



# FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

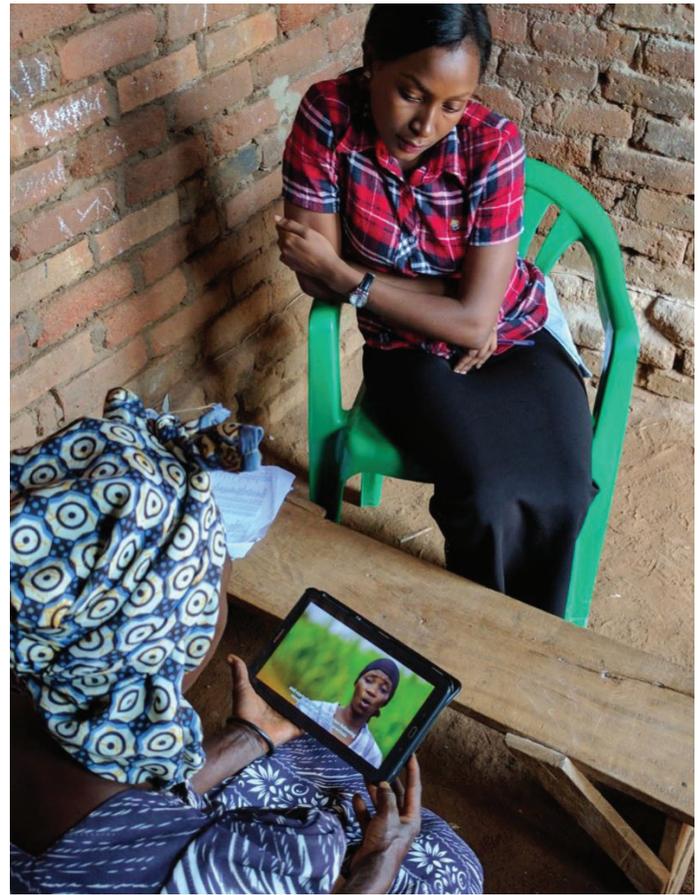
## INTEGRATED DIGITAL CHANNELS TO PROVIDE AGRICULTURAL ADVICE TO SMALLHOLDER FARMERS IN UGANDA

### What

The Feed the Future Developing Local Extension Capacity (DLEC), in partnership with Viamo, tested the effectiveness of integrated information and communication technologies (ICTs) such as videos, interactive voice response (IVR) systems and short messaging services (SMS) in amplifying agricultural advisory services.

### Why

Digital extension can help governmental and non-governmental extension providers improve the impact of their efforts, especially when such efforts rely only on in-person visits and trainings. But there is limited evidence on the effectiveness of digital channels (e.g., video, IVR and SMS) and the integration of these channels on extension-related outcomes such as technology adoption and yield improvements. We explore this in the context of Ugandan smallholder maize farmers, a particularly important target population for the Government of Uganda and its development partners.



### How

We tested a comprehensive extension package that consists of three ICT components—a video containing content on recommended practices for maize cultivation, an IVR system that farmers call for free to receive information on those same recommended practices, and SMS reminders on the application and timing of those recommended practices. Our design allowed us to evaluate the incremental effect of each ICT component on a range of important outcomes.

### Timeline

August 2018 – March 2019

### Partners

- Viamo
- IFPRI



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## Results

ICT-mediated audiovisual content—videos on improved farm and crop management practices—was found to be effective in delivering information to smallholders. Households that were shown a video on how to become better maize farmers performed significantly better on a knowledge test, were more likely to apply recommended practices, used inputs more efficiently, and reported 10 percent higher maize yields than households that did not view the video. Incremental effects of IVR

were found to be limited, possibly because few farmers appear to have called the IVR hotline. SMS messages also appeared to have little additional effect. While IVR and SMS showed limited effects, these findings suggest opportunities for further innovation in the design of integrated ICT approaches to extension.

## Contacts

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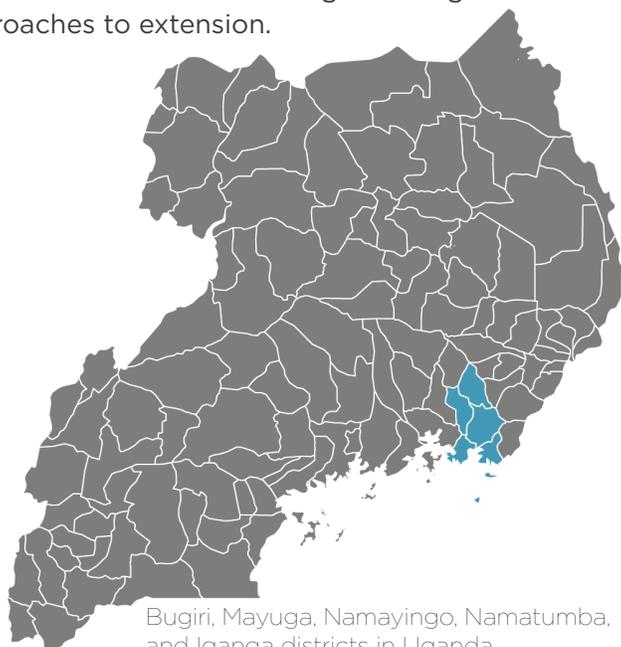
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Bugiri, Mayuga, Namayingo, Namatumba, and Iganga districts in Uganda