Background

Provide overall background context of where the initiative took place

Farmerline Ltd is a Ghanaian social enterprise that develops ICTs to communicate and collect data to/from smallholder farmers in rural regions of West Africa. In 2013, Farmerline launched its voice messaging service and has since then reached over 5,000 smallholder farmers in Ghana and over 200,000 in Nigeria, Sierra Leone and Cameroon.

Challenges

Overview of the challenges faced in building knowledge, skills, or talent development of youth

Due to limited internet access and training from Ghana’s Ministry of Food and Agriculture, many farming communities are left without access to timely and locally relevant information which can directly benefit their agricultural yields and income. Today, the average age of farmers in Ghana ranges from 45-55 years old. The labour intensive nature of farming, coupled with low yields and low incomes often means that few young people wish to be engaged in the sector. It is not considered to be profitable enough. There is the need for much greater outreach and support to young farmers.

Approach Used

Outline why the approach was chosen for the specific challenges and context

Farmerline is an agricultural start-up made up of and lead by young people. The CEO/Co-Founder, Alloysius Attah, is 25 years old and the majority of the staff are full-time students or recent graduates from KNUST University in Kumasi. Together as a team, Farmerline has developed an innovative product line of ICTs (web and mobile applications) to support smallholder farmers in increasing their yields and income. Our voice messaging service uses a web platform to communicate best farming practices, weather forecasts, regional market prices and financial tips in local languages to farmers’ mobile phones. We have additionally launched mobile applications that simplify processes for agricultural organization such as collecting data from farmers, mapping farmland and engaging youth in agriculture. In partnership with Hershey’s, Farmerline is developing an agricultural social media mobile app that will (a) create a channel for young farmers, female farmers in particular, to engage with one another and connect with various service providers, (b) encourage the sharing of
compelling agricultural content and current events, and (c) provide opportunities for engagement with potential partner organizations.

**Outcome and Impact Achieved**

*How many youth benefitted? How did they benefit? How were food security and nutrition improved?*

In 2012, Farmerline launched a pilot funded by Indigo Trust to communicate agronomy tips to fish farmers in the Ashanti region of Ghana. According to the Impact Assessment results, fish farmers saw the weight of their fish increase by 6%, prices at which fishes were sold increased by 44%, the harvesting time of fish reduced by 2.2%, and the income of farmers improved by 40%. Through follow-up visits and workshops, Farmerline has recorded impressive increases in yields per acre (as high as 55.6%) among farmers across Ghana directly from utilizing these services.

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

*How should the approach be adapted to other situations in the future? Suggestions for overcoming challenges?*

Although mobile service coverage has exploded across Africa, rural farmers still struggle to maintain reliable service and in some regions, stable electricity to keep their phones charged. Network saturation is also a common issue on the leading network in Ghana, where a phone number must be dialled several times before finally connecting. Moreover, on the human design side, it must be recognized that farmers are hard-working, busy people and are not always free to answer their phone. This disrupts the reception of messages and full attendance in registration, training, and follow-up workshops. To mitigate these risks, Farmerline has developed intelligent retry patterns for outgoing messages that optimize the chance of connecting with farmers, even if the phone is unavailable on the first try. Farmerline also allows farmers to customize their messages, including the option to select the best time of day to receive voice calls.

Farmerline’s innovation can be implemented in any African country where smallholders are faced with challenges of access to timely and relevant information. As long as the messages are convenient, localized, interesting and actionable, we believe this educational method can have positive impact in any area of the world with mobile phone usage.

**Policy Implications**

*What policy changes are needed to support this type of initiative and scaling up?*

Ghana could highly benefit from policy development in the areas of youth, education and agriculture. Specifically, providing opportunities for youth to learn about agriculture as adolescents, linking youth with internship opportunities to apply said learnings and additionally gain practical skills, and grant creation for young entrepreneurs in the field of agriculture. When youth are given access to educational content, funding and mentors, engagement in agriculture will increase and challenges
such as food security, nutrition and socioeconomic development in rural regions will be effectively addressed moving forward.