DEVELOPMENT INNOVATION VENTURES

2023 Awardees

Development Innovation Ventures (DIV) is USAID's open innovation program that supports breakthrough solutions to the world's toughest development challenges. Through its evidence-driven approach, DIV maximizes impact per dollar spent. Since 2010, DIV's portfolio of innovations has improved millions of lives around the world. In 2023, DIV added 20 new awards across 17 countries and six technical sectors to its portfolio. Learn more about the latest grants below.

Development Innovation Ventures:
- Offers tiered funding to pilot, test, and scale the most promising solutions to global development challenges, taking calculated risks to maximize taxpayer resources.
- Develops and applies rigorous evidence to determine what works most effectively to improve people's lives.
- Supports promising ideas from a broad range of partners, including social entrepreneurs, nonprofits, private companies, government partners, and researchers across every sector and country in which USAID operates.

DIV provides small amounts of funding to help advance a variety of relatively unproven ideas and higher amounts to help scale rigorously validated solutions. The "stages" in grantee profiles correspond with the following:

Stage 1: Pilot
Up to $200,000 to pilot innovations that are early in development and need real-world testing to understand user demand, social outcomes, and feasibility.

Stage 2: Test and Position for Scale
Up to $1.5 million to support impact evaluations, further market testing, or operational expansion of innovations that have already conducted successful pilot testing.

Stage 3: Transition to Scale
Up to $15 million to transition proven approaches to scale.

Evidence Generation
Up to $1.5 million to evaluate widely-used approaches that lack sufficient evidence of causal impact and cost-effectiveness.

Photo: An Interactive Research and Development worker demonstrates how to use chlorine tablets to purify household water in Pakistan. Credit: Shehzad Noorani/Interactive Research and Development Global

Implemented in:
Ghana, Tanzania

DIV Stage:
Stage 2: $1,500,000

Sector(s):
Health

Breathing for Babies: Revolutionizing Care for Acute Respiratory Distress
Vayu Global Health Innovations | Boston, MA
www.vayuinnovations.org

To increase the availability of continuous positive airway pressure (CPAP) where it is needed most, Vayu Global Health Innovations developed the Breathing for Babies package of devices—including an oxygen blender and a bubble CPAP—that does not require electricity or skilled mechanical support and is available at one-third to one-half the cost of available alternatives. Vayu will conduct research to evaluate the effects of the Breathing for Babies package on clinical outcomes in real-world conditions, analyze cost-effectiveness of the program, and implement demonstration projects in Ghana and Tanzania. This evidence is designed to help Vayu overcome regulatory hurdles and enable implementation through governments and international organizations.

Learn more about Breathing for Babies.

Implemented in:
Rwanda

DIV Stage:
Stage 3: $6,500,000

Sector(s):
Economic Growth

Scaling Sustainable Poverty Graduation
Village Enterprise | San Carlos, CA
www.villageenterprise.org

Village Enterprise developed a streamlined version of the poverty graduation model that has been rigorously tested and found to cost-effectively increase household consumption and assets for at least three and a half years. Village Enterprise will partner with the Government of Rwanda to implement a wide-scale pilot of its poverty graduation program with 22,000 Rwandan households and train government staff to lead the implementation of a pilot program with an additional 8,000 households. Village Enterprise and the Government of Rwanda will raise an additional $15 million to support the government's nationwide adoption and scale-up of a graduation program rooted in Village Enterprise's approach, aiming to move more than one million Rwandans out of extreme poverty by 2026.

Learn more about Scaling Sustainable Poverty Graduation.

Implemented in:
Kenya, Nigeria, Uganda

DIV Stage:
Stage 3: $5,250,000

Sector(s):
Health

Scaling a Digital Approach to Targeted Malaria Treatment
Maisha Meds | Palo Alto, CA
www.maishameds.org

Maisha Meds developed a digital inventory and sales management platform to increase appropriately targeted care for patients seeking care at private pharmacies. The platform encourages rapid diagnostic tests to confirm malaria and the provision of quality treatment when necessary. Building on a DIV Stage 2 award (2019–2022), a randomized controlled trial found Maisha's platform led to a 300 percent increase in appropriate malaria case management compared to the control group. Maisha Meds aims to expand

its network of pharmacies using the platform to 2,500 additional facilities, serving 400,000 patients across Nigeria, Kenya, and Uganda. DIV's grant will complement $9 million in funding from the Bill & Melinda Gates Foundation, resulting in a total of 7,500 facilities and 950,000 patients served. Through its network expansion, Maisha Meds aims to reduce the cost per patient treated by up to 35 percent, saving patients money and radically improving health outcomes.

Learn more about Scaling a Digital Approach to Targeted Malaria Treatment.

Implemented in: Kenya, Zambia	**Optimizing Agriculture Insurance Products and Services for Smallholder Farmers** Pula Advisors | Mollis, Switzerland www.pula-advisors.com

DIV Stage:
Stage 2: $1,500,000

Sector(s):
Agriculture and Food Security

To make insurance more accessible to smallholders, Pula Advisors sells insurance policies to governments and large farmer support programs, such as the Zambian Farmer Input Support Programme or the World Food Program. These programs, in turn, provide the policies to farmers bundled with agricultural inputs, loans, or various other benefits. While widely adopted, the effects of an affordable and commercially viable insurance product like Pula's have not yet been rigorously tested. Pula will conduct a randomized controlled trial to evaluate whether access to commercial insurance encourages farmers to invest in higher-quality inputs or equipment. DIV funding will also enable Pula to use satellite data to automate its risk models and improve the quality and accuracy of its data collected from farm visits, which is costly to gather and can be error-prone. The results of this award will inform public policy on the possible benefits of providing commercial-scale insurance as part of social support programs.

Learn more about Optimizing Agriculture Insurance Products and Services for Smallholder Farmers.

Implemented in:
Rwanda

DIV Stage:
Stage 2: $1,500,000

Sector(s):
Energy, Environment

Scaling Up Clean, Green, Public Transportation
BasiGo | Nairobi, Kenya
www.basi-go.com

To make public transportation more accessible and reduce environmental impact, Kenyan company BasiGo introduced zero-emission electric buses to the Kenya public transportation market. BasiGo will expand to Kigali in neighboring Rwanda by piloting lease arrangements with some of Rwanda's largest bus operators to demonstrate the cost-efficiency and viability of electric buses. The pilot will enable BasiGo to seek additional external financing, conduct market research with riders and operators, study profitability, and implement an urban pollution monitoring system to determine to what degree BasiGo's fleet contributes to lower pollution levels. Kigali currently has 300–400 buses carrying 120,000 round-trip passengers daily while facing a demand for 700 buses; BasiGo intends to help fill this gap with 200 zero-emission, electric buses on Kigali's roads by 2025.

Learn more about Scaling Up Clean, Green, Public Transportation.

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Implemented in:
Kenya

DIV Stage:
Stage 1: $200,000

Sector(s):
Agriculture and Food
Security

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Introducing Improved Climate Insurance Products to Smallholder Coffee Farmers
Sprout | San Jose, CA
www.sproutprotect.com

Sprout offers seasonal climate insurance to protect smallholder farmers. Its index insurance model bases payouts on predetermined, explicit conditions, making it more affordable while still commercially viable. Sprout also provides weather-prompted information and advice to farmers via mobile phones to enable farmers to manage more climate risks independently. Sprout will introduce its suite of digital products through its Climate Smart Coffee™ program, pilot them with 1,000 coffee farmers in Kenya, and conduct an impact study to understand whether coffee farmers' incomes or investments in inputs increased after obtaining Sprout insurance. Sprout aims to reduce climate protection costs and increase on-farm investment, enabling smallholder farmers to improve their climate resilience and incomes.

Learn more about Introducing Improved Climate Insurance Products to Smallholder Coffee Farmers.

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Implemented in:
Kenya

DIV Stage:
Stage 1: $200,000

Sector(s):
Agriculture and Food Security

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Learn more about Introducing Improved Climate Insurance Products to Smallholder Coffee Farmers.

Implemented in:
Liberia, The Gambia

DIV Stage:
Stage 2: $747,500

Sector(s):
Education

Scaling a Program to Reach Three Million Out-of-School Children
Luminos Fund | Boston, MA
www.luminosfund.org

The Luminos Fund runs Second Chance, an education program that helps out-of-school children catch up to their peers so that they can re-enter school at the appropriate grade level. Funded by several donors, IDInsight has been working with Luminos to rigorously evaluate the program's impact through a randomized controlled trial (RCT). Support from DIV will enable Luminos to extend the ongoing RCT to track student enrollment, retention, and learning outcomes and to support the governments of Liberia and The Gambia in determining how public schools can directly implement Second Chance. Luminos aims to reach over 137,000 children and 2,300 teachers during the award period and has the potential to reach millions of out-of-school children through government partnerships.

Learn more about Scaling a Program to Reach Three Million Out-of-School Children.

Implemented in:
Madagascar

DIV Stage:
Stage 1: $200,000

Sector(s):
Agriculture and Food Security

Piloting an Insect Approach to Address Malnutrition and Food Insecurity
Valala Farms | San Francisco, CA
www.ipsio.org/valala-farms

To help alleviate food insecurity, Valala Farms has created a high-protein, insect-based instant porridge formulation for distribution by emergency and development food assistance programs. The porridge, which contains dried cricket powder as a key ingredient, may provide more protein and iron per serving than other commonly used nutritional supplements and can also be baked into a cracker, among other preparations. Valala Farms will scientifically test and fine-tune its instant porridge recipe to verify that it contains the ideal ratio and combination of ingredients and meets international nutritional and safety guidelines, allowing it to qualify for formal accreditation as a

nutritional supplement. Once the dried cricket instant porridge formulation is accredited, global humanitarian organizations will be able to purchase, use, and distribute it to millions of people who need nutritional supplementation.

Learn more about Piloting an Insect Approach to Address Malnutrition and Food Insecurity.

Implemented in:
Nigeria

DIV Stage:
Stage 2: $972,012

Sector(s):
Health

Using Machine Learning to Reduce HIV Treatment Interruptions
FHI 360 | Durham, NC
www.fhi360.org

To increase HIV/AIDS treatment retention, FHI 360 developed and piloted a machine learning algorithm that uses data from HIV/AIDS programs to identify individuals likely to interrupt medical treatment. Once the algorithm identifies those likely to stop treatment, providers can offer tailored care to address barriers preventing them from adhering to their regimen. FHI 360 will scale its program to 16,000 people across two Nigerian states and conduct a randomized controlled trial to rigorously evaluate the program's effect on treatment interruption. This study will inform whether this machine learning approach can improve resource allocation and health outcomes and should ultimately be integrated into broader HIV/AIDS programming.

Learn more about Using Machine Learning to Reduce HIV Treatment Interruptions.

Implemented in:
Madagascar

DIV Stage:
Stage 2: $749,743

Sector(s):
Water, Sanitation, and Hygiene

Expanding Home Toilet Services
Loowatt | London, UK
www.loowatt.com

Loowatt, a United Kingdom-based company, has developed a waterless flush, container-based sanitation device similar to a toilet that is hygienic and odor-free. With the press of a button, a polymer bag that lines the container is pulled down and sealed after each use, keeping the contents contained. Loowatt clears the lined containers for an affordable monthly service fee and the waste is converted to energy and fertilizer. This patented, waterless flush technology is less expensive to install and maintain than traditional sanitation options, such as pit latrines and toilets with septic tanks. Over the next three years, Loowatt will expand its operations and demonstrate the financial viability of its subscription-based service model. Compared with toilets connected to sewers, the Loowatt toilet could improve the lives of more than 100,000 people every day and save up to 50,000 liters of water per household per year.

Learn more about Expanding Home Toilet Services.

Implemented in:
Kenya

DIV Stage:
Stage 1: $200,000

Sector(s):
Agriculture and Food Security

Testing the Soil Method to Sustainably Manage Fall Armyworm
Farm Input Promotions—Africa (FIPS)| Nairobi, Kenya
www.fipsafrica.org

To make effective fall armyworm control accessible, Farm Input Promotions-Africa (FIPS-Africa), a Kenyan social enterprise, is rigorously testing a low-cost, preventative measure known as the *soil method*. Based on traditional farmer knowledge, the soil method is a simple agroecological intervention that requires farmers to place soil onto a maize plant's whorl (new leaf growth) when the plant is vulnerable to fall armyworm infestation. FIPS, working with Poverty and Health Integrated Solutions (PHIS) and Statistics for Sustainable Development, will conduct trials in both greenhouse and field settings to determine whether the soil method reduces fall armyworm damage to maize crops and to assess Kenyan farmers' perceptions of the approach. If found effective, results from the two studies will inform future research on how best to promote wide-scale adoption.

Learn more about Testing the Soil Method to Sustainably Manage Fall Armyworm.

Implemented in:
Zambia

DIV Stage:
Stage 2: $1,500,000

Sector(s):
Health

Evaluating the Impact of a Comprehensive School Health Program
Healthy Learners | Brunswick, ME
www.healthylearners.org

Healthy Learners works through the government to train teachers as school health workers and to help children access needed healthcare. School health workers teach health education, assess student health, provide preventative care, and make fast-track referrals to local clinics where students receive priority care. Healthy Learners will conduct a cluster randomized controlled trial to evaluate the program's impact on health and education outcomes compared to a simple deworming program and no intervention. The trial results will inform the continued scaling of the program, potential long-term funding from the Government of Zambia, and expansion to other countries.

Learn more about Evaluating the Impact of a Comprehensive School Health Program.

Implemented in:
Ethiopia

DIV Stage:
Stage 1: $200,000

Sector(s):
Health

Piloting a Neonatal Advanced Life Support Program
Wax & Gold | Amarillo, TX
www.waxandgold.org

To reduce neonatal asphyxiation (the inability to breathe at birth), Wax & Gold collaborated with St. Paul's Hospital Millennium Medical College in Addis Ababa to apply lessons from international standard health worker training programs to design a new, enhanced training program called the Neonatal Advanced Life Support program. Wax & Gold will test its training program in seven medical facilities to determine its relative effectiveness in less-resourced medical facilities. If it proves effective across facilities, the training program will inform a planned scale-up to 14 regional health centers.

Learn more about Piloting a Neonatal Advanced Life Support Program.

Implemented in:
Uganda

DIV Stage:
Stage 1: $196,000

Sector(s):
Agriculture &
Economic Growth

Evaluating Innovative Farmer Financing on Crop Yields and Income
Emata Uganda Limited | Kampala, Uganda
www.emata.ug

Emata Uganda Limited developed a data-driven credit scoring system that replaces traditional, labor-intensive loan underwriting to provide tailored, affordable financing to smallholder farmers. This system combines client data with third-party weather and satellite data to assess risk and determine alternative credit scores to inform loan offers. Once approved, co-op members can instantly request and receive loans when they need cash during cost-intensive periods, such as planting, and repay the loans after harvesting. Emata's digital distribution channel and connections with input providers and agricultural buyers offer an innovative and cost-effective way to manage lending risk. Emata will conduct customer research to inform loan uptake, new products, and partnerships. Emata ultimately expects to finance more than 1.1 million dairy and crop farmers through partnerships with 140 co-ops and aggregators.

Learn more about Evaluating Innovative Farmer Financing on Crop Yields and Income.

Implemented in:
Pakistan

DIV Stage:
Stage 1: $200,000

Sector(s):
Water, Sanitation, and Hygiene

Evaluating Behavior Change Approaches to Household Water Purification
Interactive Research and Development Global (IRD) | Karachi, Pakistan
www.ird.global

Interactive Research and Development Global will conduct a randomized controlled trial to test the effectiveness of different behavior change approaches that encourage people to use chlorine tablets to make their household water safe to drink. Four treatment groups will receive various combinations of information, chlorine tablets, support from a health worker, and a reward for using chlorine. Lessons from this study may influence the Government of Pakistan's network of 125,000 community health workers who reach nine million rural and urban households in informal settlements each year.

Learn more about Evaluating Behavior Change Approaches to Household Water Purification.

Implemented in:
Vietnam

DIV Stage:
Stage 2: $1,483,431

Sector(s):
Education and Training

Advancing Quality Independent Childcare in Industrial Zones
OneSky | Berkeley, CA
www.onesky.org

OneSky developed a model to train independent childcare providers in experiential, child-centered learning to improve childcare for working parents in Vietnam. OneSky's model includes in-person classroom sessions, home visits, and an online learning platform. OneSky will partner with the Ministry of Education and Training and five provincial Departments of Education and Training to train government staff as trainers using the model. OneSky will also work with IDInsight and the Research and Training Centre for Community Development to conduct a randomized controlled trial to generate evidence on the model's effectiveness on children's cognitive, motor, and socio-emotional development outcomes. Over five years, OneSky expects its training of trainers approach to improve independent childcare delivery to reach at least 100,000 children.

Learn more about Advancing Quality Independent Childcare in Industrial Zones.

Implemented in:
Türkiye

DIV Stage:
Stage 1: $200,000

Sector(s):
Health

Testing an mHealth App to Increase Immunization Among Syrian Refugee Children
HERA, Inc. | Boston, MA
www.heradigitalhealth.org

To make healthcare more accessible to refugees in Türkiye, HERA, Inc. developed a free mobile application that provides health information, accurate locations of local U.N. Refugee Agency (UNHCR) health facilities, appointment reminders, and health record storage. HERA will work with the Medical Rescue Association (MEDAK) to upgrade its technology and launch a marketing campaign, aiming to increase the number of app users from 5,000 to 40,000 refugees. HERA will also conduct a longitudinal cohort study to inform improvements to the app and a small randomized controlled trial to assess the impact of the app on child vaccination rates. HERA is designed to support not only refugees but also migrant farm workers and other mobile populations. Lessons from these studies will inform HERA's potential scale and the work of other organizations building digital tools to support refugees and migrants.

Learn more about Testing an mHealth App to Increase Immunization Among Syrian Refugee Children.

Implemented in:
Brazil

DIV Stage:
Stage 2: $970,000

Sector(s):
Education and
Training

Scaling and Testing an Artificial Intelligence-Based Functional Literacy Program
Letrus | São Paulo, Brazil
www.letrus.com

To help public high school students develop necessary literacy skills for everyday life, Letrus developed an artificial intelligence (AI)-powered educational program that provides specific, prompt feedback on writing submissions. Letrus goes beyond spelling and basic grammar to promote functional literacy by supporting students' skills in diction, organization and flow, and reading comprehension. Letrus will conduct a randomized controlled trial with 200,000 students to generate evidence on the program's longer-term effects, including university enrollment and employment. In addition to contributing to the global dialogue on the value of functional literacy, if Letrus demonstrates a positive impact on education and labor market outcomes, it may support the case for the cost-effectiveness and scalability of lighter touch, AI-based models in classrooms around the world.

Learn more about Scaling and Testing an Artificial Intelligence-Based Functional Literacy Program.

Implemented in:
Guatemala

DIV Stage:
Stage 2: $1,200,000

Sector(s):
Agriculture and Food
Security

Testing Improved Biofortified Maize Seeds and Subsidies
Semilla Nueva | Guatemala City, Guatemala
www.semillanueva.org

To improve health in Latin America, Guatemalan organization Semilla Nueva ("new seed" in Spanish) is working to enhance the quality and adoption of biofortified maize. This staple food is bred to contain higher levels of zinc, iron, and protein and can improve nutrition and health outcomes. However, farmers may not accept it, and it is not yet known whether the body absorbs maize's micronutrients when prepared in traditional ways (nixtamalization) common to southern Mexico and Central America. Semilla Nueva will partner with independent researchers to conduct two randomized controlled trials: the first to determine whether the body absorbs sufficient levels of zinc and iron from traditionally prepared biofortified maize and the second to assess how changes to a subsidy program would influence farmer adoption of the improved seeds. The rigorous evidence generated by these studies will provide valuable information on the effectiveness of biofortified maize for improving nutrition and on the cost-effectiveness of such subsidies to combat malnutrition in Guatemala and the region.

Learn more about Testing Improved Biofortified Maize Seeds and Subsidies.

Implemented in:
Mexico

DIV Stage:
Stage 2: $1,500,000

Sector(s):
Health

Testing a Combined Approach to Control Mosquito-Borne Diseases at Scale
Michigan State University | East Lansing, MI
www.mmg.natsci.msu.edu

Researchers from Michigan State University (MSU), in partnership with the Universidad Autónoma de Yucatán (UADY), are testing an approach to mosquito control that combines the Sterile Insect Technique (SIT), which sterilizes males with radiation, with the Incompatible Insect Technique (IIT), where males are infected with the Wolbachia bacteria, leaving wild females unable to reproduce when they mate. Both SIT and IIT can suppress a mosquito population and are expected to complement each other. MSU will implement this bundled approach and measure changes in mosquito population density and the prevalence of mosquito-borne diseases in humans. This investment builds on past USAID support through the Combating Zika and Future Threats Grand Challenge, which partially funded the UADY mosquito mass-rearing facility in 2016. MSU's research will generate evidence of the cost-effectiveness of the combined SIT/IIT approach, informing its ability to address these otherwise untreatable diseases and potential for scale.

Learn more about Testing a Combined Approach to Control Mosquito-Borne Diseases at Scale.