

ACCELERATING DEVELOPMENT IMPACT A SNAPSHOT OF PROGRESS







The U.S. Global Development Lab serves as an innovation hub. We take smart risks to test new ideas and partner within the U.S. Agency for International Development (USAID) and with other actors to harness the power of innovative tools and approaches that accelerate development impact.

USAID established the Lab in 2014. The Lab brings together diverse partners to catalyze the next generation of breakthrough innovations to advance USAID's mission to end extreme poverty and support inclusive growth.

OUR APPROACH

The Lab operates under a set of guiding principles. We are:

♦ OPEN AND INCLUSIVE

Drawing upon the ingenuity of people from around the world.

◆ EVIDENCE-BASED

Investing based on strong evidence of impact.

◆ CATALYTIC

Attracting the support of others to enable sustainable development solutions that reach massive scale.

AGILE

Creating fast feedback loops that enable continuous learning and performance improvement.

OUR TOOLS

The Lab is focused on solutions around Science, Technology, Innovation, and Partnership — reflecting USAID's broad embrace of innovation to bring about positive change and solve some of the world's most pressing challenges. We work across USAID and with the international development community to test innovative tools and methods. When a new approach proves effective, we work to increase its adoption throughout USAID and with our partners to increase its impact.



Spotlight on Off-Grid Energy

HELPING USAID PROVIDE ENERGY ACCESS TO MILLIONS

About 1.2 billion people — including 635 million in Africa alone — do not have electricity. Many more only have access to expensive, polluting energy sources such as kerosene or diesel. Access to clean, affordable energy can transform their lives. It allows businesses to stay open later and children to study after dark. It increases economic growth and reduces poverty, especially in marginalized, rural areas. That is why the Lab is supporting USAID's effort through Power Africa to expand energy access across the continent.

USING AN OPEN AND INCLUSIVE APPROACH TO FIND THE NEXT BIG IDEA

We know that great ideas can come from anyone, anywhere. That is why we open up international development to creative, talented people in every field all over the world. Open innovation programs such as Development Innovation Ventures (DIV) help us source and test promising solutions across many sectors. When we want to focus global attention and resources on a specific issue, we use innovative approaches such as challenges and prizes.

TAKING SMART RISKS AND TESTING FOR EVIDENCE OF IMPACT

DIV uses a staged funding model, similar to how venture capital firms operate. We start with relatively small grants to test, or pilot, new ideas. This allows us to reduce risk and double down on the most effective innovations. We look for evidence of impact and the potential for growth, and provide more funding only if these conditions are met. One of our grantees, Off-Grid Electric, provides a radically affordable solar leasing service in Tanzania. Using digital financial services via mobile phones or local kiosks, customers pre-pay for the service in increments as small as a single day of power. DIV took a calculated risk on Off-Grid Electric at an early stage, providing a \$100,000 grant in 2013 to test the model.

PATHS TO SCALE

CATALYZING PRIVATE FUNDING

As Off-Grid Electric expanded and gathered more evidence, we awarded additional grants of \$1 million and \$5 million. DIV increased funding to Off-Grid Electric as it demonstrated economic viability and potential for scale. DIV's investment helped Off-Grid Electric access even more financing and expand its coverage. Leveraging the three awards totaling \$6.1 million, Off-Grid Electric has raised \$95 million in private sector debt and equity. By early 2016, Off-Grid Electric's service had reached 100,000 households and was available in 14 regions in Tanzania. The goal is to reach I million households by 2020.

MAINSTREAMING PROVEN INNOVATIONS TO ACCELERATE USAID'S TOP PRIORITIES

When we find something that works, we focus on mainstreaming the solution across USAID and using it to accelerate top priorities. For example, in 2015, the Lab and Power Africa developed a joint strategy to accelerate the household solar sector. We know it's not enough to invest in individual enterprises, so the team employs a systems approach. We are identifying the barriers to growth in the off-grid energy ecosystem. And, we are identifying actions that USAID and our partners can take to address those barriers, helping companies expand and reach more customers.

PARTNERING WITH OTHERS TO TAKE SUCCESSFUL INNOVATIONS TO SCALE

In June 2016, the Lab and Power Africa Jaunched Scaling Off-Grid Energy: A Grand Challenge for Development in partnership with the U.K. Department for International Development (DFID) and the Shell Foundation. The partnership's goal is to accelerate growth in the off-grid energy market to provide 20 million households in sub-Saharan Africa with access to modern, clean. and affordable energy. Together with our partners, we believe we can achieve impact more quickly by coordinating efforts, addressing the most pressing barriers to scale through innovative approaches, and bringing new partners to the table to invest in energy access. Our partners are making investments to incentivize the development of new solutions, help existing companies grow and attract financing, drive consumer demand, and strengthen the marketplace.

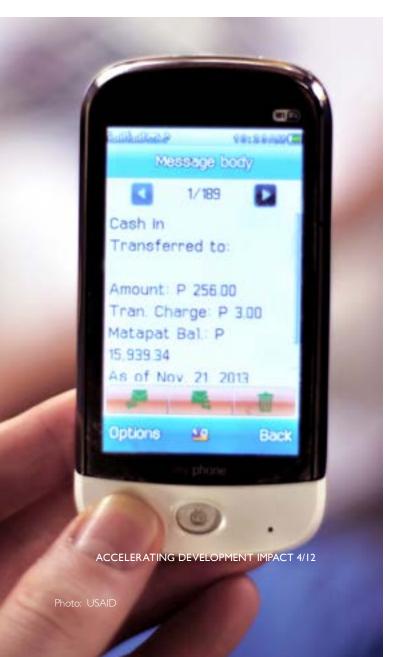


Spotlight on Digital Financial Services

HELPING THE WORLD'S UNBANKED GAIN ACCESS TO FINANCIAL SERVICES

Globally, 2 billion people lack access to formal financial services. A disproportionate share of these people are poor. Relying on cash makes people vulnerable to theft, corruption, and economic shocks. Governments that make payments in cash are also subject to corruption and less able to collect the revenue owed to them. The rapid spread of mobile phones in the developing world offers an unprecedented opportunity to scale safe, affordable, and relevant financial services to populations beyond the reach of conventional banking models.

Starting in 2011, USAID began extending digital finance technology through its work on projects in Indonesia, Malawi, and the Philippines. The Lab continues to build upon these initial efforts to test digital finance approaches, determine what works, and support USAID in expanding access to the best and most affordable tools and services. In partnership with governments, implementing partners, and small businesses, we are making transactions cheaper, more secure, and transparent.



PATHS TO SCALE

BRINGING PEOPLE TOGETHER TO CATALYZE CHANGE ON A GLOBAL SCALE

The Lab brings people together to support solutions that can expand and grow. Real-world trials demonstrate that when governments digitize institutional payments, demand for digital financial services increases and incomes rise. But making the switch from cash to electronic payments at an institutional level requires significant resources, political will, and expertise.

Responding to this challenge, USAID co-founded the Better Than Cash Alliance (BTCA) in 2012. BTCA advocates for a global shift from cash to electronic payments and has 50 member organizations, including governments, multilateral agencies, nongovernmental organizations, donors, and private companies such as Visa, MasterCard, and Citibank. In just four years, BTCA has helped increase the adoption of electronic payments. For example, the Colombian government, a BTCA member, now conducts 65 percent of its transactions in digital form. The Government of Mexico also joined the alliance after BTCA-sponsored research showed that the country was saving \$1.3 billion per year on digitized payments.

LEVERAGING USAID'S GLOBAL FOOTPRINT TO ACCELERATE IMPACT AND SUPPORT SCALE

As one of the largest donor agencies in the world with a presence in more than 80 countries, USAID is able to use its global reach and significant financial footprint in parts of the world that are underserved by formal financial providers.

The Lab and USAID Missions are supporting implementing partners' efforts to switch to electronic payments (e-payments). In 2014, inspired by USAID's commitment to BTCA, the Lab led the effort to change internal policy making e-payments the default method of payment we direct our implementing partners to use when possible. The power of this policy change is evident in **Bangladesh**. Since switching from cash to e-payments, maternal and child health care provider Dnet estimates it has saved more than 40,000 hours in staff time and \$60,000 per year, while bringing thousands of previously unbanked women into the formal financial system.

In the **Philippines**, the Lab and the Mission co-invested \$3 million over three years to work with banks, the government, and mobile network operators to expand mobile financial services to those beyond the reach of financial service providers. As a result, four municipalities in the Philippines launched mobile-enabled payment and collection systems for taxes, utilities, and social transfers. This allowed 10 million Filipinos to gain access to more efficient financial services.

In **India**, the Ministry of Finance and USAID launched a Digital Finance Partnership in 2015 to increase the use of digital payments at points of sale, particularly between small businesses and low-income consumers. India has made significant progress on financial inclusion over the past two years, but cash still dominates.

"The partnership between the Lab and the Mission catalyzed the transformation of the Philippines financial sector into what is now a more inclusive, transparent, and efficient system. By expanding the concept of mobile money to include e-payments, USAID not only promoted financial inclusion for millions of people, but it also fostered efficiency and transparency in local government operations."

— Gloria Steele

USAID's Senior Deputy Assistant Administrator for Asia and former Mission Director, USAID/Philippines

Emerging trends in mobile technology have given us the opportunity to create inclusive, pro-poor financial sectors that help the world's financially excluded populations access financial services that meet their needs. Through a focus on collective action and collaboration with USAID's global network, the Lab will continue to work toward global adoption of e-payments.



Accelerating the Next Breakthroughs

The Lab has sourced and tested more than 900 innovations. We are working to increase the impact of the most promising solutions and help them reach more people. Below are a few examples of promising solutions we believe are poised for broader adoption.

USING SCIENTIFIC RESEARCH TO INFLUENCE HEALTH POLICY

The Lab is supporting research to determine the best way to administer medicines to prevent malaria in Mali. The research has shown that a door-to-door approach increases preventive coverage against malaria by 14 percentage points. If all areas of the Sahel and sub-Sahel region — part of Africa that is particularly vulnerable to malaria — were covered, 20,000 lives would be saved. The results of the Lab's research will inform the Government of Mali's plan to control the disease.

INCREASING ACCESS TO THE INTERNET

The Lab helped draft and launch Indonesia's five-year national broadband plan, convening partners and unlocking funding. The broadband plan leveraged more than \$500 million from the country's Universal Service Fund and is expected to connect 50 million people in rural communities. Indonesia now has a 10-year plan to connect 74,000 communities using low-cost, emerging technologies based on an initial USAID pilot. The private sector is expected to provide 90 percent of the investment.

INCREASING ADOPTION OF HIGH-IMPACT SOLUTIONS

The Lab supported Pratham, a nongovernmental organization in India, in its efforts to implement learning camps. These are intensive educational sessions in which children are grouped by ability rather than age. Results from a randomized controlled trial showed that the camps had a significant positive impact. Pratham is now scaling this approach in partnership with state and local governments, reaching more than 779,000 students. The study shaped the national Read India Program strategy, and Pratham is piloting and scaling the model with other governments including Zambia.

HELPING EARLY-STAGE ENTREPRENEURS ATTRACT PRIVATE CAPITAL

The Lab is testing new ways to catalyze investment in entrepreneurs in developing countries. Our Partnering to Accelerate Entrepreneurship (PACE) program works closely with 40 incubators, accelerators, and seed-stage impact investors through 17 public-private partnerships that are expected to leverage more than \$100 million in private resources. One of our partners — Village Capital — has invested \$1.3 million in 25 innovators that have raised \$18.4 million in follow-on funding, served nearly 30,000 customers, and created 239 jobs. Village Capital is now helping other accelerators replicate and adapt its model through the VilCap Communities Program.

TESTING AND ACCELERATING INNOVATIONS WITH EVIDENCE OF IMPACT

Through Securing Water for Food: A Grand Challenge for Development, the Lab supported Reel Gardening, which provides a convenient, water-saving way for families and communities to grow their own vegetables. The innovation embeds seeds and fertilizers in a biodegradable, color-coded, paper tape that optimizes water usage. Reel Gardening has saved 34 million liters of water, farmed 47.5 hectares of land, and produced approximately 1,233 tons of vegetables. The company has already sold seed tapes to 175,000 households and plans to triple sales this year.

TRANSFORMING HOW USAID ENGAGES WITH PARTNERS

The Lab is testing new ways to collaborate with partners on development challenges. One tool—the Broad Agency Announcement (BAA)—is a procurement approach that allows USAID to work with potential partners to define a problem and co-create solutions before making an award. This gives us greater flexibility and access to a range of expertise for research and development, and can lead to better results. Rarely used before 2014, the Lab's advocacy for the BAA has made an impact on how USAID does business. In the last two years, USAID has issued 53 BAAs resulting in more than 100 awards. For example, in Indonesia the Mission, with Lab support, issued a BAA to identify new solutions around inclusive workforce development. More than 130 organizations expressed interest in co-creating solutions to this challenge.

PROGRAM DESCRIPTIONS

SCIENCE

The Lab channels the technical expertise of scientists and researchers around the world and within USAID to help solve global development challenges. We build local scientific capacity, empowering people with tools for change. And, we use the evidence from scientific research to drive new policies and programs.

Higher Education Solutions Network (HESN)

HESN is a partnership with seven competitively awarded universities working with partners worldwide. Leveraging nearly equal investments from each institution, the universities established eight Development Labs, collaborating with a network of 685 partner institutions in academia, the private sector, civil society, and government across 69 countries. HESN's Development Labs work with USAID's development experts and international staff to define and solve the most challenging problems faced by developing countries. Current university partners include: College of William and Mary, Duke University, Massachusetts Institute of Technology, Michigan State University, Texas A&M University, University of California at Berkeley, and Makerere University in Uganda.

Partnering to Enhance Engagement in Research (PEER)

PEER supports competitively awarded grants for collaborative research projects led by developing country scientists and engineers who partner with American researchers. PEER-funded scientists conduct applied research that informs public policy or new practices in development, leading to new innovations or generating evidence for how to scale innovations. PEER also builds human and institutional research capacity by providing funds, tools, technical assistance, and research opportunities for local scientists and students. The program is implemented in partnership with the U.S. National Academy of Sciences. Since 2011, the program has supported more than 250 research partnerships in 50 different countries and leveraged more than \$400 million from other U.S. Government scientific agencies.

Science and Research Fellowship Programs

The Lab supports three fellowship programs that are characterized by their commitment to the use of science, technology, innovation, and partnership. The American Association for the Advancement of Science (AAAS) Fellowship and Jefferson Science Fellowship both bring scientists and technical experts to serve one- to two-year fellowships at USAID, contributing their cutting-edge knowledge and analytical skills to development policy, research, and programming. Fifty-one fellows were hosted at USAID during the 2015 – 2016 fellowship year. The Research and Innovation (RI) Fellowship program connects U.S. graduate student researchers to organizations globally that need scientific, research, or technical expertise to address pressing development challenges. In 2016, 105 RI fellows conducted collaborative research projects in 24 countries.

TECHNOLOGY

With digital technology making it possible to accelerate the fight against poverty, the Lab works to ensure that everyone, even the poorest, has access to digital services. The Lab supports the effective use of technology and advanced data analytics across USAID and explores emerging technologies to better understand how they will shape the future of development.

Digital Inclusion

The Lab helps bridge the digital divide by expanding access to the internet in countries where USAID works and ensuring the most marginalized people have the skills and resources to be active participants in the digital economy. Through public-private partnerships and direct technical assistance, the Lab has unlocked more than \$100 million for expanded internet access, resulting in approximately 20 million new mobile and internet users worldwide, and directly supported USAID health and education programs by connecting 56 schools and 39 hospitals to the internet since 2012.

Development Informatics

The Lab seeks to make development more adaptive, efficient, and responsive to citizens and decision makers by helping transform the use of data and technology throughout development. For example, the Lab is contributing to the expansion of mHero, a mobile message-based tool that allows health workers to stay in touch with health officials, improving the local health system's ability to prevent and respond to public health threats. The Lab also led the public advocacy campaign for the Principles for Digital Development, a set of best practices for applying digital technology and data in development.

GeoCenter Plus

The Lab applies geographic analysis to improve the strategic planning, design, monitoring, and evaluation of USAID programs. The GeoCenter works directly with USAID Bureaus and Missions to integrate geographic analysis, scenario planning, and data analytics to inform development programs. The GeoCenter also strengthens the capacity of USAID to use geospatial technology by training local geographical information system (GIS) specialists, and leads a geospatial community of practice of nearly 50 GIS specialists across USAID Missions and Washington-based operating units.

Digital Finance

The Lab is acting on the growth in digital financial services to help the world's financially excluded and underserved populations access and use financial services that meet their needs. For example, USAID co-founded the BetterThan Cash Alliance (BTCA) in 2012. In just four years, BTCA has grown to 50 member organizations, including governments, multilateral agencies, nongovernmental organizations, donors, and private companies such as Visa, MasterCard, and Citibank, and has catalyzed rapid global progress on the adoption of e-payments.

INNOVATION

The Lab identifies, tests, and accelerates new innovative solutions, tools, and approaches that have shown evidence of impact, sustainable financing, and scale. We provide support to innovators to reach more end-users, secure financial sustainability, and maximize the potential of each innovation to overcome common barriers to scale. The Lab also works to advance a culture of innovation within USAID by spurring new ways of solving complex problems using the latest practices from the innovation management field.

Development Innovation Ventures (DIV)

DIV is USAID's venture capital-inspired, tiered, evidence-based funding model that invests comparatively small amounts in relatively unproven concepts, and continues to support only those that prove to work. It applies three core criteria to its application review process — evidence of impact, cost-effectiveness, and potential to scale. DIV accepts applications at three different funding stages from Proof of Concept (\$25,000 – \$150,000); Testing (\$150,000 – \$1.5 million); and Transitioning to Scale (\$1.5 million – \$15 million). Since 2010, DIV has provided more than \$70 million in catalytic grant funding to more than 150 innovative interventions across nine sectors and in more than 40 countries.

Grand Challenges for Development (GCDs) and Prizes

GCDs remove critical barriers to international development progress by calling on the global community to discover, test, and accelerate innovative solutions around specific global challenges. In the past six years, USAID and its partners have launched eight GCDs focused on agriculture, combating disease outbreaks, democracy and governance, education, energy, maternal and child health, and water. Together USAID and its 18 partners have jointly committed more than \$310 million towards advancing solutions to key development problems. The Lab is also leading efforts to apply innovation methods such as challenge funds and prizes to incentivize action toward specific outcomes, such as the development of more efficient, lower-cost refrigeration solutions in the recently launched Off-Grid Refrigeration Competition.

The Global Innovation Exchange

The Global Innovation Exchange (the Exchange) is an online platform to convene and connect innovators, funders, and experts working on development innovations around the world. As a public good platform co-funded by USAID, the Australian Department of Foreign Affairs and Trade, the Korea International Cooperation Agency, and the Bill & Melinda Gates Foundation, the Exchange drives shared business intelligence and analytics across the development industry to reduce duplication and barriers for innovators, entrepreneurs, and funders alike. In its first year, the Exchange registered more than 4,400 innovations, 10,000 experts, and \$450 million in funding opportunities.

LAUNCH

LAUNCH is a network-centered innovation program founded on the belief that the problems of today are too big to be solved by any one organization alone. The LAUNCH approach is to convene and curate networks of innovators and industry and government leaders to forge together pathways for systems change. LAUNCH founding partners — NASA, USAID, the State Department, and Nike — work together to identify, showcase, and support innovative approaches to global sustainability challenges, and to use the expanding LAUNCH network to bring innovators into the marketplace.

PARTNERSHIP

The Lab manages USAID's signature public-private partnership model, the Global Development Alliance, and works with USAID Missions and Bureaus to identify opportunities to engage the private sector to advance key development priorities that align to business interests. In addition, we work with impact investors and entrepreneurship accelerators to catalyze private capital for early-stage businesses and strengthen the environment for entrepreneurship.

Global Development Alliances (GDAs)

GDAs are partnerships between USAID and the private sector that utilize market-based solutions to advance broader development objectives. These partnerships combine the assets and experiences of the private sector to leverage capital, investments, creativity, and access to markets to solve the complex problems facing governments, businesses, and communities. GDAs are co-designed, co-funded, and co-managed by all partners involved so that the risks, responsibilities, and rewards of partnership are shared. In Fiscal Year 2015, USAID had more than 360 active public-private partnerships with leverage commitments of \$5.9 billion. On average, for each dollar USAID expects to invest through these partnerships, private sector partners have committed \$3.35 over the life of the projects.

Partnering to Accelerate Entrepreneurship (PACE)

Entrepreneurs serve as critical drivers of economic growth but often cannot access finance, while investors note a lack of investment-ready enterprises. The Lab's Partnering to Accelerate Entrepreneurship (PACE) initiative is bridging this gap by catalyzing private sector investment into early-stage enterprises and helping entrepreneurs grow their businesses — unlocking the potential of thousands of promising enterprises around the world. Working in partnership with more than 40 incubators, accelerators, and seed-stage impact investors, the Lab has created 17 public-private partnerships dedicated to testing ways to bridge this gap and foster entrepreneurship. These partnerships are expected to leverage \$100 million in combined public and private investments over their lifetime.

Diaspora Engagement

Diaspora Engagement is a core focus area for the Lab, which works with nontraditional partners in under-addressed technical areas to test and incubate innovative partnership models. The Lab is partnering with USAID Missions and external partners to engage diasporas in development through initiatives such as DIAGives, which aims to facilitate \$7 million in diaspora philanthropic giving in Northern Bangladesh over the next three years, and Diaspora Landscape Analyses, which perform diaspora market research to serve as an evidence base for USAID programming.

AGENCY INTEGRATION

The Lab works to advance USAID's development goals and increase its impact. We mainstream the use of science, technology, innovation, and partnership (STIP) across USAID's strategies, programs, and operations.

Agency Integration

The Lab supports the application of STIP across USAID by providing technical assistance, training, and catalytic investments in Mission-driven STIP programs. In Fiscal Year 2016, the Lab worked closely with eight Missions to integrate STIP tools and approaches to accelerate their development objectives. For example, the Lab is supporting ongoing efforts with the Uganda Mission and a range of local partners, including the Government of Uganda, to promote and source local, sustainable off-grid power solutions to help a majority of underserved citizens.

Evaluation and Impact Assessment

Monitoring and evaluation is critical to USAID's efforts to find out what works and what doesn't; learn from failures; and understand where and when to best replicate successes. Data is used, along with a set of evidence standards developed in partnership with experts from academia and the private sector, to determine which innovations are 'best bets' for funding and where evidence gaps remain. The Monitoring, Evaluation, Research, and Learning Innovations (MERLIN) program is testing new models of rapid learning, evaluation, and measuring impact of USAID projects with a diverse set of 17 partners.

Ebola Response, Recovery, and Resilience

The Ebola crisis exposed significant weaknesses in digital infrastructure and health information management. Building on our work in real-time data and digital development, the Lab is working to improve our ability to prevent, detect, and respond to future public health threats by filling these technical gaps in West Africa, as well as increasing engagement with private sector partners and facilitating the use of geospatial information systems, scientific capacity building, and open innovation approaches in response, recovery, and resilience planning.

Digital Development for Feed the Future

The Lab is collaborating with USAID's Bureau for Food Security on integrating digital technologies into Feed the Future activities to accelerate reductions in global hunger, malnutrition, and poverty. Examples include driving greater digital financial inclusion among farmers and their families; delivering mobile-enabled agricultural extension information; and facilitating greater precision agriculture through richer data collection, analysis, and packaging.

Scaling Off-Grid Energy

The Lab is partnering with Power Africa, DFID, and the Shell Foundation to accelerate growth in the off-grid energy market with a goal to provide 20 million households in sub-Saharan Africa with access to modern, clean, and affordable electricity. Through Scaling Off-Grid Energy: A Grand Challenge for Development, the Lab and its partners are supporting early-stage companies that offer household solar solutions, incentivize technological innovation, and support critical elements of the off-grid ecosystem.



