The following case study was received as a result of a call issued by the Committee on World Food Security for case studies highlighting examples of initiatives aimed at ‘Developing the knowledge, skills and talent of youth to further food security and nutrition’. The cases received provide the background for a discussion of lessons learned and potential policy implications at a special event on October 15th, 2015 during CFS 42. Find out more at www.fao.org/cfs/youth.

**IICD - Exploring how digital tools and skills influence the motivation of young farmers in Kenya**

**Background**

This case study is informed by three projects located in western Kenya (Kisumu, Kakamega and Eldoret), which focus on enhancing agricultural productivity and access to markets. The current context in which farmers in western Kenya operate is characterised by a strong urban demand for an increasingly diverse range of products and crops. The transformation and strengthening of agricultural activities and processes, such as those induced by the various value chain development initiatives funded by development agencies, have resulted in a recognition of smallholder farmers and grassroots organisations as being essential links in any agricultural value chain. This recognition of their role and added value, and the support provided through targeted programmes, offers farmers opportunities to develop their farms and professionalise their farming activities. Such initiatives have already led to a gradual increase of younger persons’ interest and involvement in farming, and has provided a structural basis for farming-as-business. This context of positive market conditions and potential profitability, in combination with being recognised and approached as important actors in the chain, has made access to reliable market-related data and information on improved production technologies more relevant and desirable than in contexts characterised by poor market access for agricultural goods.

**Approach Used**

In order to improve livelihoods of farmers in their respective regions, IICD and local private sector partners train and coach implementing partners and farmers in the use of text or voice messages to receive and use market price information and short messages with production information on their mobile phones. IICD links farmer organisations and local service providers, ICT advisors and research institutes to provide accurate and timely information. Mobile phones are also used to collect productivity information in the field and to link up farmers with buyers – both increase the efficiency of the value chain and improve communication between the different players in that chain.

IICD’s approach integrates various types of information in one comprehensive programme, building on partners’ skills step-by-step. Market price information is therefore complemented by other types of information and other media. IICD has enabled partners to select media most appropriate to their context: sometimes this involves radio or feature phones, other times the focus is on more elaborate systems like Interactive Voice Response systems, which also allow illiterate farmers to benefit from the information. IICD and partner organisations develop relevant content and training materials jointly with the farmers involved.

The organisations implementing the programme in western Kenya have set up five farmer-ICT-hubs between them, located near existing markets or collection centres frequented by the farmers.
The centres are open to farmers and community members and are used to provide training, internet access and a variety of support and information services to the farmers. The centres train farmer group members on generic and applied ICT skills, such as ICT for financial management, thus improving transparency and management of the farmer groups. All three projects provide ICT training to support farmers in obtaining information about good farming practices and market price information, and use multimedia and video for participatory recording and screening of production techniques.

In order to facilitate exchange and learning with farmers on production techniques, IICD supported partners in capacity development on multimedia and the use of video for recording and screening of production techniques in the field. Practices are coming from both the farmers (peer-to-peer) and from the Kenyan Agriculture Research Institute. The videos are edited into short, 10-minute clips to be screened at the ICT Hubs, in schools, churches or existing farmer meetings, facilitated by extension officers to improve learning.

**Outcome and Impact Achieved**

The perceptions of young farmers in western Kenya, and the stakeholders that surround them, show that ICT-for-Agriculture interventions extend the opportunities, motivations and capabilities of young farmers to engage in farming. With value chain development interventions already creating a positive context, the introduction of ICTs provides youth with a perspective of profitability that is worth investing their time, effort and financial resources.

Youths benefit from the impact of ICT in:

- Enhancing the performance of the collection centres: better and more timely marketing services to members, higher and more stable prices, as well as
- Strengthening farmer organisations: forging unity among members, bringing more producers together to acquire a better position in the value chain, better information on prices and markets to inform production planning.

As such, ICT has been found to catalyse and accelerate organisational development and value chain work, especially in relation to involvement, motivation and commitment of youth to improved management and development of their farms.

**Lessons Learned/Opportunities for Scaling-Up**

Projects have identified the following youth’s ICT-enabled journey into profitable farming:

- Young farmers struggle to make ends meet: low productivity, low income and intensive labour render farming activities unprofitable. Youths hear about the ‘digital world’: an appealing call that they do not want to miss out on. Some of the entry points: previous basic computer literacy – presence of an ICT Centre – need to access markets or increase production – to ease communication – as a doorway to a better job – as an alternative to long- distance travels for consultations.
- Young farmers are introduced to the digital world through general ICT skills, basic office productivity applications and Internet use trainings in the ICT centre. During training youth identify the potential of ICT to render their farming activities profitable.
- Young farmers start applying ICTs to obtain the best market prices, keep records, find crops in high demand, get information on pest and disease control, access new farming practices and agricultural technologies, and communicate with other farmers. The ICT used is often introduced in the context of the use of a particular value chain and product but the skills and insights are quickly applied to other crops and chains.
Early adopters of ICT for farm management see benefits and return on investment (ROI), increased access to expert advice services and higher incomes, which in turn act as motivation to continue applying ICT tools on farming.

Due to their increased technical knowledge and higher incomes, increased recognition comes from parents, family and community members. These young farmers are approached by extension workers, private sector companies and farmer organisations, where they take new roles at different levels.

Other community members, inspired by early adopters and their success, follow suit.

**Policy Implications**

The findings in the study point to a number of recommendations that can further encourage young farmers’ uptake and use of ICTs to support their agricultural activities. Although the list is not exhaustive, the below points should be considered when designing or implementing youth, ICTs and agriculture activities:

- Focus on young smallholder families who already made a conscious choice for farming and are likely to apply ICTs to their farming activities
- Differentiate and tailor ICT training approaches and user support on the basis of age, marital status, gender, and ownership or access to land
- Pay attention to removing obstacles that prohibit young women from fully participating in, and taking advantage of, ICT-related activities
- Furnish ICT centres as learning spaces to support informal exchanges and networking by young farmers (male and female)
- Encourage the emergence of diverse early adopters and role models to inspire diverse profiles and groups of youths to follow suit
- Consider strategies to diffuse integration of ICT from specific value chain crops to diverse crops and activities
- Include ongoing monitoring, evaluation and learning activities as part of the programmes to identify unintended negative effects and undertake corrective action when necessary.