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Bureau for Resilience and Food Security Digital Strategy Action Plan

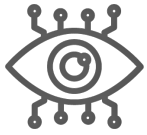
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TABLE OF CONTENTS

INTRODUCTION	3
OVERVIEW OF GENERAL TRENDS	4
Digital Inclusion	4
Agriculture	5
Resilience	6
Nutrition	7
Water Security, Sanitation and Hygiene (WASH)	8
Policy: National, Regional, and Local Community	8
GUIDING PRINCIPLES	9
RISK	9
DIGITAL DEVELOPMENT PRIORITIES	10
Annex I: Linkages with USAID Digital Strategy and Other Relevant Agency Priorities	13



The Bureau for Resilience and Food Security (RFS) Digital Vision Statement

Responsibly and appropriately leverage digital technologies and enable digital ecosystems to support the development objectives of RFS and Missions.

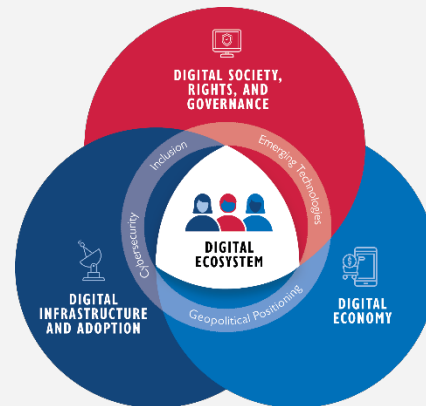
To work toward this vision, RFS aims to use digital technologies effectively to create more inclusive, efficient, prosperous, healthy, and connected agriculture, food, and water systems today — and more climate-smart and resilient agriculture, food, and water systems for tomorrow that sustainably support the health, well-being, and livelihoods of our target populations. This vision statement recognizes that we are now, for the most part and increasingly, living in a digital world. It is, therefore, critical that RFS employ a holistic focus in incorporating digital technologies across our portfolio to achieve our development goals and maximize the impact of our investments, as opposed to considering digital as a nice-to-have or add-on.

INTRODUCTION

The Bureau for Resilience and Food Security Digital Strategy Action Plan (DSAP) follows the launch of [USAID's Digital Strategy 2020-2024](#). Our priorities for the Bureau align with the broader objectives of the Digital Strategy, as follows:

- Improve measurable development and humanitarian assistance outcomes through the responsible use of digital technology in our programming; and
- Strengthen the openness, inclusiveness, and security of country digital ecosystems.

The term 'digital ecosystem' refers to the stakeholders, systems, and enabling environments that together empower people and communities to use digital technology to gain access to services, engage with each other, or pursue economic opportunities. USAID's [Digital Ecosystem Framework](#) is a helpful guide for understanding and assessing digital ecosystems.



The Action Plan seeks to guide RFS's work in digital, which includes RFS support to USAID Missions on this topic, although it is not an action plan for Missions.

This document aims to share the issues and initiatives that RFS will prioritize during the course of the Agency's current Digital Strategy. The priorities are grounded in an understanding of the Bureau's current digital programming, its existing priorities and initiatives, as well as the broader context beyond USAID. The priorities serve as a starting point for strategic planning to facilitate greater coherence in our programming across countries, as well as engender collaboration across the technical sub areas of RFS.

The RFS Digital Strategy Action Plan is a three-year plan covering the same time frame as the Agency's Digital Strategy (through 2024). It may be revisited and updated periodically in the interim as appropriate.

OVERVIEW OF GENERAL TRENDS

The application of digital technology within RFS sectors has both sectorally unique elements, as well as some commonalities. For instance some aspects — including digital ecosystem barriers related to the digital divide, limited rural connectivity, inclusion and policy gaps, lack of widespread data literacy, and inadequate data management and privacy protections — limit agriculture, food security, resilience, nutrition, and water security, sanitation and hygiene programming. These barriers are more pronounced in some countries where RFS works than in others. Both the availability and affordability of digital infrastructure and hardware can vary widely, even among neighboring countries. For example, the cost of mobile data in Chad is more than 86 times more expensive than in neighboring Sudan.¹ Digital solutions that are accessible, affordable, and appropriately designed to meet the needs of bottom-of-the-pyramid users are generally not yet pervasive in the countries and sectors in which RFS works due to factors including lack of prioritization from the private sector, limited infrastructure, and inadequate user-centered design.

Prioritizing local needs met by local suppliers is a critical component to ensuring the appropriateness, effectiveness, and viability of digital technology solutions. Local actors — such as extension agents, local businesses, and others — can serve as a key vehicle for feedback, helping to ensure the development of demand-driven products. There is also a persistent capacity gap among some stakeholders at all levels, from policy makers to farmers, when it comes to digital technology. Effective data governance, data privacy risk mitigation, and solution interoperability also sometimes lack in the contexts where RFS works. Moreover, there is often a gap between generating data and translating that information into products that deliver a targeted, demand-driven service.

While this section is divided into the sectoral areas that RFS supports, it is important to highlight that digital technologies present an opportunity to benefit multiple RFS sectors in parallel. In fact, the potential cross-sectoral nature of digital technologies makes them all the more relevant to RFS's work, in terms of both increased efficiency and broader impact. For example, the application of risk management tools used in resilience programming contribute to sustaining availability and affordability of nutritious foods. In addition, digital technologies applied to addressing food-safety risks have directly contributed to SME growth and access to finance.

Digital Inclusion

More than one in three people in rural areas in Least Developed Countries either lack access to mobile networks entirely or only have access to 2G coverage.² Women often face even more barriers to accessing technology, which might otherwise increase their access to finance and expand employment opportunities. On average, women are 14 percent less likely to own mobile phones than their male counterparts, 20 percent less likely to own a smartphone, and 43 percent less likely to engage online.³ When women and

girls can access and effectively use digital technologies, the benefits are multiple. For example, the Better than Cash Alliance has found that access to digital financial services can strengthen women's household decision-making power and increase their labor-force participation.⁴

These access gaps are not unique to women. They also impact persons with disabilities⁵; indigenous peoples; ethnic, linguistic and religious

¹ [Worldwide mobile data pricing 2021](#)

² International Telecommunications Union, [Measuring digital development: Facts and figures](#) (2020)

³ [COVID-19 and the Gender Digital Divide](#) and [The Gender Digital Divide Primer](#)

⁴ Better than Cash Alliance, [Reaching Financial Equality for Women](#) (2021)

⁵ The GSMA's [Principles for Driving the Digital Inclusion of Persons with Disabilities](#) is a particularly useful reference guide when considering actions to take to promote the digital inclusion of persons with disabilities.

minorities; low-income populations; persons with limited literacy or education; and others. RFS supports efforts with USAID Missions ranging from collaboration with stakeholders that already have access to smartphones and the internet, to those with people in the most remote rural areas, where mobile network service may not yet exist.

In the countries where RFS works, digital service providers do not always intentionally design for and/or target their services to women or marginalized and vulnerable populations. This obstacle is compounded by digital ecosystem constraints commonly perceived as barriers to scale (e.g., limited rural connectivity and digital literacy, and inadequate policies and regulation).

Disaggregated data from digital solution providers is still often lacking in the digital development

sector and increasingly among digital technology providers; however, there is at least a growing awareness of the importance of considering the needs, context, and circumstances of population segments that are less likely to afford or benefit from existing digital technologies. There is also a growing awareness of the potential for digital identification and e-government to enable excluded populations to access government and private sector services (such as banking), as well as increasing the overall transparency, accountability, and efficiency of systems.

Nevertheless, much work remains — in terms of policies, infrastructure, device access, product design, and capacity development — before we will see a significant reduction in these digital divides.

Agriculture

Common examples of digital technology in the countries where RFS works include those deployed to support providers of extension and advisory services, facilitate access to financial services — and, increasingly, enable access to market-, risk-, and production-related information (e.g., extreme weather events, rainfall); create input, service, and output market linkages; monitor for deforestation; enable traceability; improve supply chain management; and facilitate logistics. Agricultural insurance providers are also increasingly using digital platforms such as satellite-based index insurance (vegetation levels) or rainfall history that can give farmers the tools to adapt to climate change. There is also increasing potential to digitize soil health management systems in order to give farmers more precise soil information, while also giving practitioners a clearer aggregate picture of soil health within geographic areas.

There are many case studies and lessons learned in the digital agriculture field, but there is limited evidence of what works in digital agriculture in developing countries. Through its [Digital Development for Feed the Future \(D2FTF\)](#) and [Digital for Resilience and Food Security \(D4RFS\)](#) initiatives, RFS has supported efforts to strengthen and synthesize evidence, most recently through the [Agriculture in the Digital Age](#) evidence review, which RFS co-funded with the Bill & Melinda Gates Foundation. This work found that while there has been a significant uptake in the use of digital technologies in the agriculture sector over the past 20 years, there are still gaps in our understanding of what works and why.

Emerging applications, such as precision agriculture, have shown significant promise in parts of the world, particularly in higher income nations; however, cost and inadequate infrastructure often inhibit those applications in the communities where RFS works.

DIGITAL IN PRACTICE

Supporting a seed company's transformation to a data-driven organization in Uganda

In Uganda, the Feed the Future Youth Leadership for Agriculture Activity partnered with Equator Seeds Limited (ESL) to procure an enterprise resource and accounting platform, a farmer information management and mobile money payment system, and digital scales in order to track inventory and payments across ESL's value chain. The efficiencies gained as a result reduced costs associated with salary payments by 32% and led to 20% greater sales.

Resilience

Digitally enhanced extension and advisory services — as well as financial services, such as insurance, remittances, mobile money, and savings groups management mechanisms — represent key uses of digital for resilience. For example, in the immediate COVID-19 response and rapid shift to remote work, many agri-businesses and service providers either benefitted from already having digital services, or rapidly pivoted to lower-cost platforms (such as WhatsApp) to communicate and to host online extension and advisory training. Development partners also used these systems and mobile services. There is an increasing use of geographic information system (GIS) mapping and earth observation for remote monitoring of crops, forest coverage and deforestation, and integrated watershed and landscape design interventions. Digital technologies are used in early warnings for pests, weather monitoring, and conflict, which are core components of the agricultural and climate risk environment.

Certain approaches — such as user-centered design of climate information and advisory services — have proven applications in USAID's programs and can be enhanced and expanded with additional focus on digital elements, helping people to prepare for and respond to climate risks. Weather pattern changes and increasing climate variability expand the need for innovative climate-resilient technology and protocol adoption that address climate impacts and safeguard livelihoods. Emerging applications (e.g., artificial intelligence/machine learning [AI/ML])

offer new approaches to filling data gaps and better predicting events, such as forecasting vulnerability and predicting the occurrence of shocks. USAID continues to invest in climate services, with plans to expand their applications.

Despite these proven applications, government meteorological agencies in some countries where USAID works often have limited capacity to generate accurate local data, which can inhibit effective use of these tools. Overcoming this obstacle requires both capacity development and greater government collaboration across agencies. Incorporating information generated by the national meteorological agencies into sector-specific decision-making frameworks requires deliberate attention and collaboration. Furthermore, individual-facing applications — like advisory services and payments, connectivity, and digital literacy — can present barriers to uptake, particularly among marginalized populations who may not have access to or an ability to effectively use appropriate digital devices required to use such applications.

Digital national identification systems linked to social registries and targeting systems, as well as recurrent monitoring systems (RMS) also play a fundamental role in strengthening data interoperability, coordination, layering, sequencing, and integration of multi-sectoral systems that are instrumental for building resilience capacities and supporting inclusive development.

DIGITAL IN PRACTICE

Strengthening social capital in Indonesia using digital technology

AtmaGo is a social networking app that enables hyperlocal information sharing. Initially focused on connecting users around disaster preparedness and recovery, it has grown into a tool for broader community engagement and resilience. A 2018 evaluation found that, at a scale of 1 million users, actions taken by AtmaGo users based on early warnings led to \$106 million in avoided economic losses and over 6,000 years of health life saved per year.

Nutrition

Nutrition-sensitive agriculture digital solutions are implemented by USAID and others through the food systems and include solutions that encourage behavior change for consumption, food-price monitoring, ensure food safety and quality from farm to fork, and reduce food waste. Because many of the most nutritious foods are also the most perishable, very efficient supply chains are needed to aggregate, transport, process, distribute, and market them. Digital technology offers significant value for improving such efficiencies, from timeliness of collection from farms to rapid distribution to processors and markets with demand. Nutrition-specific digital solutions are commonly integrated within mobile health solutions, and include digital job aids and decision support, service management and monitoring, information sharing, and tools for field-based measurement of malnutrition/anthropometry.

The digital divide can limit the impact that the most vulnerable experience from digital solutions around nutrition. Nutrition interventions often

target women, who not only have important pre- and post-natal nutritional needs, but can also be responsible for procuring and preparing food for the household. However, as stated earlier, women are generally less likely to own a mobile phone than men. Targeted women may also have limited literacy, making audio-based messaging most effective. Low-income households are also less likely to own phones but are most likely to need nutrition assistance. It is critical that we consult with local populations on their needs and work with local providers to create digital solutions that bring vulnerable populations into the system and consider when digital technology should be used in combination with other strategies to effectively reach target populations. Data fragmentation, whereby elements of data are stored in multiple systems, is also a significant challenge, though multiple global initiatives are actively working to collate national level multi-sectoral nutrition data and strategies (e.g., Maximising the Quality of Scaling Up Nutrition Plus [[MQSUN+](#)]).

DIGITAL IN PRACTICE

Expanding the effectiveness of nutrition activities through digital tools in Bangladesh

The USAID Nobo Jatra project, implemented by World Vision, uses a variety of digital tools to support pregnant and lactating women. Cash transfers are completed via mobile money and health messages are delivered by phone or through a listening device (integrated in a bracelet). Project data is collected with tablets and stored and managed in an online management information system (MIS).

Water Security, Sanitation and Hygiene (WASH)

Common use cases of digital technology in the WASH sector include digital payments for WASH services, including pay-as-you-go (PAYGO) technology in facilitating access to water, digital feedback channels between customers and utilities companies, digital asset management for monitoring and planning, and digital approaches to improving water resource management. Recent digital approaches included mobile-phone based monitoring and payments, Internet of Things (IoT) sensors, smart meters,

and the use of remote imagery (i.e., satellite), along with data visualisation and advanced analytics to support decision making by government agencies, businesses, USAID and its implementing partners, and others.

While some of these approaches (i.e. payment innovations) are more fully established, work is ongoing to leverage the full suite of existing digital solutions and identify new innovations needed to enhance decision making at all levels.

DIGITAL IN PRACTICE

Strengthening water utilities management in Haiti through digital platforms

The USAID Water and Sanitation Project is helping the decentralized water system in Haiti through the open access mWater platform. Tablets are used by each local utility to enter information on water production, number of active and passive customers, revenues and expenses, and the results of water quality tests. The geo-tagged, aggregated data entries allow decision makers to analyze data on maps as well as dashboards and more quickly identify emerging problems.

Policy: National, Regional, and Local Community

Strengthening policies that support enhancing progress through the use of digital systems is foundational to supporting sustainable digital ecosystems. Intentional co-location, coordination, and collaboration among implementing partners, donor organizations, and host-country governments with a focus on strengthening community-level institutions' capacity to use digital solutions can speed progress toward meeting the sustainable development goals (SDGs). Collaboration across this ecosystem is also critical to support the standards and architecture needed to advance interoperability and support data reuse. For example, Policy

LINK supported the development of the Comprehensive African Agriculture Development Programme (CAADP), which developed a digital platform (CAADP toolkit) for knowledge and data sharing, learning, and fostering transparency among the African Union member states who have signed on to the Malabo Declaration on Accelerated Agricultural Growth. A [recent study by Policy LINK](#) showed the CAADP toolkit and dashboard is fast becoming the reference point for country-level and comparative data on African agricultural performance, with broad users from public sector institutions, development partners, civil society organizations, and academics.

GUIDING PRINCIPLES

Adherence to the principles outlined in the [Principles for Digital Development](#) guides the development and implementation of RFS's Digital Strategy Action Plan.

In addition, RFS recognizes that digital technologies have the potential to both reduce or exacerbate existing inequalities. As such, the [two key principles of inclusive development](#) also guide our approach to using digital technologies in our work:

- **Do no harm:** Take measures to ensure that its efforts do not put any individual or marginalized group at increased risk of harm.
- **Do nothing about them without them:** Consult with marginalized groups to understand their needs and priorities.

The Digital Strategy Action Plan is also consistent with a number of USAID policies and initiatives, such as USAID's Digital Strategy, from which this Action Plan process was born, as well as overarching U.S. Government strategies that guide RFS's work, such as the Global Food Security Strategy, the Global Water Strategy, the Multi-Sectoral Nutrition Strategy, the Resilience Policy and forthcoming Climate Strategy. More details on linkages with those other documents can be found in [Annex I](#).

RISK

RFS recognizes that there are both anticipated and unanticipated risks to the introduction of any new digital technology in a development context, which can hinder or actively detract from our development objectives. For instance, [a 2021 study by FIAN](#) found that digitized land registries in Brazil and Indonesia have enabled land grabbers to more easily identify prospective plots of land and push rural and/or indigenous communities off of their land. In addition, as more people and devices (such as IoT sensors and machines) connect to the internet, potential cybersecurity and privacy risks will also grow. Women and girls also often face unique risks as a result of increased use of digital technologies. For example, [more than half of young women globally](#) have reported experiencing abuse online.

We also recognize that failure to support digital ecosystems and/or to promote inclusive uptake of certain digital technologies can introduce risks, such as putting countries and/or communities at an economic disadvantage relative to those that have more proactively integrated digital technologies into their systems and economies. Failure to adequately consider issues of digital sovereignty and the potential consequences of the concentration of ownership and control over emerging technologies (such as advanced AI and automation) by a limited number of companies, universities, and governments may also introduce unanticipated risks to inclusive economic growth.⁶

The environment and climate represent another lens through which to evaluate potential risk. Some digital technologies may have an impact on the environment and climate that is net positive (e.g., through increased energy efficiency) or negative (e.g., through increased energy consumption or electronic waste).

⁶ As an increasing number of digital tools begin to integrate elements of artificial intelligence, its applications present both great opportunities and risks. Colleagues who are considering making use of digital technologies that include an artificial intelligence component will benefit from first reading the USAID publication [Reflecting the Past, Shaping the Future: Making AI Work for International Development](#).

While the risks associated with digital technology will vary by circumstance and context, RFS supports proactively seeking to identify anticipated and unanticipated risks associated with both action and inaction, as well as identifying mitigation measures to minimize the effects of those risks. RFS encourages staff and our partners to consider conducting digital ecosystem-wide assessments or analyses of the risks associated with the introduction of new digital tools and technologies into development contexts prior to doing so, especially in cases where they may apply to individuals and/or communities that are more likely to be situationally vulnerable (e.g. women and girls, indigenous peoples).

DIGITAL DEVELOPMENT PRIORITIES

RFS recognizes the importance of effectively leveraging digital technology to support attainment of our broader development objectives, as well as the potential to strengthen country digital ecosystems through our programming and engagement with ecosystem actors. In order to support RFS and Mission-based teams to do so, RFS supports prioritizing the following areas:

Apply a market-systems approach to digital development in programming that is locally-led and demand-driven, and takes into account the digital divide.

This approach must align with the Principles for Digital Development, including a focus on promoting USAID’s incorporation of an inclusive and facilitative market systems approach from the start of activity design to head off donor dependency, support local system demand for and ownership of digital technologies, encourage interoperability, and drive investments that prioritize sustainability.⁷ It will also focus on taking proactive steps to ensure that no one is excluded due to differing digital technology access or ability, which may at times require policy and/or advocacy intervention. Colleagues may find methods commonly used in the private sector, such as product lifecycle management, to be particularly helpful in framing and structuring this approach.⁸

Rationale

In the development sector there is a long history of donor-supported digital initiatives that become defunct once donor support ends. While some digital technologies provide critical services at scale as global digital public goods, most will require a market-system approach to be sustainable. RFS believes that it is important for projects to take an intentional and inclusive approach to ensuring long-term viability of any digital technologies that project stakeholders use from the outset, rather than waiting until the final year of a project to start thinking about how such tools will sustain themselves after the project ends.

Intended Result

RFS supports consistently promoting the application of an informed, intentional, inclusive, sustainable, and systems-oriented approach to applying digital technologies in programming to increase activity reach, reduce the cost of service delivery, and increase efficiency.

⁷ RFS recognizes that not all communities that USAID serves are likely to be commercially viable to serve. In the context of our work, local system ownership and sustainability may not always be led through the private sector. In instances where digital services or products are only viable as a public good, we will support the host country public sector agencies to take the lead and to make long-term investments, with USAID providing capacity development and initial financial support, as relevant.

⁸ In the context of digital technology, lifecycle management generally entails; 1) analysis and requirements gathering, including market segment analysis; 2) phased design; 3) phased development; 4) deployment; and 5) maintenance and refinement.

Focus on strengthening local digital ecosystem capacity for using digital data and digital technology safely and responsibly.

This focus includes supporting efforts to increase inclusive access to digital technologies, integrating digital and data analytics content, data privacy, and cybersecurity measures into workforce development, and developing the digital capacity of government agencies, producers, SMEs, and others.

Rationale

Digital technologies are more likely to benefit RFS sector programs when adequate access to and ability to effectively and responsibly use those technologies exists. Without supporting efforts that increase the equitable and local availability of relevant digital tools, taking steps to promote uptake of prerequisite devices, expanding digital data capacity and standards, and ensuring that stakeholders are digitally literate and know how to use relevant hardware and software, we will be unable to maximize the benefits that strong local ecosystem capacity can bring. This work also includes support to government agencies to develop, maintain, and deploy digital systems — such as early warning, digital identity, digitized government services, and others — and legal and/or regulatory measures that ensure the privacy and security of data maintained within the systems. To do this work effectively, we first need to understand the needs of stakeholders in the context of broader digital ecosystem factors.

Intended Result

RFS's support of efforts to strengthen local digital ecosystem capacity will lead to increased uptake of digital technologies and safeguards that positively contribute to RFS and Mission development objectives. Engagement at the ecosystem level will also enable USAID staff to have a better understanding of the stakeholder landscape (donors, entrepreneurs, users) in relation to digital technology in the sectors that RFS supports.

Include a greater emphasis on inclusion, privacy, dignity, and the rights of end-users through differentiated programming that reaches program participants through channels that work best for them.

This effort also includes addressing the issues of [bias in data collection, modeling, and analysis](#); an emphasis on equitable information access and the rights of data subjects (including consent); [responsible data sharing](#) and standards development; and developing the capacity of local partners to be aware of these broader issues and how to integrate them into their programming. This effort also emphasizes the importance of building [cybersecurity](#) into data systems and technology programming from the start. Understanding what actions or investments may be needed requires an understanding of the legal and policy environment that underlies digital rights and governance. While included as an individual priority, this priority is also cross-cutting across all other priorities.

Rationale

RFS puts women, youth, marginalized populations, and vulnerable groups at the center of our work as key agents of change. This commitment to inclusion must extend to the digital space as well, ensuring that we always adhere to a responsible and ethical approach to digital technology deployment and usage, starting with a “do no harm” and “do nothing about them without them” approach. We will also consider the needs of the most remote rural areas to ensure they are able to access information through radio or other means where there is no internet or mobile-phone access. Given the value that digital data can have, we also have a responsibility to users in ensuring that it is protected throughout the data lifecycle.

Intended Result

RFS supports making investments in policy development and implementation support that lead to increased uptake of an inclusive, secure, and rights-based approach to data and digital technology in RFS and Mission-aligned activities.

Strengthen the ability of the private sector (especially local private sector) to deliver contextually-appropriate, inclusive, rights-based, and viable digital technologies that address RFS's development objectives.

This effort includes supporting digital entrepreneurship and innovation, and positioning local system actors to build the business case for impactful digital technologies and analytics, as well as supporting partnerships and engagement that lead to more open, inclusive, and secure digital ecosystems. We recognize the importance of balancing the private sector's interests in intellectual property rights with USAID's interest in digital public goods, and will strive to find win-win solutions on this front. Where possible, we will also employ a multi-stakeholder engagement process to better understand country and local community priorities, needs, and challenges before identifying and engaging with relevant private sector actors.

Rationale

This priority is consistent with USAID's Private Sector Engagement (PSE) Policy, as well as RFS's PSE mission, which is "...to seek collaboration with - and support Missions to collaborate with - private sector actors whose interests and values align with our own, to catalyze investments into local systems and markets such that they become self-sustaining." Additionally, this approach recognizes that many of the local digital ecosystem capacity gaps noted above can be addressed by a strong local private sector.

Intended Result

Private sector actors will be more inclined to and capable of providing digital services to the populations that RFS and aligned Missions serve. Digital ecosystems will be further strengthened through improved public and private sector collaboration on issues such as interoperability and shared standards.

Invest in research and evaluation that helps colleagues better understand the factors driving positive outcomes, the impact of digital technology, and risks or negative outcomes to avoid.

This priority includes an emphasis on understanding market segmentation and need, what types of digital technologies are more likely to be appropriate in a given context, and how different demographics are interfacing with digital technology. Research should also seek to identify when technology enabled harm, as well as relevant mitigation measures.

Rationale

The appropriate and responsible application of digital technologies in development is heavily nuanced and contextually specific. There is no one-size-fits-all approach. It is critical for USAID colleagues and our partners to understand these nuances so that they can effectively take advantage of the potential benefits and mitigate risks that digital technologies bring to their work.

Intended Result

USAID staff and relevant stakeholders have an increased understanding of more nuanced measurement approaches to assess the outcomes and impact of digital technologies in development. This effort — paired with improved knowledge sharing and collaboration within RFS, with Missions, and other stakeholders — will ensure wide dissemination of research, evidence, and methods. Furthermore, through increased sharing, we can ensure that metrics, evaluation, and learning are widely available — and thereby avoid the need to continually reinvent the wheel.

Annex I: Linkages with USAID Digital Strategy and Other Relevant Agency Priorities

The USAID Digital Strategy goal is “To achieve and sustain open, secure, and inclusive digital ecosystems that contribute to broad-based, measurable development and humanitarian-assistance outcomes and increase self-reliance in emerging market countries”. Through a multi-pronged, inclusive approach, USAID seeks to capitalize on opportunities and address inherent risks in digital systems in countries where USAID works.

RFS’ Digital Strategy Action Plan reflects this agency-wide goal and embraces the multi-pronged approach to develop safe, fair, and equitable digital systems. Programming must focus on building both internal Bureau and in-country capacity to develop knowledge and skills that will lead to better programmatic decisions through the use of digital systems and result in strong, inclusive, self-sustained digital ecosystems both within the Bureau and in the countries where USAID is implementing digital programming.

The RFS Digital Strategy Action Plan goals align with Agency goals to ensure that digital technology promotes inclusive growth, fosters resilient and democratic societies, and empowers all — including the most vulnerable — while navigating the risks associated with digital tools. To successfully achieve these goals, RFS intends to:

- Include components in program design and activities that strengthen openness, inclusiveness, and security of country digital ecosystems.
- Identify cross-sectoral opportunities to leverage digital activities (tools, technologies, and platforms) that are being designed or implemented to reduce redundancy of the development of these activities across the Bureau and Agency and improve cross-Bureau and interagency collaboration and knowledge-sharing.
- Ensure cyber-hygiene practices have been defined for programmatic activities and require implementing partners to identify measures they are taking to mitigate threats associated with digital tools as well as help identify cybersecurity threats in the countries in which they work.
- Engage key stakeholders, including community members, through co-creation processes to understand both the limitations and opportunities digital solutions offer in the context of the communities in which RFS works.
- Include core elements of the Digital Ecosystem Country Assessment (DECA) in RFS digital assessments, as appropriate, and share research methodologies on RFS areas to help inform DECAs in Missions with RFS portfolios.
- Invite Mission Digital Development Officers to participate in RFS digital communities of practice, training, and program design.
- Support Missions in the Digital Ecosystem Fund application process, as requested.

The RFS Digital Strategy Action Plan will also align with the following Agency policies and priorities:

- [Global Food Security Strategy \(GFSS\)](#) — The US Government’s Global Food Security Strategy 2022-2026 has a strong emphasis on digital technology, and includes a new cross-cutting intermediary result (CC IR 10) on “Enhanced integration of digital technologies”.
- [Global Water Strategy](#) — The Global Water Strategy envisions a more water-secure world where people have access to safe drinking water and sanitation, and water resources are protected and well-managed. In support of the strategy’s four strategic objectives, strategic approaches include promoting “common data exchange formats and access to data for decision-

making”, as well as building “knowledge to monitor the quality and quantity of water resources” and improving forecasting.

- **[USAID Multi-Sectoral Nutrition Strategy](#)** — Optimal nutrition is fundamental to achieving USAID’s wider mission to end extreme poverty and to promote resilient, democratic societies while advancing our national security and prosperity. The strategy represents a model of development that harnesses science and data to inform cutting-edge approaches in nutrition. The growing evidence base has shown not only that it is possible to capitalize on increasingly ubiquitous mobile phones to improve public health, but also that the data collected and made available through digital systems can help health stakeholders make better decisions. Digital tools offer a means to improve coverage and quality of nutrition services and to improve the ability of food systems to support nutrition and health.
- **[USAID’s 2012 Policy on Building Resilience to Recurrent Crisis](#)** is currently under revision with a revised Policy expected in 2022. Digital technologies play an essential role in providing the information, services, analysis, and communications essential to protecting and improving human well being despite shocks and stresses everywhere USAID works.
- **[Climate Change Strategy](#)** — A draft of the USAID Climate Change strategy, 2022-2030, was undergoing public review at the time the RFS DSAP was finalized. Climate programs can improve their reach, impact, and efficiency by leveraging digital technology to crowdsource data, enable real-time analytics, relay critical information, create resilient digitally-enabled communities, and increase access to clean energy.
- **[Private Sector Engagement Policy](#)** — USAID recognizes the private sector as the driving force in the creation, delivery and adoption of innovative digital technologies in developing countries. USAID’s PSE Policy cites the role of digital technologies created by the private sector in improving agricultural productivity, connecting fragmented markets, expediting cross-border trade, sharing market information for better decision-making, easing mobile payments, and creating jobs in higher-skilled production activities. With the onset of the COVID-19 pandemic, many USAID Missions acted quickly to help partner SMEs develop and apply e-commerce and digital platforms to continue operations and adjust to new consumer demand through online service delivery, where network connectivity allows.
- **[Economic Growth Policy](#)** — RFS’s approach to digital technology is firmly rooted in a belief that most digital technologies that USAID supports should be market-driven and financially viable beyond USAID engagement. Whether a digital technology is commercially viable or best suited as a public good, RFS recognizes that it is not in the best interests of anyone to perpetuate dependence on donor-supported digital solutions, which often lack scalability or sustainability. This approach is consistent with the Economic Growth Policy, which states that “Inclusive, sustained, resilient, private sector-led economic growth delivers the increased incomes and domestic resources that make developing countries self-reliant and fosters demand for more transparent and accountable governance.”
- **Inclusive Development ([Automated Directives System \[ADS\] 201](#), [ADS 205](#))** — USAID defines inclusive development as “The concept that every person, regardless of identity, is instrumental in the transformation of their own societies and their inclusion throughout the development process leads to better outcomes.” The RFS Digital Strategy Action Plan recognizes the importance of inclusive development and encourages RFS, Mission, and implementing partner staff to use inclusive processes when designing, developing, and/or deploying digital technologies in their work.

- **[Gender Equality and Women's Empowerment \(GEWE\) Policy](#)** — The GEWE policy affirms USAID's commitment to empowering women and girls across the globe and underscores the need to ensure that the transformative power of digital technology is equally available to men and women. RFS will work to close the persistent — and in some cases, growing — gaps in women's access to, and use of, digital technology, which significantly hamper women's access to agriculture and market information and services, as well as a growing array of digital financial tools. These tools can improve women's productivity and profit, improve their lives, the stability of their families, and the resilience of their communities. As the world becomes increasingly more digital, RFS's interventions will align with the GEWE policy and Digital Strategy in closing the persistent gender digital divide while also addressing the structural and normative factors that may prevent women from fully benefiting from these technologies and may lead to unintended consequences.
- **[Youth in Development Policy](#)** — The Youth in Development Policy provides guidance on the systematic and purposeful inclusion of young people across USAID's work. The policy includes a principle to “embrace innovation and technology for and by youth.” Digital tools and technology can provide benefits to young people ranging from access to financial services to improved farming practices. Digital platforms, such as social media, have also [proven effective](#) in encouraging young people to choose careers in agriculture. There is some [evidence to suggest](#) that young people are able to pick up new technologies more easily than older adults, giving them a comparative advantage. [Other evidence](#) also finds that young people are more willing to adopt new technologies and farming practices as compared to older adults with more on-farm experience. While these anecdotes provide interesting avenues for further exploration, there is still a need to systematically confirm the comparative digital advantage of youth in (agri)food systems and how digital tools can improve the working experience of young people both on-farm and elsewhere along the value chain to increase entry into the agricultural workforce.
- **[Locally-led Development](#)** — Digital tools and platforms should harness the power of science, technology, innovation, and partnership to generate new knowledge, tools, and approaches. The tools should be developed to engage and empower local actors throughout the development process to lead and make decisions about their own development. USAID and its partners will work together to implement solutions and create an environment for sustainability, scalability, and impact that increases the prevalence and effectiveness of locally-led and locally-owned solutions to development challenges.
- **[RFS Food Systems Conceptual Framework](#)** — This framework depicts both RFS's perspective on the food system and its role in sustainably reducing hunger, malnutrition, and poverty, as well as illustrating the range of ways RFS might take action through food systems to achieve these outcomes. As such, it is a useful framework when considering the relevant drivers and investment levers that may exist relative to digital technology, as well as how those factors may potentially affect food systems and/or development outcomes.
- **[Vision for the Indo-Pacific](#)** — The RFS Digital Strategy Action Plan's emphasis on private sector engagement also aligns with the Vision's focus on unlocking private enterprise-led economic growth, which includes an emphasis on digital connectivity and cybersecurity.



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