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

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Expanding Mobile Phone Access and Ownership

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The Challenge	The Solution
During the pandemic, mobile phones emerged as a critical tool in helping agriculture market actors respond to market disruptions. Basic feature phones and smartphones alike helped actors access vital information and advisory services, negotiate deals, locate inputs, hire labor and mechanization services, aggregate produce, and hire transport to markets. Unfortunately, many market actors still do not own mobile phones[1] for a variety of reasons, including inadequate literacy and digital skills, lack of trust in digital devices, limited knowledge of relevant use cases, poor connectivity, lack of identification documents to register for mobile phone subscriptions, social constraints (particularly for women), and notably, a lack of affordability.[2]	To expand access to mobile phones and increase mobile phone ownership, USAID and its implementing partners should consider creative strategies, such as asset financing models, bulk purchasing, installment payment plans, secure shared devices, and partnering with the private sector to subsidize phones and financial products. These solutions can remove barriers by lowering the cost of phones, dividing up payments into smaller and more affordable installments, and expanding access to financing for affordability.

What are some strategies to expand mobile phone access and ownership?

Various approaches can be used to expand mobile phone access and ownership without relying on free distribution. For example, mobile phone financing plans enable market actors to access more affordable phones through better pricing, more manageable payment installments, and/or financial products that can be used to save for or secure credit toward the purchase of a phone. Also, strategies such as promoting shared devices can help expand access to digital tools and services in resource constrained communities where mobile phone access or availability remain low.

How do these strategies work?

- **Device asset financing models** implemented as lease-to-own, layaway, or payment installment plans are made available through outgrowers, producer groups, or agribusinesses that already sell equipment and inputs on similar plans, mobile phone vendors, or third-party providers such as pay-as-you-go utility companies.
- **Bulk purchasing options** are coordinated in collaboration with stakeholders that can procure phones wholesale such as mobile network operators (MNOs), agriculture market actors such as outgrowers, or those who have a business case to sell quantities of bulk phones at a discount, wholesale price, and/or in installments.
- **Financial products** may be offered by relevant financial service providers that have or are willing to develop a mobile phone loan or savings-based product.
- **Shared or intermediary access models** help farmers or market system actors access mobile phones through intermediaries such as extension or mobile money agents equipped with mobile devices. This allows them to use digital services such as mobile money accounts and digital extension services without directly owning a phone. Further, in resource-constrained communities, shared access models can

[1] At the end of 2019, 14 percent of adults in low-middle income countries (LMICs) did not own any type of mobile phone; in South Asia and Sub-Saharan Africa, more than 20 percent of adults do not own a mobile phone. Affordability of handsets remained the top reported barrier to mobile ownership in many LMICs in 2019. GSMA State of Mobile Internet Connectivity Report, 2020, https://www.gsma.com/r/wp-content/uploads/2020/09/GSMA-State-of-Mobile-Internet-Connectivity-Report-2020.pdf

[2] Women across LMICs are 8 percent less likely than men to own a mobile phone. GSMA Mobile Gender Gap Report, 2020, https://www.marketlinks.org/resources/mobile-gender-gap-report-2020

promote sharing of mobile devices between households or groups such as Village Savings and Lending Associations (VSLAs) to facilitate group-based transactions.

Why should you consider expanding mobile phone access and ownership?

Mobile phone ownership can help empower market actors with tools to continue their agriculture activities earn income and build resiliency in the face of shocks such as the COVID-19 pandemic. Some use cases include maintaining critical relationships within the agriculture market system, expanding their customer base and marketing channels, accessing vital information for decision-making, conducting remote transactions, and using digital financial services. The strategies to expand mobile phone access and ownership listed above create value for market actors by providing better pricing and more manageable payment plans for devices, while simultaneously creating new business opportunities for agribusinesses or financial services providers interested in financing mobile devices as an additional product or service line. Despite these opportunities and the proliferation of cheap smartphones in particular, Missions and implementing partners should exercise caution when increasing access to affordable phones. Specifically, they should consider the risks associated with increasing access to phones that, due to their make and model, have various compatibility issues that could negatively impact market actors' access to current mobile-based digital services.

When are mobile phone access and ownership expansion strategies likely not the right fit?

Mobile phone ownership expansion strategies may not be appropriate to pursue if the target population does not have access to the foundational infrastructure needed to support mobile phone use (i.e., a strong telecommunications network). Also, it may not be appropriate to expand financing-related schemes if initial assessments or surveys on current use and interest in mobile phones reveal barriers unrelated to affordability. As in all digital interventions, Missions and implementing partners must carefully determine whether factors such as poor digital literacy, lack of trust in digital tools, laws or regulations, or other social constraints may negatively affect the impact of these strategies.

What are some of the potential risks and pitfalls of expanding mobile phone access and ownership?

Strategies to expand mobile phone ownership must be implemented based on thoughtful research and planning with consideration of the potential risks or negative impact on market actors. Some risks include market actors becoming over-indebted when purchasing phones. If purchasing schemes are not appropriate, they may cause negative impacts on household income or disrupt household dynamics if certain actors who obtain phones do so in contradiction of social norms. Also, establishing financing schemes without a clear business case may result in market actors investing in a business that is not viable and could result in loss of finances, reputation, and/or customer loyalty. Finally, when promoting shared devices, multiple users face an elevated risk of harm if the device is lost or stolen, or if personal account information or data are compromised due to human error or efforts from malicious actors.

Illustrative Examples

- Juhudi Kilimo Ltd. (JKL): JKL is a microfinance institution (MFI) in Kenya that provides financial services to approximately 47,000 rural smallholder farmers and a number of micro entrepreneurs (mainly agribusinesses). JKL offers a variety of loans, including those designed for agriculture assets. In March 2020, before the onset of COVID-19, JKL launched a mobile phone loan product called "Simu Yangu," which means "My Phone" in Kiswahili. The maximum loan amount is approximately $15 USD, which is meant to be repaid monthly within six months. JKL believes it is important to "bring their clients into the digital era." It recently transitioned to using linked M-PESA mobile money wallets for loan collections, savings deposits, and disbursement of emergency digital credit, thus making the phone a

valuable tool for both JKL and the clients, especially during the COVID-19 market disruptions. So far, most of the loans have been taken by women.

- Strategic Impact Advisors and TNM: With funding from the Foundation for a Smoke Free World in Malawi, this project conducted training for 1,000 smallholder farmers (SHFs) on mobile money use cases. Initially, approximately 50 percent of farmers did not own a mobile phone, so an arrangement was made with TNM, the mobile network operator, and two local farmer-based organizations to craft a solution. TNM sold basic mobile phones (costing about $11 USD) to the SHFs on an installment plan that spread the payments for the phones over three equal monthly installments, which was a more manageable outlay of costs for the SHFs. Payments were collected by lead farmers who deposited the funds with the farmer-based organization for repayment to TNM. TNM sold 346 phones through this installment plan scheme, increasing mobile phone penetration by 25 percent among the SHFs being trained.

- The ADVANCE II Program: The ADVANCE II Program operated an outgrower business model in Ghana promoting commercially focused linkages between actors that both supply and purchase from smallholder farmers. The program aimed to incorporate a range of digital services for operations (e.g., mobile data collection), extension and information delivery (e.g., voice messaging service), and financial inclusion (e.g., digital financial services). However, in their activity areas, mobile phone ownership was only at 33 percent of the overall population (49 percent for men, 19 percent for women). To address this challenge, ADVANCE II worked directly with mobile network operators to sell low-cost phones in the communities. Unexpectedly, sales were limited to harvest times when farmers had a bit of extra income to make such purchases. In this case, it would have been helpful to also explore payment installment options rather than expecting farmers to pay all in one lump sum.

- Advanced Chemical Industries Limited (ACI): ACI is one of the largest conglomerates in Bangladesh. One of its strategic business units is ACI Agribusinesses, which integrates services on agriculture, livestock, fisheries, and farm mechanization. It also has the ACI retail chain, SHWAPNO, which operates 129 outlets across the country and an online marketplace. ACI is implementing a project with 600 farmers to promote best agriculture practices and purchase their outputs for sale at SHWAPNO. During the pandemic, ACI subsidized 70 percent of the cost of smartphones for its long-term farmers (those that have worked with ACI for five or more years). This scheme was deemed necessary to maintain communications, provide agriculture advice, and conduct transactions as the organization had no choice but to connect with farmers virtually. As an investment in better supply chain management, the phones were purchased in bulk and made available to farmers who paid for the devices through deductions from their bills to ACI. The organization found this approach beneficial and expects it to reduce supply chain costs in the long run.

ACTION CHECKLIST

1	**Conduct a Market Assessment:** With the goal of creating user-centric and viable solutions, it is necessary to start with relevant market information on the context and the demand and supply for mobile phones. USAID should leverage existing data when possible and/or commission research to inform the identification of relevant mobile phone financing solutions. Research should include: • **Demand-side information**: mobile phone use in country and by specific market actors in the areas where USAID works, their preferences, barriers, and risks to phone ownership (disaggregated by gender and other demographics).

	• **Supply-side information**: a landscaping of mobile network operators, main mobile phone suppliers, relevant financial service providers, other third-party providers (e.g., pay-as-you-go solar devices), and cost and quality of devices available. • **Environment**: infrastructure for operating mobile phones such as connectivity (e.g., network coverage) and electricity, and requirements for registering for a mobile phone subscription (e.g., Know-Your-Customer identification requirements).

2	**Explore Potential Mobile Phone Uptake Schemes:** Based on the specific market context and agriculture market actors' needs and preferences, USAID should encourage implementing partners to explore various opportunities and partnerships for appropriate mobile phone uptake schemes. In each scheme, it is critical to identify and cultivate partnerships with relevant stakeholders, such as mobile network operators, financial service providers, and other mobile phone vendors, and collect relevant detailed information to demonstrate a business case for the scheme. The preferred scheme will depend on the specific context, willing partnerships, and market actor preferences. Before meeting with a potential partner, be sure to prepare as follows:
	• Do not expect or seek donations or see this partnership as solely a corporate social responsibility initiative. There must be a viable business proposition to discuss with the potential partner.
	• Be prepared to have an informed conversation. Study the partner's current activities, business goals, and incentives, and consider what value proposition a mobile phone uptake scheme might offer.
	  ○ Does the potential partner sell mobile phones? In bulk? For wholesale pricing or other discounts?
	  ○ In which regions or customer segments is the partner looking to expand its product or service offerings?
	• Also prepare to discuss the market opportunity that further engagement would open to the potential partner.
	  ○ How many phones may be purchased wholesale?
	  How many potential buyers could the partner reach were it to make affordable mobile phones available?
	• Be sure to discuss and understand the partner's expectations for the potential costs and repayment terms that would be acceptable.
	• Understand the potential risks the partner may face and come equipped with examples of how these risks have and can be mitigated.
	• Where available, provide data, reports, or case studies demonstrating the business case for participation in a mobile phone uptake scheme.
	
	Some specific uptake schemes to explore are outlined below:
	• **Device asset financing models**: Identify stakeholders such as agrovets, agro dealers, outgrowers, producer groups, agribusinesses, and other relevant third-party providers (e.g., pay-go solar device vendors) that traditionally provide services to SHFs, including selling agriculture inputs on credit, lay-away, or lease-to-own plans. Once relevant partnerships are identified, explore the feasibility for financing mobile phones using a similar approach. Implementing partners should be prepared to demonstrate the business case of including mobile phones into inventory alongside other agricultural inputs and equipment, by presenting relevant detailed information (e.g., number of potential customers, anticipated cost outlays, potential profits, and other benefits).
	• **Bulk purchasing options and installment payment plans**: Identify and build partnerships with mobile network operators, mobile phone vendors, or farmer organizations. Propose options such as bulk pricing and/or installment plans for mobile phones. Implementing partners should be

	prepared to demonstrate the business case to the MNO or vendor by presenting relevant detailed information (e.g., acquisition of new customers, brand loyalty, potential to reach entire value chains). • **Financial products**: Identify and build linkages with financial service providers operating in the program activity zone. Assess available financial products and if financial products do not exist to finance mobile phones, consider how to propose options for saving or loan products that would be relevant for their existing and new clients. Implementing partners should be prepared to demonstrate the business case to the financial service provider by presenting relevant detailed information (e.g., numbers of existing/new clients, client income streams, client use of savings and loan products). **Shared/intermediary access models:** Identify and build partnerships with digital service providers, projects or initiatives that equip youth, mobile money agents, extension officers, community leaders, and/or digital extension agents to provide access to mobile phones and digital services for smallholder farmers and rural communities. Propose expanding these service offerings into areas where mobile penetration is low and/or mobile phone financing opportunities have yet to materialize. Implementing partners can provide support by helping to identify trainees with appropriate interest and skills. Further, implementing partners can sensitize farmer groups or VSLAs on the benefits of collective phone ownership, link groups to affordable purchasing options, and provide trainings on relevant service options. For any of these solutions, implementing partners should design and implement a pilot before a full rollout that is based on a detailed implementation plan.
3	**Address Corresponding Barriers to Phone Ownership:** Though affordability is often one of the primary challenges for market actors to own mobile phones, corresponding barriers may also impact the long-term viability of the mobile phone financing solution. Many barriers are well documented in global research[xxv] and their relevance should be confirmed by local market research. These may include literacy and digital skills, perceptions of relevant use cases and security, limited telecommunications network coverage and electricity, lack of identification documents to register for mobile phone subscriptions, and/or social constraints. USAID should encourage implementing partners to consider the degree to which these barriers exist and identify approaches and activities to mitigate them in the financing schemes. Some relevant activities may include: • Training in digital skills • Training in use of relevant digital services • Training in digital privacy and security risks • Developing linkages with third-party providers of alternative energy (e.g., pay-go solar), • Advising market actors on how to process and obtain their identity documents • Conducting community awareness-raising workshops on the benefits of women and girls in owning mobile phones and/or engaging project ambassadors to dialogue with the community
4	**Advocate for Better Quality and Pricing of Phones in the Market:** As appropriate, USAID should advocate to telecommunication regulators to use their Universal Service and Access Funds (USAFs), in countries where these are available, to subsidize the price of mobile phones so that low-cost phone brands (especially smartphones) are more affordable. As an additional strategy, USAID Missions and implementing partners can engage host governments in developing policies that provide incentives to mobile phone providers such as waived taxes for producing affordable phones. USAID and implementing partners can help craft an approach that involves mobile network operators that sell phones and that provides local phone manufacturers access to these funds.

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