

# EXECUTIVE SUMMARY

## DSA III END OF PROJECT IMPACT EVALUATION REPORT

Digital Agriculture III: Digital Services for enhanced agricultural productivity, improved livelihoods and social inclusion of farmers in three remote Counties of Laikipia, Kilifi and Busia in Kenya

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## 01. PROJECT CONTEXT

### programme Overview

March 2023 - March 2024

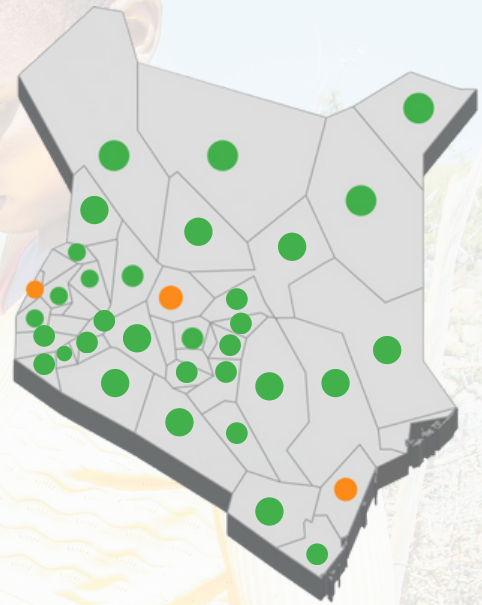
### Duration

UK Government Digital Access programme (DAP)

### Funding

Kenyan farmers, especially youth, women, and persons with disabilities (PWDs)

### Target Groups



- Expansion Areas: Laikipia, Kilifi, and Busia
- DSA Programme Areas

### Key Objectives

- Understand user needs for digital agricultural content
- Increase farmers' capacity to access digital services
- Enhance agricultural productivity and social inclusion for marginalized and underserved women and youth small holder farmers.

### Expected Outcomes

- Improved livelihoods and social inclusion for marginalized and underserved women and youth small holder farmers.
- Further tested models from previous DSA phases (I & II)
- Increased empowerment and knowledge utilization among farmers

## Lessons from Previous Phases (DSA I & II)

### DSA supports the Agricultural Sector Transformation and Growth Strategy (ASTGS) from 2019 to 2029.

The Strategy has set out to ensure a vibrant, commercial, and modern agricultural sector that sustainably supports Kenya's development in devolution, short-term national aspirations for 100% food security, and longer-term global bodies commitments. Among the Key pillars that will enable this transformation are knowledge and skills (Pillar 7), research, innovation, and Data (Pillar 8).

### Partnerships & Collaboration

Engagement and support by the stakeholders, platform providers (DSA platforms), bundled services providers (bundled services), and awareness creators (awareness creation) had a positive and significant influence on the quality of content in digital agriculture services for smallholder farmers and excluded or underserved communities.

## 1.1 PURPOSE OF THE PROJECT EVALUATION

The purpose of this impact evaluation was to assess the effectiveness, efficiency, relevance and sustainability of the project. It aimed to gain a deeper understanding of the project's outcomes, particularly in terms of its ability to equip farmers with digital skills for improved livelihoods and inclusion.

## 2.0 METHODOLOGY

The project's impact evaluation employed a comprehensive, mixed-methods approach to assess the effectiveness of interventions aimed at empowering farmers in the three (3) counties through provision of digital skills.

The evaluation collected primary data on changes in farmer behaviour, productivity, and income related to digital content and skills covering digital literacy, content usage, and impact indicators.

Focused Group Discussions were held with farmers and stakeholders.

Complimentary secondary information was synthesized from Project Records (such as project progress reports, MoUs and partnership agreements). It also relied on documented achievements, challenges, collaboration efforts, testimonials and case studies (farmers' video recordings and written testimonials) to illustrate real-life impact and success stories.

Both quantitative and qualitative data was analyzed with a view to identifying significant differences in key indicators before and after the intervention to extract prevalent themes and narratives about the project's impact.



## 2.1 SAMPLE PROFILE

# Of Community Digital Champions (CDCs/TOTs)

1,483

Women

71%

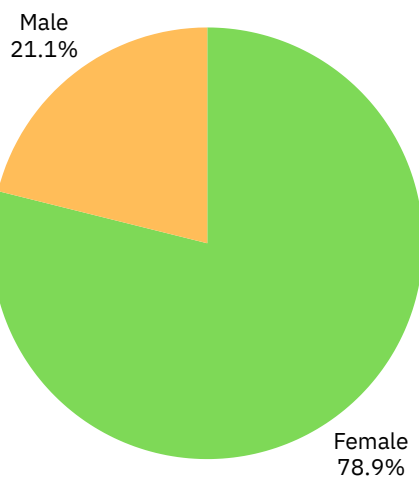
Age 25-34

58%

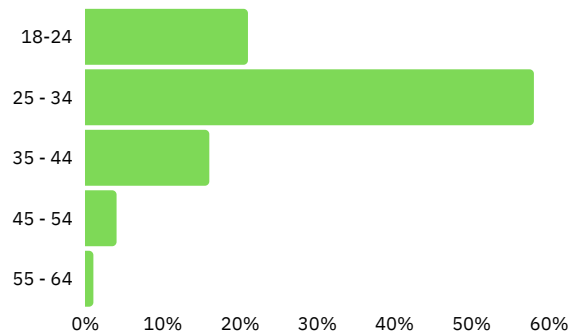
Held college diplomas

40.1%

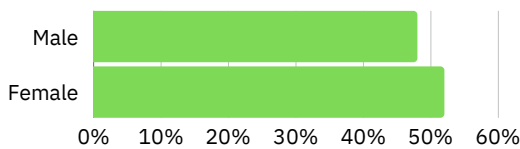
**GENDER DISTRIBUTION OF TOTS/CDCs**



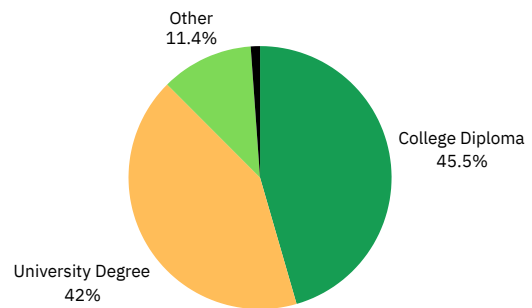
**AGE DISTRIBUTION OF TOTS/CDCs**



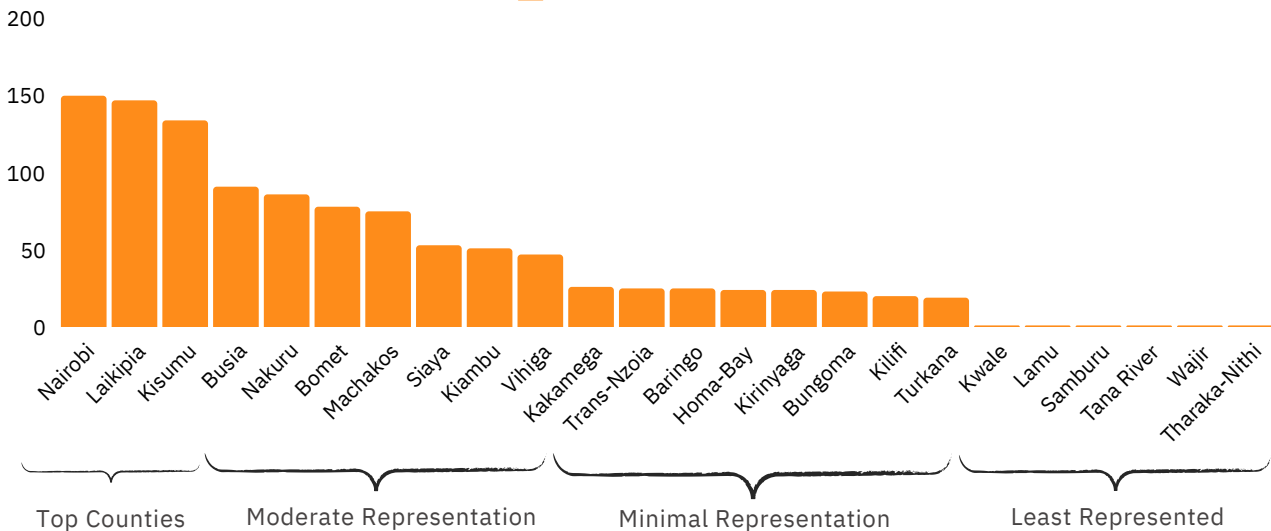
**GENDER DISTRIBUTION OF FARMERS**



**EDUCATION LEVEL OF TOTS/CDCs**



Representation by Country



## 3.0 SUMMARY OF KEY FINDINGS

### 3.1 Relevance

In 2009/2020, UK DAP supported a user needs assessment called Maudhui Digiti, meaning digital content in Swahili.

- The overall goal was to improve access to locally relevant and development-oriented digital content in Laikipia County.
- The assessment revealed that only 1% of residents relied on digital content as their main source of agricultural information.
- There was a pronounced gender disparity in accessing digital content, with females lagging behind males.
- The majority of farmers in Laikipia County had not embraced opportunities from e-commerce and e-banking platforms.
- Similar barriers were confirmed by two separate studies by the Communications Authority of Kenya (CA).
- The Access Gap Study indicated that agriculture was a key use case for ICT services, but there was:
  - Lack of awareness
  - Insufficient digital literacy skills
  - A need for localized/contextualized content among citizens
  - Lack of perceived usefulness of the services
- These findings informed the conceptualization of the DSA programme.



## 3.2 EFFECTIVENESS

### 3.2.1 Effectiveness of the Models

In DSA III four models tested in phase II of the DSA programme, were further tested and refined. The models are discussed briefly below:

1. Training of Trainers (TOT) Model
2. Awareness Creation Model
3. Affordable Internet Access Using Emerging Technologies
4. Bundled Digital Content Services Model

Evaluations showed a moderate positive correlation (0.546) between predictors and digital content quality, with 29.8% of variation explained by these factors.

The Training of Trainers Model was found to have been effective. Descriptive statistics reveal that the participants generally rated the training outcomes (Results), their reactions to the training, their learning experiences, and their behavioural changes highly, with mean scores all above 4.3 on a scale of 1 to 5.

The AIDAR Model highlighted strong farmer engagement with mean scores around 3.9 for retention, attention, interest, desire, and action, indicating effective implementation of strategies to promote digital services.

The Affordable Internet Access Using Emerging Technologies (AIAT) Model showed high user satisfaction (mean score 3.9) with positive perceptions across infrastructure, content relevance, skills, affordability, and risk management.

Finally, the Digital Services in Agriculture (DSA) Bundle Model indicated strong long-term adoption (mean 4.1) and positive perceptions of value, integration, customization, user experience, and efficiency among smallholder farmers. Overall, the results underscore the importance of comprehensive engagement strategies and effective digital service provision for enhancing agricultural practices.

### 3.2.2 Digital Services for Agricultural (DSA) Visibility and Accessibility

#### Objective

Enhance visibility and accessibility of Digital Services for Agriculture (DSA) for farmers across 47 counties.

#### Pre-Qualification of Providers

- DSA providers were pre-qualified based on comprehensive criteria.
- Meetings were conducted to clarify project expectations and advocate for diverse access channels (SMS, USSD, IVR, online videos, mobile apps).

#### Farmer Sensitization Platforms

- Social/religious gatherings
- Chief barazas
- Farmer groups
- Radio talk shows (Radio 47 reached 353,161 listeners)
- Social media (ACWICT reached farmers via Facebook, X, and Instagram)
- Training of Trainers (ToTs) reached 77,402 farmers and stakeholders.

#### Increase Visibility & Accessibility

- Trained 247 officers (92 female, 155 male) from the State Department of Youth Affairs to promote DSA among Kenyan youth.
- Engaged 57,572 prospective Community Digital Champions (CDCs) through partnerships.
- CDCs raised awareness through personal interactions, Chief barazas, social events, self-help group meetings, and social media.

#### Feedback Mechanism

- Farmers provided feedback on challenges accessing digital agricultural content, leading to content upgrades.
- Content bundling was found beneficial for easier access and lower bandwidth costs.

### 3.2.3 PARTNERSHIPS AND COLLABORATIONS

The project was launched through collaboration with the County Government of Laikipia, trainers of trainers (ToTs), and farmers. Key steps included an entry meeting in Nyeri County and the development of a Digital Skills Curriculum, facilitated by various consultative meetings and workshops with organizations like ACWICT, APDK, British Council, and ICTA. ACWICT created training materials based on the ICTA-approved Digital Skills Curriculum Framework, which were subsequently approved for digital skilling.

### 3.2.4 MONITORING AND EVALUATION

Monitoring, Evaluation, Reporting and Learning (MERL) were crucial in project implementation. The MERL plan, aligned with the project logical framework, guided progress tracking and ensured activities were executed as planned. In phases I and II, tools were customized, and in phase III, new online and physical templates were designed to collect necessary data throughout the project lifecycle.

## 3.3 IMPACT

**622,024**

Farmers and stakeholders targeted for Awareness Creation

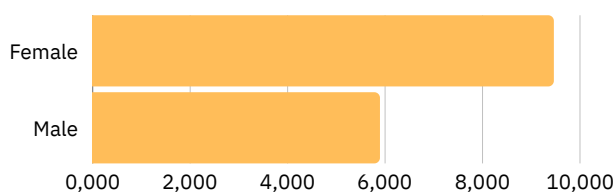
**3,446,254**

Reached farmers and stakeholders (Awareness Creation)

**554.0%**

Success Rate

**15,359** Community Digital Champions (CDCs) Trained in Digital literacy



Counties with the Highest Number of CDCs Trained

Laikipia County  
**12.9%**

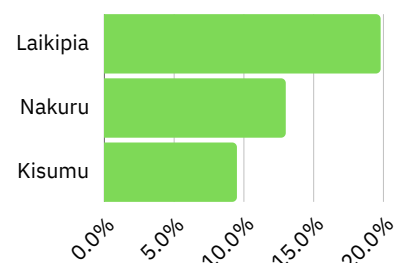
Nakuru County  
**8.4%**



**50,033** Total smallholder Farmers Trained by CDCs



Counties with the largest share of smallholder Farmers Trained





### 3.4 EFFICIENCY

By integrating digital services, 50,033 farmers in various Kenyan counties improved agricultural efficiency and productivity, significantly enhancing user convenience.

### 3.5 SUSTAINABILITY

The project relied on local stakeholders who played a significant role in mobilization and training. These are expected to continue to offer support to farmers in the country. Given that the majority of the ToTs were youthful, the continuity of use of digital services in agriculture is expected to continue.

### 4.0 LESSONS LEARNT

1. Partnerships are key in delivering unprecedented outcomes
2. The benefits of the virtual CDC/ToT digital skilling model far outweigh the in-person skilling model.
3. Engaging and involving different stakeholders in programme design and delivery is beneficial and creates synergies.

## 5.0 RECOMMENDATIONS

#### Allocation of Adequate Time ( 2 years +)

Rolling out a national-scale project quickly is challenging; a timeline of over 2 years for model testing and refinement is necessary for better outcomes.

#### Northern Frontier and Coastal Region

Smallholder farmers in Northern frontier counties were underrepresented in DSA III, despite its benefits; efforts must be made to include these areas socially and digitally.

#### Digitally Excluded Farmer Communities

The virtual digital skilling model needs further testing, as it has drawbacks for digitally excluded farmers with limited access to resources.

#### Effective Representation of PWDs, Women, and Youth

Future project preparations should address cross-cutting issues to effectively represent marginalized groups like PWDs, women, and youth.



# THANK YOU

## FOR YOUR CONTINUED SUPPORT IN

# OUR PROGRAMME

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