

The Digital Advisory Support Services for Accelerated Rural Transformation (DAS) Program

Using Technology to Create Resilient Food Systems

Small farms account for 84 percent of total farms worldwide and produce 35 percent of the world's food supply.* Despite the huge role smallholder farmers play in feeding the world, they face a number of challenges in obtaining inputs for the growing season (fertilizer and seeds) and accessing the necessary information to successfully grow and sell their crops profitably. Smallholder farmers encounter weak market linkages, poor infrastructure (such as a lack of roads and harvesting facilities), financial constraints and limited credit access, and unpredictable weather conditions due to climate change.

Barriers to accessing information and reaching financial markets is especially restrictive to smallholder farmers' productivity. For example, the ability to access weather forecasts, market research, planting techniques, financial tools, and other agricultural information is important for decision-making but severely lacking in many regions of the world.

By increasing smallholder farmers' access to and use of information and communications

technology for development (ICT4D) tools, the chance of a fruitful harvest increases and, in turn, improves food security for everyone.

The DAS Program

Development Gateway: An IREX Venture (DG), with a grant from the International Fund for Agricultural Development (IFAD), is leading the implementation of the The Digital Advisory Support Services for Accelerated Rural Transformation (DAS) Program to address the gap in digital tools and information access for smallholder farmers. DG is also partnering with digital development experts, Jengalab, and training experts, TechChange, in order to provide a holistic approach to advisory support within the DAS Program.

How the Program Works

The DAS Program is a demand-driven facility, meaning country teams and partners that are supported by IFAD can approach the Program for tailored support on integrating, scaling, and creating sustainable digital technology solutions in existing institutions and organizations. The DAS Program will focus on providing technical support for ICT4D through ecosystem

*Lowder SK, Sanchez, MV & Bertini, R. Which farms feed the world and has farmland become more concentrated? World Dev 2021; 142. <https://doi.org/10.1016/j.worlddev.2021.105455>.



assessments, developing training modules, conducting research on emerging technology, and other approaches to support the mission of utilizing digital tools that can scale impact on smallholder farmers. Advisory support may also involve assessing the needs of a particular project or program to identify capacity gaps, opportunities, and challenges as they relate to building, scaling, and making ICT4D sustainable.

Below are several options for the type of work experts under the DAS Program can provide:

1. Ecosystem assessment and mapping for country strategies, development plans, supply chains, or specific sectors;
2. Digital tool appraisal to map user journeys, user experience, scalability, and sustainability;
3. ICT4Ag trainings to provide an introductory training that complements ICT4D initiatives. The ICT4Ag training is intended to be transferable to various contexts and will consist of multiple mini-courses: Principles for Digital Development (PDD), Interoperability (how-to guide for AgTech tools) and Digital Finance;
4. Customized training to promote capacity and awareness building of target institutions, government, and implementing partners on ICT topics;
5. Establishment and documentation of data governance procedures to support digital tool management;
6. Integration of ICT technology indicators into the project, program, or strategy M&E results frameworks;
7. Support in the development of a Request for Proposal/Terms of Reference/Scope of Work to engage an ICT service provider; and
8. Research brief on specific ICT topics (e.g., the use of algorithms, machine learning, data protection factors, etc.).

Case Study: Uzbekistan

In May 2022, the DAS Program supported the development of a Country Strategic Opportunity Programme (COSOP) in Uzbekistan. The COSOP will provide strategic direction for 2023-2027 for IFAD-financed Programs in alignment with national priorities on agriculture and rural development. It is important for guiding investments in agriculture and ensuring nonprofit actors are acting in alignment with government priorities.

Through the COSOP development process, the DAS Program team interviewed dozens of key stakeholders in addition to conducting extensive research on the agriculture sector and developing GIS maps to inform ICT recommendations within the final strategy document. The Program used the interview process to identify opportunities for digitization and partnerships to spur digital innovation and evaluated specific digital tools in alignment with IFAD and country digital priorities.

The DAS Program will continue to monitor outcomes from the COSOP as the recommendations are implemented over the next few years. This engagement also led to a follow-up request from Uzbekistan for additional support to expand the digital features of a new project, designed as a follow-on to the entry points the Program identified in the COSOP strategy document, to take place in 2023.

Overall, the DAS Program will provide institution and capacity-building recommendations that help develop an understanding of cutting edge digital topics, monitoring and evaluation frameworks, and development of ecosystem-aligned national policies.



In particular, support for digitized monitoring and evaluation systems allow partners to gather and centralize program information in ways that can be used or visualized to identify patterns, trends, and even opportunities to further improve targeting farmers. Over time, these insights can contribute to overall impact measurement, helping government and development partners identify what kinds of interventions are the most effective for reaching farmers and meeting their needs.

The Program will also offer training using the TechChange platform to train extension workers, government workers, and other key implementing partners on the integration of ICT solutions into agriculture projects, programs, and strategies. Implementing partners will have the option of accessing the Principles for Digital Development (PDD) course, Interoperability course, and/or Digital Finance course. A customized training program option is also available under the Program.

The DAS Program will support IFAD-financed programs and implementing partners to design applications that are better targeted (i.e., by mapping user journeys and user experience to improve engagement with new or existing tools). By focusing on the end user, the DAS program can help partners improve the ability of digital systems and tools to meet the needs of smallholder farmers. The Malawi engagement (described below) provides an example of this form of advisory support in practice.

Case Study: Malawi

In June 2022, the DAS Program began meeting with Malawi's Ministry of Agriculture and its implementing partners in order to assess how the DAS team could provide advisory support across a portfolio of IFAD-financed programs.

The aim was to strengthen user engagement and uptake of digital tools designed for commodity value chains and market linkages.

The DAS Program provided support through a multi-tiered approach including landscape analyses, user journey and dissemination strategies, and sustainability assessment mapping that multiple programs in the portfolio can use.

The Program conducted a landscape analysis of agri-tech and digital agriculture platforms, apps, and entrepreneurship to help implementing partners in Malawi understand how a digital application could improve the linkage between farmers and businesses. Additionally, the DAS Program created knowledge dissemination strategies, which can be adapted for different apps under development (and gathered key learnings from partners), stakeholders, and other IFAD-financed programs through interviews and focus groups to determine how best to place apps for maximum user engagement and sustainability. The Malawi engagement will help partners define the app's target audience and advise on a method for sharing and promoting the tool through social media, events, pilots, and other mediums.

Connect with the DAS Program

The DAS Program will identify opportunities to pilot, scale, and implement digital solutions across agricultural programs in East and Southern Africa, West and Central Africa, and Near East and North Africa from 2022 until March 2025. Stay tuned!

Interested in learning more about the DAS Program and its activities?

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