Introduction

Extension services plays an important role for growth and transformation of the agricultural sector in Sub Saharan Africa (SSA).

Some of the Benefits of extension services

- High productivity
- Quality of produce
- Reduction of diseases and pest
- Maintenance of environmental health
- Increased income

Challenges facing the sector

- High ratio of extension staff to farmers
- Poor infrastructures
- Extension systems are still underfunded
- Diverse / varying needs among farmers

- Extension service has become demand driven.
- With application of ICTs in delivering advisory services being explored.
- iCow service (mobile extension service) addresses the challenge of low productivity.
- Offered by GDT in partnership with ILRI & Safaricom Ltd
- Provides farmers with basic, simple, timely knowledge to improve production

Materials and Methods

- Study area: Uasin Gishu, Nyandarua, and Bomet Counties. Higher density of smallholder dairy farmers. The iCow services were rolled and have been in existence in these counties.
- Participatory Research – Learning from farmers’ experiences about iCow

Sampling Procedure

- A two-stage stratified random sampling procedure used
- A total of 457 respondents sampled, of which 209 farmers were regular users of iCow services and 248 farmers were not enrolled in the platform
- The household survey was conducted in June and July 2018
- Information on farm-specific characteristics, farmers-specific characteristics, animal details, milk details and household income were collected
- Descriptive statistics used to present data from this study

Results and discussion

On average, users of iCow realized higher average annual milk production per cow (2359 litres) as compared to non-users (1964 litres) (Figure 1)

![Figure 1: Comparison of iCow users and non-users with respect to Milk.](image1)

Cow users earned more income than non-users. Specifically, iCow users earned Ksh. 132,031 more household income than non-users (Figure 2)

![Figure 2: Comparison of iCow users and non-users with respect to income](image2)

Conclusions & policy implications

- The ICT-based extension has the potential to reduce rural poverty through increased household incomes.
- There is need to scale up the iCow services, due to its proven capacity of enhancing smallholder farmers’ access to simple, timely information.
- Policies should focus in improving infrastructure in the rural areas for the ICT usage.
- Partnerships between network providers and research institutes should be encouraged as part of bridging the extension gap occasioned by reduced public expenditure on extension services.

References