Big Data Platform- Scaling up data-driven digital agriculture: Learnings from the Kenya experience

Digital Green in Kenya

Empowering farmers to lift themselves out of poverty

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Over the past decade, we’ve grown from a small NGO to a well-established international non-profit whose work has reached over 2.3 million farmers in 16 countries.

Digital Green operations (2008-2021)
- Afghanistan
- Tanzania
- Bangladesh
- Nepal
- Burkina Faso
- Mozambique
- Uganda
- Kenya
- Malawi
- Senegal
- Rwanda
- Nigeria
- Niger
- Ghana
- South Sudan
- Honduras

Key achievements

Reach
- ~2.3 million farmers across 16 countries
- More than 46,000 frontline workers trained on digital extension approaches

Impact
- ~50% increase in adoptions and 46% increase in productivity in Bihar, India

Approach
- Expansion beyond agriculture into new content areas like nutrition and new models like Loop

Operations
- ~100 staff and ~US$10mm annual budget
Digital Green is uniquely positioned to adjust and quickly respond to evolving farmer needs

- Deliver targeted content to farmers via their preferred channels
- Build extension capacity through our Virtual Training Institute
- Link farmers with local buyers
FarmStack: An open-source protocol to power the secure transfer of data across the agricultural sector
Digital extension in Kenya

- Digital Green started operations in **Kenya** in 2018
- Focused on building the capacity of county government extension staff in the use of participatory videos to share good agronomic practices
- Completed **trainings on video production & dissemination** in Makueni, Nyeri, Kirinyaga, Kiambu, Nyandarua and Nandi counties
- Produced **58 videos** currently being disseminated to farmers
- Due to Covid-19, we have adapted the approach to integrate more digital technologies (e.g., use mobile channels such as IVR, use of tablets, apps to complement videos)
- We are introducing **FarmStack** to relevant bodies

**USAID** Feed the Future project will reach **10,000 mango farmers** in **Makueni County** with mango fruit flies control content

**World Bank**-supported One Million Farmer platform will reach **25,000 farmers** in six counties with best agronomic practices
58 Videos produced & disseminated in Kenya

- Mango field hygiene: Makueni
  https://youtu.be/r0cGS7IkHEA

- Soil analysis and recommendations:
  https://youtu.be/dX5pS3j7i8g

- Chicken housing: Kiambu:
  https://youtu.be/cy0e7BeMMeo

- Avocado seedlings: Nandi:
  https://youtu.be/lk5gnluj6ks

We are partnering with KALRO, Digicow and other organizations to deliver videos through their mobile apps. By combining data (farmer location, crops produced and weather), we establish the specific agronomic needs and use multiple channels to deliver appropriate videos. We are partnering with Agrocares and others to produce videos on key agriculture topics such as soil analysis.