than mobile

Is the web still a relevant environment for communicating agricultural information to users? Or is it doomed to collapse in the future – to be replaced by other channels? The question we raise is about the interest and relevance of web tools, applications and services (simply called web solutions) for agriculture today.

Timely access to critical information and knowledge has become a necessity to sustain competitive levels of agricultural production. Traditionally, farmers have relied on extensionists, NGOs and traders to acquire agricultural know-how. However, due to the limitations of this traditional approach – the frequency, cost, quality and timeliness of interactions – farmers' expectations are rarely met. To fill this gap, people are turning to new ICTs to provide farmers with tailor-made information, mostly via the internet.

This turn of events has witnessed the emergence of several agricultural information management systems (AIMSs) in the past decade. This seems to be the result of initiatives and efforts undertaken by development agencies and the private sector trying to improve production and market conditions of agricultural stakeholders. Other key factors to have triggered this development include the availability of new, cheaper devices combined with internet access.

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The web is becoming an increasingly strong channel for reaching users. Studies show that there are more than one billion websites online and more than 550 websites created worldwide every single minute. Though mobile is progressing quickly, the web seems here to stay. In terms of the web channel's usability and functionality, some of the strong arguments for growth are the fact that the web is cross-platform and can be accessed from any device, as long as a web browser is available. It can also integrate and map important volumes of information on a single screen. It can resize and adapt to any screen, whether on a tablet or smartphone.

It also supports the functions of intermediaries such as agricultural extension officers, international development and NGO field staff, representatives of farmer organisations as well as some progressive farmers. These intermediaries use the web to optimise their information exchange with end users, most of whom are illiterate. Their use of the web also supports the argument that ICTs are not here to replace the human aspect of extension but to complement it. Indeed, an ongoing activity at the Technical Centre for Agricultural and Rural Cooperation (CTA) in the Netherlands to build an Apps4Ag Database reveals a wide range of ICT solutions that combine the web with other channels such as video, SMS and radio.

Examples of the use of web with other channels for agricultural information exchange include:

- Advisory services to inform farmers about good agricultural practices. CTA, in collaboration with eLEAF, are using the web (e.g. FieldLook, a custom web portal for growers and crop management advisors) in combination with SMS to support extension services delivery for the Gezira Irrigation Project in Sudan.
- Training and education through e-learning to develop user capacity. The Commonwealth of Learning promotes local capacity across Commonwealth countries to develop e-Learning kits that are compatible with mobile devices. FAO also works with CTA on IMARK to provide training for agricultural stakeholders.
- Market information and market intelligence for producers, traders, development organisations and policymakers. Several market information platforms are now combining the web and SMS with traditional market billboards and radio to disseminate information to users, e.g. RATIN by the East African Grain Council and NKALO in West Africa.

On the other hand, several powerful search engines on the web are enabling easy access and exposure to a wealth of agricultural information. Searches may result in useful tools, such as Garden Planner, iCow or mFisheries.

Since the creation of the first web page in the 1990s, the tools and environment used to develop web content has not stopped improving, and this has allowed a high and increasingly easier level of linkages and integration of many types of content, such as audio, video, photo and maps, and services.

Thinking web, you will get more with less: more information and services from a single universal platform; more information in a single screen (no intermittent scrolling); more types of content in a unified environment and a single graphical screen. Web applications keep working: no matter what device you use, you will always get more clients, even if they are using different platforms. For now at least, the web is here to stay. ◄

The creativity and passion of the private sector

The private sector is well placed to contribute to the agricultural sector through its creativity and passion in partnership with other players in the sector.

ICTs offer opportunities to introduce new services and increase the reach of these and existing services to a larger population, in particular in the agricultural value chain. The private sector, driven by entrepreneurs, is well placed to convert these opportunities. In particular, it can contribute in three areas: sustainability, creativity and passion.

Entrepreneurs thrive on success. Failure rarely pays. Success rests on sustainability, and sustainability results in value-added services with longevity. The value and hence sustainability of a service ultimately depends on the end user. If the product is deemed to have no value, users simply will not pay for it. In the private sector, goods and services are usually exchanged through the transfer of money. Essentially, this is no different in ICT4Ag. A farmer, like any customer, is more likely to part with cash if there is a worthwhile return. The name of the game is demand and supply of value, in ICT4Ag as elsewhere.

The private sector brings entrepreneurial creativity and out-of-the-box thinking to ICT4Ag value-added services. Entrepreneurs seek to solve problems in unique and innovative ways. This approach, used in ICT4Ag, is creating new ways of finding scalable solutions for old problems. It is in the nature of entrepreneurs to see beyond what is immediately visible and join the dots across multidisciplinary sectors, combining technology and agriculture, to cite one example. The entrepreneurial way of thinking is different than institutional or public sector thinking, and has the potential to be a real game changer in the agricultural sector.

Entrepreneurs are often fuelled by passion and persistence. This volatile mix is a great driver of innovation, and entrepreneurs generally have a long-term holistic approach to problems that they are passionate about fixing. Being answerable to bankruptcy makes entrepreneurs highly focused and deliberate in their efforts.

For entrepreneurs with a passion for agriculture, ICT4Ag is a stimulating and satisfying new and organic evolution of the agricultural sector. We have entered an era in which a variety of technologies have become available to educate and support farmers, enabling them to increase productivity and income. For an agricultural information service such as iCow, which predominantly relies on ICT4Ag over mobile phones, this has been an interesting space because partners from both agriculture and technology need a period of time to acclimatise before either can understand cross-over innovations like iCow.

The iCow application uses SMS, video and web as direct channels, but the iCow model incorporates partners who use other channels for ICT4Ag, including radio and TV. The iCow platform provides a one-stop shop for farmers that enables them to build their agricultural knowledge of specific topics through service subscriptions. This reservoir of knowledge also increases their agricultural acumen and provides them with 24/7 access to experts and expertise. And the iCow platform sends farmers pertinent reminders about their livestock needs.

When N'Kalô, an initiative by RONGEAD to improve the marketing of agricultural products in West and Central Africa, begun developing its information and advisory service, it had to think hard about the kind of information it was able to provide and whether people were interested enough in it to buy it. Providing agricultural prices, for example, would not be difficult, but few people are willing to pay money for agricultural prices. So N'Kalô decided to develop a new kind of market information: market intelligence.

Once N'Kalô decided what to bring to agricultural stakeholders, it began to think about what the most suitable and affordable technology would be to convey the information. You have to keep in mind that farmers, even if they know how to use mobile phones, are not used to codes and apps. So that means adapting the technology and cost to your target audience.

N'Kalô partnered Orange Côte d'Ivoire to develop an easy way of proving farmers with agricultural information. They only needed to send the name of their region to subscribe to the service. N'Kalô, aware of which crops are grown in a given region, then sent them information about those crops only. After one month, subscribers receive a message with a proposal for automatic renewal.

The main challenge now is to increase the network of partners to generate more information about agriculture in Côte d'Ivoire. Another challenge is mobile sector regulation. N'Kalô is currently not allowed to advertise, even though more and more services and input providers who want to take advantage of its network of 23,000 subscribers. The focus now is to improve the subscriber network.

The best way to have a lasting impact in the agricultural sector is by understanding the problems facing farmers and designing simple but effective solutions to these problems. That is where the private sector can help. It knows how to make these solutions cost effective. It knows how to make them work in real time for an affordable price for the end user as well. And perhaps most crucially, these solutions have to be driven by consumer demand. ◄

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Government-supported e-extension

The authors discuss the public sector's efforts to introduce e-extension at the county level in Kenya.

More than mobile

Agricultural extension services refer to organisations that support people engaged in agricultural production. These services play a major role in disseminating knowledge, technologies and agricultural information to improve livelihoods in rural areas. Agricultural information resource centres, agricultural shows, demonstration farms and plots are all important sources of knowledge. Investments in agricultural extension services generally compare favourably with those made in agricultural research, which suggests its importance in overall agricultural development. All the more reason, then, to continue to warm authorities to the idea of e-extension, which is a more efficient alternative to traditional extension because it maximises the use of ICTs.

The Agricultural Information Resource Centre (AIRC) in Kenya is a semi-autonomous government agency. Set up in 1996, the centre's primary role was to provide agricultural information through media channels such as radio and video and the distribution of printed technical materials. The centre also provided extension skills training to farmers, extension staff and other stakeholders. Recent educational AIRC videos have been uploaded to YouTube for easy access and have attracted 2,580 subscribers and over 700,000 viewers, mainly from Kenya, Canada, the United States and India. AIRC's website also provides technical digital material and is connected to several national and international credible sources of agricultural information.

The former ministry of agriculture – now the State Department of Agriculture – started an e-extension project in 2013 to use ICTs to make extension service delivery more efficient and effective. Since then, AIRC staff have teamed up to develop an e-extension training curriculum that uses Web2forFDev tools and mobile apps to adopt ICT innovations in agricultural development. The manual was then used to train frontline extension workers, and by June 2014, more than 600 staff had been trained and equipped with e-extension kits comprising a smartphone, a mini-laptop and a modem.

Since Kenya adopted a new constitution in 2010, agricultural extension services have been devolved to the county level, while policy formulation has been left in the hands of the national government and AIRC. AIRC conducted an assessment in March 2015 to gauge e-extension adoption in various counties. The assessment showed that county politics undermined e-readiness in these counties to adopt e-extension services.

Changing the mindset

To begin with, the main agenda of political authorities in Kenya's counties is re-election in 2017. They tend to prefer infrastructure development projects – ones that are physically tangible for citizens– such as roads, cattle dips, agri-business industries and the provision of farm inputs. These kinds of 'hardware' projects are given priority over more intangible 'software' projects and technology transfer services, such as extension services and farmers' field days. The prospect of re-election means that funds are often directed to these physically tangible projects. Indeed, most of the county staff interviewed complained that they were demoralised because they lacked the facilities to implement their extension work plans.

Some staff were trained in e-extension, however, and learned how to use Web2forDev tools and innovative and cost-effective means of reaching out to farmers. This approach has reduced the overall cost of extension in their respective wards. One such extension worker is Daniel Kefa, who has made a name for himself by using Twitter to communicate with extension staff and farmers. He is an agricultural officer in Nakuru county and has overcome the odds by using social media tools to provide sorely needed agricultural extension services in the area. His success has not come easy, however. He has to contend with a lack of internet bundles and the low awareness among farmers on the use of mobile apps to access extension services.

The most notable change in the staff that received training in e-extension is a different attitude towards adopting ICTs in their daily work. Perhaps not surprisingly, those who did not receive training in e-extension were apathetic towards the initiative. There were exceptions. Viginia Gitau, senior chief agricultural officer in a sub–county in Nakuru county embraced the concepts of the initiative and is learning about e-extension tools from her trained colleagues. She has even started to incorporate these tools in her activities, especially during field days.

The results of the assessment complement previous studies on e-readiness, which showed that implementing e-extension not only requires physical infrastructure and technical expertise but also psychological readiness. In other words, the public sector has to assess how people across the entire agricultural extension value chain perceive and respond to e-extension, and invest in creating the right mindset to welcome e-extension in their communities. ◀

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Documents

e-agriculture 10-year review

FAO has been facilitating the e-agriculture Action Line since the 2003 and 2005 World Summits on the Information Society. It has now published a report that details the progress and lessons that have been learned in the past decade. The report concludes that the most successful projects have involved 'partnerships – whether these have involved public and private sectors, between organisations with different specialisations and networks, or between rural people themselves'.
➜ http://goo.gl/i9shTm

Sènèkèla case study

Launched in 2013, Sènèkèla is a mobile agricultural value-added service in Mali that provides agricultural information and market prices. GSMA recently published a case study on Sènèkèla to assess how the service has fared in its first two years. The case study gives a market overview of Mali and analyses the challenges of setting up such a service during political unrest.
It also discusses service design, the technology providers and the business model, and analyses early results and what can be done to improve the system in the future.
➜ http://goo.gl/w0qMeM

GODAN discussion paper

GODAN and the Open Data Institute presented their open data discussion paper at the 3rd International Open Data Conference on 28–29 May 2105. It discusses three ways open data can solve practical problems in agriculture and nutrition: first, by enabling more efficient and effective decision making; second, by fostering innovation that everyone can benefit from; and third, by driving organisational and sector change through transparency.
➜ http://goo.gl/AJ83J7

Web resources

ICT4D guide

The *Organizational Guide to ICT4D* was designed for both print and interactive platform. It uses the development community's experiences to connect 'established principles with processes for implementing new technology'. The guide looks at questions that organisations have about ICT4D, such as what can it mean for their organisation, how can they build ICT4D capacity in their organisation and what are the practical approaches and best practices that they can implement to improve success?
➜ http://goo.gl/zAoHPM

M4D Handbook

The *Integrating Mobiles into Development Projects* handbook is an interactive web resource put together by FHI 360 and OpenRevolution for USAID. The handbook is useful not only to USAID staff but also to any organisation wanting to integrate mobile technology into its development work.
➜ http://goo.gl/g8feUhAgLinks.net

TP Organics

TP Organics started as a business initiative in 2007 to identify the research and innovation priorities of the organic sector and enhance the development of the sector and its market. It is the only tech platform to deal specifically with the organic and low-input food and farming sector. TP Organics engages stakeholders along the whole food supply chain, to determine the research needs of the organic sector. It counts as its members 28 umbrella organisations and networks in sustainable agriculture, research, the environment and consumer protection. Other members include SMEs and four technology platforms for organic research in Hungary, Italy, the Czech Republic and Spain. TP Organics also collaborates with 20 research institutes.
➜ http://goo.gl/kwcM2t

Projects

e-Afghan Ag

e-Afghan Ag 'provides credible relevant information to those helping farmers in Afghanistan'. The project collects extremely useful information in a variety of areas, such as fruits, nuts and vegetables; grain and field crops; pest management; livestock; irrigation and natural resources management; extension; markets; postharvest; seed and seed systems; and kitchen garden. The project's website provides information on key factors in cropping, pest management by crop, pesticide use, availability of feed and water.
➜ http://goo.gl/x5BQ0

AgriNeTT

AgriNeTT is an agriculture ICT project of the The University of the West Indies. Its main focus is to build ICT applications for agricultural data. AgriNeTT uses open data and open access to develop an agricultural open data repository that will house data sets from a variety of institutions and associations, including farm level production data, commodity prices and volumes, farm land spatial data, soils, weather and pest and diseases tracking data.
➜ http://goo.gl/jOpD3D

Agritools

Agritools is a journalistic research project that aims to understand the real effects of the use of ICTs in the field of agriculture, fisheries and livestock in Africa. It looks for success stories and reveals the factors that lead to this success. Agritools uses two research tools: an interactive map of Africa with video documentaries and a crowdsourced storytelling space that collects stories from the field by giving voices to the African ICT for agriculture initiatives and inserting them into the map.
➜ www.agritools.org

NGOs in the ICT4Ag space

Shaun Ferris discusses how different technologies have transformed the way NGOs work in communities affected by poverty and injustice.

More than mobile

Technology is rapidly changing methods, support systems and the way NGOs work with communities and their service providers. This transformation is creating new opportunities in communities around the world, changing the day-to-day lives of many people affected by poverty and injustice, as they gain access through mobile devices to a wide range of digital information and services. Technology is also driving a new era of evidence-based decision making and accountability for development organisations enabled by faster, more accurate data collection, analysis and dissemination. Powered by technology, NGOs can strengthen project delivery, gauge impact, and improve programming across the NGOs over time.

Not many local businesses in emerging economies could support new apps and ICT4D innovations 15 years ago, apart from telecom companies. Governments were just beginning to explore the benefits of technology, and so infrastructure to support the ICT community was limited. In the following decade, mobile phone usage exploded across the developing world. Inspired by the tech transformation in the industrial world, NGOs began experimenting with technology and this led to a great deal of pilot testing. Most ICT products tested in the 2000s were experimental, offered free of charge and were proof of concept rather than setting out products with a clear client base and business model.

Therefore, few ideas were sustainable or ready for commercialisation. Scaling ideas with merit also proved difficult, as costs in ICT usage outside of the capital cities was often prohibitively expensive, investments were short term and ability to pay for the new services was weak. That situation is changing, as infrastructure is gaining momentum along with the strong economic growth in many emerging economies and local IT talent is emerging. Examples such as the use of voice communications, and the rapid rise of mobile money has had a profound change in the way people do business across Africa.

NGOs who once attempted to build their own products are now working to establish partnerships with both external and local IT business firms. This blend of experience, capital, knowledge and localised business solutions is giving rise to a new generation of products, entrepreneurs and services. Such partnerships are also exploring new business models. Some of these are free and support critical public sector services, whereas other services that support rural enterprise initiatives are shifting from free- to fees-based models.

Similarly the NGO world is also working more closely with government sectors and the private sector, to strengthen local systems to support areas such as input supply, natural resource management, early warning systems and market development. Each of these players work in their area of expertise and are increasingly linking their operations through some form of technology, which may support improved supply chain operations, better mapping, decision support tools, communications and more rapid information gathering.

Using technology to improve livelihoods

Catholic Relief Services (CRS), the humanitarian agency of the Catholic community in the United States, uses ICTs to improve the way it designs and implements programmes. In the agricultural sector, CRS has been building its understanding of the ICT4Ag space for the past 7–8 years. It has found that pilot testing is an essential part of the learning process, making it possible to match technologies to specific types of projects. CRS is developing tools to harness technology to help farmers and farmer extension services gather information, develop decision support tools, map their work and monitor business performance. For example, farmers are given e-vouchers which they can use to purchase seeds to help them replant their fields. Mobile devices and cloud-based services make it possible to register beneficiaries, seed vendors, provide bar-coded vouchers and report on vendor payments.

CRS also works with field agents to support farmers to improve their market performance. Using Farmbook, a field-based business app that was built and tested at the request of a consortium of NGOs working in the Southern African Agro-Enterprise Learning Alliance, in this process, field agents learn new marketing and business skills using an e-learning platform. They record farmer business plans using a digital business ledger, and a monitoring tool enables them to record their activities.

Real-time market prices and weather updates are provided to farmers via text messages. In central Niger, CRS reported prices of peas and beans to farmers and in the Philippines, text messages delivered coffee and cacao prices which led to a 13% gain in revenue. Access to this information helps farmers to decide when and where to sell.

CRS emphasises the importance of working closely with all the actors in the technology to client eco-system, taking the time to listen and share the successes and failures that it encounters in its networks. Technology is already helping to transform the way people work in agriculture, and by further integrating digital systems into the way the sector works, better services will be delivered to communities in the future. ◄

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The role of academic institutions

Academic institutions play a key role in addressing the challenges facing the agricultural sector.

Academic institutions play a key role in addressing the challenges facing the agricultural sector by providing science-based content and understanding how to best use the diverse range of ICT delivery channels.

Every night, a billion people go to sleep hungry, and 70% of these are small-scale farmers and their families. Lack of credit and access to markets and information often lie at the core of their problems. To try and fix these problems, millions of dollars are provided each year not only to help poor farmers, but also to protect the environment and promote broad economic development.

What may not always be clear is that universities like the University of California, Davis, and The University of the West Indies (The UWI) in St Augustine, Trinidad, play an enduring role in global development. Today these universities are focusing on using ICT4Ag to address the vexing challenges of food security and the environment by expanding information access and connecting small-scale farmers and fishers, vendors, markets, policy-makers and natural resource users.

Research institutes as ICT4Ag service providers

Universities provide long-term threads of disciplinary and cross-disciplinary research that underpins agriculture policy, best practice and programming. In many cases, they have research, education and outreach mandates at all levels. The establishment of the World Food Center at UC Davis and the rebranding of UWI's Faculty of Food & Agriculture (FF&A) with existing units such as the Cocoa Research Centre are examples of the type of institutional commitment many universities make to contribute globally. These facilities work to improve food access, reduce poverty and protect our fragile environment.

Focusing on agriculture, UC Davis has worked with over 100 countries to strengthen technical, extension and information development and delivery services. Many recent initiatives involve ICTs. For example, in response to the often-observed farmer knowledge gaps, UC Davis has established online information repositories such as e-Afghan Ag (see page 11 in this issue), e-China Apple and e-Pak Ag. Indeed, 'content is king' is the catchphrase – these information assets are developed to provide credible, relevant information to those helping farmers. Several related activities have worked to understand how to best use the diverse range of possible ICT delivery channels. The principles of effective communication leading to behaviour change so developed are then shared to strengthen national capacity and information delivery.

In addition to a long and rich tradition of research and extension by UWI FF&A, the university's computing and information technology (DCIT) and electrical and computer engineering (ECNG) departments have developed a variety of ICT applications for agriculture and fisheries. DCIT has applied intelligent decision support around agriculture data in the development of AgriNeTT, a mobile application for small-scale farmers to enhance crop management, for example. The Caribbean ICT Research Programme (CIRP) in ECNG has developed the mFisheries suite of mobile applications for at-sea safety, navigation, a virtual marketplace, and various information and communications services using different media. CIRP is also collaborating with the Caribbean Network of Fisherfolk Organizations on the use of multimodal web channels for regional engagement with the ultimate aim of participatory governance.

How to achieve greater impact

We have identified successful underlying principles for ICT interventions for farmers and fishers. While these principles may not appear particularly new to those working in the ICT field, they are all essential for success. For example, programmes need to start by clearly knowing their audience's needs. Information must be widely available and is best delivered through multiple channels appropriate to the audience. The information needs to be clearly, concisely and attractively packaged so that it delivers evident and compelling value at a logical and aspirational level. Underlying all this is the need for trust – trust in the message and the messenger. Delivery is not a 'fly-in fly out' activity. Local partnerships with trusted intermediaries are critical for long-term success.

Universities play a key role in the ecosystem of agents necessary to address the many challenges faced by the agricultural sector. While their unique strengths lie in areas such as teaching, training, research and analysis, operationalising interventions requires a great many other agencies whose strengths lie in complementary areas. Partnerships within the ecosystem are essential. For example, while some partners can promote joint knowledge resources at the target group level, others can facilitate greater interaction with target groups. These target groups themselves must be key partners in the provision of ongoing feedback essential to improving the tools, materials and delivery channels. Improved strategies and channels for building relationships and engagement amongst partners are essential for synergy, efficiency and increased impact. ◀

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Farmer organisations offer ICT solutions

Farmer organisations are an ideal medium for delivering ICT-based services to improve farmers' incomes, and expand their markets

Farmer organisations (FOs) play a key role helping farmers in Africa and Asia to empower themselves. They give poor and illiterate farmers a voice. One thing all FOs have in common is their commitment to a common aim and their effort to maintain continuous contact with members. The effectiveness of an FO depends on its having a strong communication channel. While traditional means of communication are important, technology has a major role to play in enhancing the scale of services that FOs can offer to their members. Indeed, ICT4Ag can be a major enabler for FOs.

Despite the key role that FOs play in the lives of their members, farmers still face several challenges, which, once removed, will go a long way to improving their lives. Access to timely and relevant information in villages, many of which are remote and inaccessible, is expected to empower rural citizens. Increasing awareness and knowledge through information on government schemes and welfare measures can improve the quality of living in rural areas. FOs have been striving to address these issues but often through conventional means. ICTs are a sure-fire way to complement, and in many situations surpass, the effectiveness of conventional means.

More than mobile

Initiatives in India and Kenya

FOs can deliver ICT-based services. The situation would be win-win for all: farmers would benefit from being able to use the services. FOs would find a means to engage more deeply with their constituents, while service providers would benefit from having achieved their basic objective.

One recent successful initiative is the Indian Farmers Fertiliser Cooperative Limited (IFFCO). The IFFCO cooperative has more than 40,000 cooperative societies as members. IFFCO's estimated reach is thought to be 50 million farmers, who own IFFCO through the share contribution system of their respective societies, as well as the consumers of the fertilizers produced by IFFCO's various plants. Apart from distributing quality fertilizer to farmers through the cooperative societies, IFFCO also organises various promotional activities so that farmers can learn about the latest technology in agriculture.

To more effectively leverage technology for the benefit of farmers, IFFCO launched a joint venture called IFFCO Kisan Sanchar Ltd (IKSL) in 2007 with Star Global Resources and Bharti Airtel. IKSL's mission is to empower Indian farmers by converting the ubiquitous mobile phone into a powerhouse of knowledge. IKSL uses mobile phone technology to provide timely agro-advisory services to farmers to improve income and yield and reduce cost and wastage. The agricultural advisories are provided as voice messages in local languages to ensure that even illiterate farmers can benefit from the services.

The IKSL model is based on the idea of engaging with farmers by showing them how to use their mobile phones in two new ways. The 'PUSH' approach ensures that farmers receive the latest relevant updates. The information is provided in the form of one-minute voice messages in the pertinent local dialect. These voice messages are provided free of charge to IKSL Green Card subscribers. The 'PULL' approach enables farmers to call a helpline for extra information about the data they have been provided with or seek solutions for their specific problems. This example shows how farmer organisations have managed to effectively use ICT4Ag provided by a service provider.

In Kenya, the Eastern Africa Farmer Federation (EAFF) is working on bringing together different service providers providing various mobile applications on different aspects of the different value chains for the purposes of creating complete clusters of these providers. In partnership with a private investor, EAFF have embarked on developing a virtual platform similar to the one run by IFFCO for the purpose of linking farmers to both input and output markets as well as making them access credit and insurance products tailor-made for them. EAFF has already developed a prototype and is currently planning a pilot phase that will initially start in Kenya targeting the rice and maize value chains.

Once the pilot is finalised, and after its analysis and evaluation, EAFF plans to roll it out commercially with a target of more than 100,000 farmers in the first year. EAFF intends to continuously engage IKSL and is organising an exchange visit to IKSL to learn first-hand how they make their mobile platform work and use their expertise to make EAFF's platform work as well. Technology has the potential to unleash a revolution in the agriculture sector, especially because it will transcend the architecture of fragmentation that is characteristic of smallholder agriculture in Africa and Asia, and develop a financial history of the farmers, thereby making them creditworthy. ◀

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SEWARUDI

The Rudi Multi Trading Company, supported by the Self-Employed Women Association (hence SEWA-RUDI), is a marketing company in India of rural farm produce, such as spices and staples, procured directly from farmers and processed, packed and marketed by rural women. The company uses a unique supply chain model of procurement, processing, packaging and distribution for its products through a rural self-help group of women. This model has been creating substantial employment opportunities for rural women.

SEWARUDI also internally rotates the rural producer groups that it uses in order to enhance the quality, capacity and efficiency of production through the use of better technology. SEWARUDI currently distributes its products to 14 districts in Gujarat, India. It sells products through a rural distribution network of women called Rudiben. This system reduces incidental expenses, increases the availability of good quality products to rural consumers, eliminates middle men and improves the livelihoods of underprivileged people in rural areas.

Rudi Multi Trading and SEWA are also involved in a number of events.

Ananta, for example, puts the skills and talents of poor rural female artisans under a broader spotlight, which helps these women to convert their traditional skills into a means of livelihood. KVIC, the Khadi and Village Industry Commission, is charged with planning, promoting and implementing programmes for the development of Khadi (hand-spun and hand-woven cloth) and other village industries in rural areas in coordination with other development agencies.

Visit the URL below for more information on SEWARUDI's work.

➜ http://goo.gl/URy0F8

The BEAM Exchange

BEAM stands for Building Effective and Accessible Markets. The BEAM Exchange is a 'one-stop shop' for sharing knowledge and learning about market systems approaches for reducing poverty. By improving the impact and effectiveness of programmes that use these approaches, BEAM can help create jobs, raise incomes and improve access to basic services. BEAM uses a variety of tools, such as its website, a variety of different social media networks, workshops and events, to support practitioners in the field of development cooperation who work with business – helping them to fight poverty by making markets work better for poor people. Another aim is to tap into the strength of the growing market systems community – a global network of policy decision-makers, programme advisors, consultants and implementers – who share their professional knowledge and experiences with each other. BEAM's scope includes sectors where market-oriented strategies are still new and emerging (such as health, education, sanitation and energy services), as well as the more established sectors of agriculture and financial services.

➜ http://goo.gl/ZYvdZx

Agribusiness Innovation Challenge

The Agribusiness Innovation Challenge is organised by ICCO, an international Dutch development organisation, and is being facilitated by Enviu and FIT Uganda Ltd.

The aim is to attract innovative agri-business models that can substantially improve the quality of life of smallholder farmers in Uganda. The main focus lies on agri-tools and technologies that have already been proven in similar contexts, but which lack a sustainable business model or successful implementation in Uganda.

These existing agri-businesses can address any issue in the value chain that holds back smallholder productivity and profitability in both crops and livestock. A challenge running from 29 May to September 2015 will attempt to find suitable entrepreneurs and ideas. The top 3 businesses will be awarded cash prizes to roll-out their business models to the tune of 20,000, 10.000 and 5,000 euros respectively. For more details, visit the URL below.

➜ http://goo.gl/BpIqFl

Dispatches from the Consom'Acteurs film festival

The first Consom'Acteurs film festival turned food and agriculture into popular topics of discussion among young people in Burkina Faso.

More than mobile

The Consom'Acteurs film festival held in Ouagadougou from 1 to 3 May, initiated by the Burkina Faso Association of Agricultural Journalists and Communicators (ABJCA) aimed to arouse people's interest in food and agriculture. Documentary films to arouse the interest and awareness of the people of Burkina Faso regarding issues related to food and agriculture: that is the venture initiated by a film festival called Consom'Acteurs held from 1 to 3 May 2015 in Ouagadougou. Consom'Acteurs is a contraction of two French words: *consommateurs* (consumers) and *acteurs* (actors). The concept is a vehicle for the idea that today, more than ever, each citizen of Burkina Faso must question his or her consumption in order to become a genuine contributor to the development of our country.

This first edition of the festival comprised four screenings followed by discussions, four thematic panels and tasting sessions with dishes made from local agricultural products. One of the films, *Paysans d'ici et d'ailleurs blues sans frontières*, draws a parallel between realities experienced by farmers in two Burkina Faso villages and farmers in Luxembourg. It shows that farmers in both places go through the same hardships and feel the same attachment to the land.

In the case of Burkina Faso, the film reveals that more and more young people are leaving life on the farm, which no longer appeals to them. 'I don't want my child to be a farmer. It would be much better if he became a teacher or a nurse,' says one woman farmer in the film. 'This reflects the true mentality of our parents today, of those of us who have been to school, of you journalists, and of the students. It's only when you've failed in everything else that you go back to agriculture,' says Souleymane Ouédraogo regretfully, former director-general for the promotion of the rural economy. And so this raises the crucial question: how can we make the occupation of farmer more attractive in Burkina Faso in order to attract and keep young people in the profession?

In search of change

Paul Taryam Ilboudo, chairman and CEO of the Société Agropastorale et de Services, says that 'farming is a job for both the present and the future. I believe that is how we can work things out. If young farmers manage to produce, be self-sufficient and have a surplus, and market their goods, then they'll be able to make money. They can use this money to improve their houses, thereby providing work for village builders, and install solar panels, which will provide work for young village engineers. It is through agriculture that we will be able to provide jobs for our young people, and that is how we will be able to pave the way for our future,' Ilboudo added.

Souleymane Ouédraogo is convinced that young people need something novel in agriculture. 'If they have to practice subsistence farming like our parents used to, young people will not turn to agriculture. Youngsters need something else. That is why we now have to accept that the world has changed and that young people need to move towards entrepreneurship. We have to create the conditions for farming to become a real business for young people,' according to the researcher.

Yennenga Kompaoré, a young entrepreneur working in the field of communication, believes that young people need more inspiration. 'We need to be inspired, to have people alongside us, opposite us, who motivate us through the pertinence of what they do,' she says. Kompaoré never misses an opportunity to call on the people of Burkina Faso to employ their skills in the service of the rural environment. 'In my view, farming is not just a matter of being in a field with a tractor. Those who, after their studies, work in a bank, in insurance, marketing or aeronautics, who are managers in certain institutions, can all use their skills on behalf of the rural environment and small farmers.

The Consom'Acteurs film festival is intended to turn food and agriculture into popular topics of discussion. This first edition was a huge success, due in large part to the public debate it inspired. For ABJCA, the gamble paid off. The association brought in 10 communication and journalism students who took part in reporting and providing on-line coverage of the event. These students and the young professionals involved in ABJCA have thus become genuine agents for change. They have been encouraged and enriched by the organisation of this festival.

And that is not all. A film report and radio shows on the festival are being produced in several local languages. These tools will be broadcast as part of a campaign following the festival to provide further support of the Consom'Acteurs concept. For real change in agriculture in Burkina Faso, it is imperative that every citizen takes action, working to promote the occupation of the farmer and to encourage increased consumption of local agricultural products. ◄

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