



WHITE PAPER #1: KEY USAID PAY FOR RESULTS MODELS AND CASE STUDIES

GSA INNOVATIVE FINANCE TASK ORDER

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CONTENTS

ACKNOWLEDGEMENTS	I
ACRONYMS	3
INTRODUCTION	5
BACKGROUND	5
ADVANCE MARKET COMMITMENTS AGRESULTS – FOOT AND MOUTH DISEASE VACCINE FOR EAST AFRICA KANDAHAR SOLAR POWER PLANT ZIKA DIAGNOSTICS	7 7 8 9
PRIZES AGRESULTS – INNOVATION FOR RESEARCH AND DELIVERY DATA-DRIVEN FARMING PRIZE	12 12 14
DEVELOPMENT IMPACT BONDS CAMBODIA RURAL SANITATION DEVELOPMENT IMPACT BOND UTKRISHT DEVELOPMENT IMPACT BOND VILLAGE ENTERPRISE DEVELOPMENT IMPACT BOND	l 6 16 20 20
PERFORMANCE-BASED AWARDS GHANA FINGAP – FINANCING GHANAIAN AGRICULTURE PROJECT HAITI HOME OWNERSHIP AND MORTGAGE EXPANSION (HOME) FEED THE FUTURE KENYA INVESTMENT MECHANISM ZAMBIA SCALING UP NUTRITION TECHNICAL ASSISTANCE	24 24 25 26 27

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ACRONYMS

AMC Advance Market Commitment

APC Advance Purchase Commitment

BAA Broad Agency Announcement

BAS Business Advisory Services

BMGF Bill & Melinda Gates Foundation

CEO Chief Executive Officer

CII Center for Innovation and Impact

CO Contracting Officer

COR Contracting Officer Representative

CPAR Contractor Performance Assessment Report

DABS Da Afghanistan Breshna Sherkat

DCA Development Credit Authority

DFAT Department of Foreign Affairs and Trade (Australia)

DFC Development Finance Corporation

DFID Department for International Development (U.K.)

DIB Development Impact Bond

FAA Fixed Amount Award

FTF Feed the Future

FMD Foot and Mouth Disease

GoZ Government of Zambia

HLFPPT Hindustan Latex Family Planning Promotion Trust

iPWS Initial Performance Work Statement

KIM Feed the Future Kenya Investment Mechanism

NGO Nongovernmental Organization

ODF Open Defecation Free

OTA Other Transactions Authority

PLGHA Protecting Life in Global Health Assistance

PCM USAID Office of Private Capital and Microenterprise

PBA Performance Based Awards

PFR Pay-for-results

PPA Power Purchase Agreement

PSE Private Sector Engagement

PSI Population Services International

PWS Performance Work Statement

R&D Research and Development

RFS Bureau for Resilience and Food Security

SME Small and Medium Enterprise

SMSU Sanitation Marketing Scale-up Programs

SOO Statement of Objectives

SOW Scope of Work

SUN Scaling Up Nutrition

UBS Optimus Foundation

UNICEF United Nations Children's Fund

WASH Water, Sanitation, and Hygiene

WHO World Health Organization

INTRODUCTION

White Paper #1: Key USAID Pay for Results Models and Case Studies is a compendium of examples of the innovative work that USAID has done with various pay-for-results approaches, including advance market commitments, prizes, development impact bonds, and performance-based contracts. The paper is designed to serve as a resource to build a foundational understanding amongst USAID's Acquisition and Assistance workforce of pay-for-results approaches to the design, development, and financing of USAID awards.

BACKGROUND

Pay-for-results approaches have been increasingly used in international development over the past decade, as donors seek new ways to incentivize private capital flows to solve development challenges, overcome market failures, increase private sector engagement, spur higher leverage of donor investments, and shift more implementation risk to activity implementers and local actors. While nascent in their usage, there is a growing effort by USAID and others to compile a body of evidence of the effectiveness of pay-for-results approaches, as well as a greater understanding of how and when to deploy them.

This compendium includes four categories of pay-for-results approaches: advance market commitments, prizes, development impact bonds, and other performance-based contracts. The fifth major category of pay-for-results approaches – conditional cash transfers – are not covered here as they fall outside the scope of most USAID activities.

These categories are broadly defined as follows:

Advance Market Commitment (AMC): In these commitments, funders pledge to guarantee a price or market for a specific product once it is developed. This guarantee is intended to serve as an incentive for the private sector to develop a product that may be risky to develop in terms of unknown research and development (R&D) costs, lacks clarity on end consumers' ability or willingness to pay, and generally has an uncertain return on investment for the private sector entity. AMCs were first used as an incentive to offset the development costs of vaccines for diseases primarily affecting the developing world, where it was unclear there was a market that would offset those development costs.

Prizes: Prizes use open competition to incentivize competitors to achieve a specific outcome, while remaining agnostic about how to fulfill that outcome. Prize competitions pay for results by making onetime cash awards when approaches are proven to have achieved the designated outcome. Prizes involve significant effort to gather and analyze information and data to ensure evidence drives the design, including a deep understanding of the barriers to achieving the desired result. Prizes engage actors from a wide range of backgrounds and capabilities and use incentives that appeal to and motivate multiple actors to use their capacity, expertise, and resources to achieve a specific outcome for a tough issue they may not tackle under normal circumstances.

Development Impact Bond (DIB): A DIB is a pay-for-results approach in which private up-front funders (which can include social investors) provide service providers with pre-financing for development programs, and donors pay service providers if, and only if, these programs succeed in delivering development outcomes. In some cases, donors may repay up-front funders their principal plus a return directly; in others, including the Village Enterprise DIB, donors repay service providers, who manage their own social investment streams. Unlike Social Impact Bonds (SIBs), in which governments pay for outcomes, DIBs involve non-governmental donors, which might be donor agencies or charitable foundations, either as full or joint funders of outcomes in lieu of local governments. Because repayment

to private up-front funders is contingent upon the achievement of specified outcomes, DIBs are not bonds in the conventional sense. For example, the first DIB intended to reduce the gender gap in school attendance in India. UBS Optimus Foundation (UBS) provided the upfront investment to an NGO, Educate India, which provided services to increase girls' school attendance, with private philanthropic foundation Children's Investment Fund Foundation providing an additional return on UBS' capital investment once certain milestones were met. This model is intended to bring new sources of capital to the financing of development activities.

Performance Based Award (PBA): In broad terms, performance-based awards tie some or all of the payment for an activity to the achievement of certain milestones or results. At USAID, performance-based awards can be designed under both acquisition and assistance and can be structured so that a portion of the implementing partner's payment is dependent on achieving certain outputs and/or outcomes. Further, the implementing partner can require similar performance from its subgrantees, subcontractors, or partners.

ADVANCE MARKET COMMITMENTS

AGRESULTS - FOOT AND MOUTH DISEASE VACCINE FOR EAST AFRICA

KEY FACTS	
Period of Performance	2020 – TBD (depends on time to develop vaccine)
USAID Office/Mission	USAID/Bureau for Resilience and Food Security (RFS)
Implementer	Deloitte and GalvMED
Value	\$17.8 million
Location(s)	Burundi, Ethiopia, Kenya, Rwanda, Tanzania, Uganda

Overview: AgResults is a multi-donor effort testing a variety of pay-for-results approaches to overcome market failures in agriculture in multiple geographies. The majority of its projects use prizes to incentivize private sector behavior change and are included separately in the prize section that follows. However, after nearly a decade of experience with prizes, AgResults recently launched its first AMC-style pay-for-results competition dedicated to foot and mouth disease (FMD) in East Africa.

The group of donors involved in AgResults - Bill & Melinda Gates Foundation (BMGF), the Department of Foreign Affairs and Trade in Australia (DFAT), the Department for International Development in the U.K. (DFID), Global Affairs Canada, USAID, and the World Bank – develop AgResults competitions by jointly deciding on which development priorities within global agricultural development are important to their agencies and are potentially solvable with a pay-for-results approach. In this case, given the importance of livestock to nutrition, women's empowerment, and economic empowerment in East Africa, it was decided that AgResults would be a potential vehicle for solving one of the greatest challenges to animal health in the region – foot and mouth disease. AgResults had launched a previous competition using a prize for animal health companies to develop a vaccine for brucellosis melitensis (also a disease affecting livestock) and wanted to build on that experience with a new competition incentivizing both vaccine development and its distribution. For FMD, it was decided to use a form of an advance market commitment to achieve these goals.

Currently, an FMD vaccine exists, but it is not suitable to strains prevalent in East Africa, and the market potential for an East Africa-specific vaccine has not been large enough to incentivize R&D. AgResults has developed a cost-share commitment for the eventual vaccine in hopes of incentivizing firms to develop a product. With a team of experts, the implementers have developed a Target Product Profile for the eventual vaccine. To be eligible for the cost share, the vaccine must be registered in at least two of the six participating countries, which creates incentives for both public and private purchase and distribution of the vaccine.

Unlike most AMCs in which a donor or end-buyer guarantees a purchase of a certain volume of vaccines, the FMD competition is structured to be a cost-share with potential government or private sector procurement platforms in target countries. This requires working with a constellation of regional buyers and operating in differing enabling environments, which has injected complexity into the design and early implementation. Having learned the importance of adaptive management in earlier AgResults competitions, the exact financial structure of the incentive is envisioned to have flexibility for change once a vaccine is developed and procurement begins. However, the basic structure involves several key

dimensions²: I) a four-year commitment to cost-share, starting at 75 percent of the cost in year one and diminishing to 45 percent by year four; 2) a guaranteed number of doses eligible for cost-share, starting at 2 million in year I and increasing to 5 million by year 4; and 3) having pools of funding set aside for each participating country, as well as a separate pool of funding able to be accessed by any entity operating in the region.

Timeline and Results to date. The project launched to competitors in 2020. It is hoped that the vaccine will be developed in two to three years, and then the four-year cost-sharing phase for distribution can begin.

Covid-19 experience to date: From a technical perspective, COVID-19 impacted the FMD Vaccine Challenge Project's timeline for vaccine development. With the global rush to research and produce vaccines for COVID-19, access to laboratories and technicians became limited, delaying how quickly competing manufacturers could develop FMD vaccines. As a result, AgResults allocated an additional six months to the Vaccine Development Phase to give manufacturers more time. Administratively, although COVID lockdowns limited project travel, the team took advantage of stakeholders' increased availability and engaged them via virtual meetings to share progress. Otherwise, the level of effort required for the COR-equivalent remained the same.

KANDAHAR SOLAR POWER PLANT

KEY FACTS	
Period of Performance	2017-2019
USAID Office/Mission	USAID/Afghanistan
Implementer	Dynasty Oil & Gas (India)
Value	\$10 million
Location(s)	Afghanistan

Overview. USAID/Afghanistan wanted to encourage private investment in the energy sector and had determined that a private solar power plant that would sell energy back to the national grid was the best option. However, their budget of \$10 million was less than the cost of building a plant and paying for the full cost of the infrastructure was not desirable from a sustainability perspective. It was decided that USAID's monetary investment would be best spent as an incentive payment that would be used to buy down the risk of the eventual private sector power plant operating, by being applied to their construction costs once certain milestones were complete.

Timeline. Achieving this goal required a labor-intensive design phase that lasted several years, mainly as a result of needing to identify and confirm the right site for the land. The design phase also included: a) creating a Power Purchase Agreement (PPA) with the assistance of a specialized lawyer in order to both ensure the legal contracts were in place but also to convince the potential private sector actors; b) recruiting and vetting interested investors; and c) setting up a reverse auction platform to receive private investors bids.

Over a year into the design process, USAID held a conference with stakeholders to present the idea and recruit potential private sector bidders. Many aspects of the PPA were criticized, and USAID

realized they needed to switch to a lawyer with more specialized expertise in this niche domain. While this was initially considered a setback, ultimately this feedback and careful design led to a better final product with the credibility necessary to attract international investors.

USAID involvement. USAID handled nearly all of the design internally over a three-year timeframe, while contracting specialized legal expertise in drafting PPAs. To choose a private sector power plant operator, USAID decided to set up a reverse auction, whereby interested private sector actors would bid on the price they would sell power back to the national grid. While the number of ultimate bidders was confidential, USAID was pleased with its ability to attract serious, experienced investors, particularly from nearby regional countries which were beginning to see Afghanistan as a market for their investment. The day of the reverse auction attracted USAID/Afghanistan Mission Director attention, and he attended along with the Chief Executive Officer (CEO) of the Afghanistan national utility Da Afghanistan Breshna Sherkat (DABS). As the bids kept reducing the price lower and lower, ultimately to 7 cents per kilowatt hour (very close to global power costs), the CEO of DABS called the President of Afghanistan in a celebratory mood and said he now believed some of the power challenges of Kandahar were solved.

Results to date. Upon contract award, Dynasty constructed a 10 MW photovoltaic power plant connected to the national grid, which took approximately 2.5 years. Commissioning and final acceptance tests were completed in October 2019, and the plant provides affordable power to 75,000 citizens in Kandahar and an industrial park. This solar power offsets 5.3 liters of fuel use per year.

ZIKA DIAGNOSTICS

KEY FACTS	
Period of Performance	2017 – Present
USAID Office/Mission and Key Players	USAID Center for Innovation and Impact (CII), United Nations Children's Fund (UNICEF)
Implementer	Multiple
Value	\$10 million

Overview. In response to the Zika virus epidemic in 2016, UNICEF and USAID collaborated on an Advanced Purchase Commitment (APC) to ensure that effective and affordable community level tests for Zika could rapidly be made commercially available. An APC was selected to "reduce demand uncertainty risks for manufacturers who invest in research and development towards new products" and to "drive the development of efficient and accurate diagnostics for both active infection and evidence of prior infection with Zika." Furthermore, recognizing the greatest impact of the virus occurs during pregnancy, there was an urgent need for the development of highly accurate tests, as well as a rapid point-of-care diagnostic test that could be applied during routine antenatal care or counseling.

Timeline. In 2016, USAID's Center for Innovation and Impact (CII) within the Bureau for Global Health received funding to examine market-based solutions to address the epidemic As part of a rapid response, multiple donors, including CII, conducted landscape analyses and identified the pressing need for rapid, accurate, point-of-care diagnostic tests, especially those that could distinguish between other viruses endemic to Latin America and the Caribbean such as Dengue fever and Chikungunya virus which presented similarly to Zika.

Through conversations between CII and UNICEF, both parties realized that there was an opportunity to combine their efforts to determine how to accelerate the development of rapid point of care, sensitive, and specific diagnostics for Zika. As such, CII and UNICEF came to a mutual agreement to design and launch a \$10 million APC for diagnostics that met pre-determined criteria for specificity and sensitivity and could also test for co-infectious diseases like Chikungunya and dengue. After agreeing to work with CII, in May 2016 the UNICEF Supply Division hosted a consultative industry meeting in Copenhagen to convene implementing partners and manufacturers in the private sector working across diagnostic tests and vaccines to solicit feedback and encourage the acceleration of research and development efforts to advance commercial progress to address gaps in vaccine and testing point of care diagnostics in direct response to the virus epidemic. Key points of discussion that arose included that while some diagnostics manufacturers had the technology to produce what was needed, and some had even considered developing diagnostics in response to the Zika outbreak, there was significant uncertainty in timing and demand, particularly if Zika were to become endemic similar to malaria. Additionally, as a follow-up to the meeting in Copenhagen, in August 2016 UNICEF also convened the first Zika Diagnostics webinar to share updates with the commercial industry and partners on developments and revised demand profiles, including UNICEF's procurement approach and timelines planned for the tender to be released for the Zika diagnostics APC.

CII then worked with UNICEF to develop the APC and the Request for Proposal. In February 2017, UNICEF issued the first tender for the procurement of Zika diagnostic tests, for testing at the point of care. This tender included access to an APC for procurement during the period of 2017 through 2019. While a number of responses from offerors were promising, CII and UNICEF noticed that the quality of data for testing that was submitted by offerors was not standardized, and it became clear that manufacturers did not have access to high quality samples to test their diagnostics against. In this way, CII and UNICEF inadvertently discovered another market failure beyond the development of diagnostics, the lack of quality blood samples was hindering all manufacturers' abilities - regardless of whether or not they were interested in funding from the APC- to effectively evaluate their diagnostics. As such, CII and UNICEF realized there was a necessity to address this additional market failure to accelerate time to market even further by nearly a year. CII and UNICEF worked with the London School of Hygiene and Tropical Medicine to develop a standardized reference panel, built from a collection of reference materials from laboratories around the world. Additionally, the APC was adjusted and all interested offerors (manufacturers) had to agree to evaluate their diagnostic tests against this standardized reference panel in order to be considered for the APC. The standardized reference panel helped UNICEF's Procurement Reference Group, an external group of experts, determine if the diagnostic tests submitted under the APC met the clinical standards outlined in the Request for Proposals.

Following the first tender, in May 2018, UNICEF held another webinar to share updates with the commercial industry and partners on the second Zika diagnostics tender. The second was issued in June 2018 and similarly included access to an APC for procurement during the period of 2017-2019. Contract awards were ultimately announced in April 2019, including the finalization of a service agreement.

Results to date. The timeline for this APC was significantly delayed given a second Ebola epidemic which limited access to blood samples needed to finalize the reference panel. Additionally, during this process the Zika epidemic also slowed, so while the public health emergency status was lifted, Zika still remains endemic in many countries that will still greatly benefit from these diagnostics brought to market. As noted in UNICEF's November 2019 Innovation Case Study, although the project has not yet

demonstrated development outcome objectives, there are several indicators in place through which the UNICEF Supply Division will monitor progress towards objectives. Additionally, the project also has several performance metrics included in its Procurement Strategy, against which progress toward strategic objectives will be measured, including4:

- Two novel diagnostics available by 31 December 2017 (delayed)
- Five suppliers in the market by 2018, to facilitate movement towards a health and competitive market for ZIKV Dx (delayed)
- In-country field-testing facilitated to demonstrate effectiveness and acceptability of novel products
- Target Rapid Diagnostic Test price of \$1.5 in 2017–2018 and \$1.0 in 2019, to improve affordability of diagnostics for use in program countries, and increase chances of sustainable procurement

PRIZES

AGRESULTS - INNOVATION FOR RESEARCH AND DELIVERY

KEY FACTS	
Period of Performance	2013 – approximately 2024 (12 years, individual projects staggered)
USAID Office/Mission	USAID/RFS, in conjunction with BMGF, DFAT Australia, DFID, Global Affairs Canada and World Bank (trustee)
Implementer	Deloitte
Evaluator	Abt Associates
Value	\$152 million
Location(s)	Multiple. Global competitions, regional (East Africa, West Africa) as well as country specific (Kenya, Nigeria, Uganda, Zambia, Vietnam, Indonesia)

Overview. AgResults is a multi-donor (DFID, DFAT Australia, Global Affairs Canada, Bill & Melinda Gates Foundation, USAID, World Bank) initiative with a total budget of approximately \$152 million dollars. It was created with two purposes: to implement multiple pay-for-results competitions in order to overcome market failures in agriculture and stimulate private sector solutions and innovation to those challenges and to create robust evaluation of whether, when, and how pay-for-results works, particularly in comparison to traditional donor programming. A significant part of the budget is set aside to have the evaluation team alongside the implementation team at the beginning of implementation.

AgResults implements a suite of different projects, most (but not all) of which, use prizes as their main pay-for-results approach. AgResults often uses the term "pull mechanism" to describe them. Prizes may be winner-take-all or shared proportionally among some or all participants based on results. Two projects have completed full 4-5-year implementation cycles – Distributing Aflasafe (a biological control input to combat aflatoxins) in Nigeria and Distributing On-Farm Storage solutions in Kenya, reducing grain moisture and impervious to large grain borers. Two projects have been canceled midway through implementation after a determination was made that the prize was not incentivizing the intended behavior - Creating a market for Verified Legume Seed in Uganda, and Distribution of Pro-Vitamin A maize in Zambia. Current prize competitions include a global competition for the development of a brucellosis melitensis vaccine and the reduction of greenhouse gases in Vietnamese rice farming, and several more are in design. Each project has a local project manager (often a local NGO or organization with content expertise) which recruits and manages local participants (called solvers in AgResults terminology) and does verification of results on which prizes are paid. The evaluators are present throughout implementation with a project-specific and cross-project learning agenda and used mixed methods evaluations to complete robust surveys and learning documents.

Timeline. AgResults was first conceived as a response to the Canadian government's call for more innovation in development at the G20 Summit in 2010 and was officially launched as an \$118 million initiative by the founding donors at the 2012 G20 summit in Mexico. Deloitte was procured as the principal implementing partner in 2013, and design of initial programs was begun. Design is a nearly yearlong process that must consider the geographic and agricultural priorities of each donor, as well as find an agricultural market failure that a prize may solve. This process averages a year per design (though often they are done in concurrent batches).

USAID involvement. USAID has been involved since the launch, and although their financial contribution is the smallest among the donors, USAID does have an equal vote on the Steering Committee. USAID has served a term as the Chair of the Steering Committee, which approves the design of each intervention before implementation, sets the learning agenda of the evaluator, and consistently monitors the progress of projects during implementation. For example, Steering Committee decisions stopped the Uganda and Zambia projects because of enabling environment issues constraining private sector incentives to act.

Results to date. Completed pilots in Nigeria and Kenya have shown developmental results. In Nigeria, more than 40 maize millers participated in distributing Aflasafe to farmers in their supply chain to receive a premium of \$18.75 per metric ton of milled maize. In the final year of the project, this prize was halved to test its effect on private sector behavior. Analysis suggests that the initial prize did incentivize millers to treat their maize with Aflasafe and reach higher value markets, and it is imputed that there are then health benefits to farmers consuming treated maize on-farm without harmful aflatoxins. In Kenya, the prize was proportionally shared by all actors based on the amount of storage solution (judged on a metric ton basis) for grains that were dry and resistant to the large grain borer pest. The competition was solution-agnostic, and companies tried a variety of innovations from inexpensive hermetically sealed bags to plastic and metal silos. While several companies shared the prize, the lion's share went to a firm that distributed the hermetic bags with the most advanced rural distribution network.

Preliminary results are also coming in on the general effectiveness on prizes. While the sample size is still small and across very different geographies and sub-topics within agriculture, it is believed that prizes best work in conjunction with traditional donor work of delivering technical assistance and capacity building and not just in isolation. This particularly applies to in-country delivery prizes and may be less true on the brucellosis vaccine development prize targeting global animal health firms and research universities. The external evaluator has completed a report on the effectiveness of the AgResults pilot projects that ran between 2013-2020, and is available on the AgResults website¹. In summary, prizes can spur markets for new technologies that benefit smallholders, yet their undertaking is neither simple nor are markets easy to influence. Nuanced understanding of market systems is necessary for a clear theory of change and causal linkages between the prize, market systems actors, and desired investments. Specifically, AgResults was most successful in catalyzing change where key constraints were within the manageable interest of the private sector . When the private sector perceived a strong business case, AgResults was most likely to succeed. Further, while the project did reach smallholder farmers, the, inclusion of women was mixed, as was evidence on long-term sustainability of behavior changes.5

Covid-19 experience to date: COVID-19 has impacted AgResults' global portfolio of prize competitions in a range of ways. Due to their focus on COVID-19 and the lack of testing labs, vaccine manufacturers participating in the global Brucellosis Vaccine Challenge Project struggled to obtain funding and access to BL3-4 labs to comply with the Stage 2 milestone of efficacy and safety testing. Given this, AgResults' Steering Committee approved a modification to extend the project by 18 months and to provide funding for access to BL3-4 labs for competitors that are ready within the extended time frame. Projects that were several years into implementation, such as the Vietnam Greenhouse Gas

Emissions Reduction Challenge Project and the Tanzania Dairy Productivity Challenge Project, felt repercussions of local COVID-19 impacts. With Vietnam's caseload spikes and official lockdowns, project operations went virtual and were limited during its last months, although the online final awards ceremony in August successfully engaged key stakeholders. In Tanzania, where the government did not enact restrictions on movement until the summer of 2020, project activities proceeded as normal with some virtual activities making up for eventual travel restrictions. However, AgResults' newest prize competitions, including the Senegal Crop Storage Finance Challenge Project and the Indonesia Aquaculture Challenge Project, were hit the hardest. Indonesia has been heavily affected by COVID-19, causing travel restrictions and economic pressures, and limiting project participation. The new project managers faced operational challenges to startup and to verify initial design assumptions, as well as to recruit private sector competitors, who were feeling their own business pressures due to COVID-19. Administratively, there was reduced travel that was compensated by intensive remote induction, mentoring, and guidance, but otherwise the level of effort required for the COR-equivalent was the same.

DATA-DRIVEN FARMING PRIZE

KEY FACTS	
Period of Performance	2016 - 2017
Implementing partners	DAI and Nesta
Key Stakeholders & Partners	USAID, Feed the Future, International Maize and Wheat Improvement Center (CIMMYT), International Center for Integrated Mountain Development (ICIMOD), Microsoft Innovation Center Nepal (MIC Nepal), Global Open Data for Agriculture and Nutrition (GODAN)
Value	\$1 million
Location(s)	Nepal

Overview. Data-driven agriculture is not a new concept, but the availability and uptake of innovative technological solutions that benefit smallholder farmers still lags in many developing countries. In order to generate local and private-sector driven technological solutions, a prize was structured to source, support, and accelerate firms that were solving one of five challenges: I) timely and context specific insight for the improvement of rice, cereals or vegetables in Nepal, 2) support a more sustainable use of Nepal's natural resources, 3) enable the market by providing inputs, extension, or connections for farmers in Nepal, 4) improve the application of agricultural products such as fertilizer or seed, and 5) generate timely and actionable information for farmers.

Timeline. The entire prize from design to the end of implementation lasted twelve months. The first design phase (Oct-Nov 2016) identified Nepal as the country candidate for the prize. The second design phase (Dec 2016 – Jan 2017) developed the implementation and communication plans and the assessment criteria and prize framework. The launch phase of the prize (Feb - April 2017) had incountry events, press and media campaigns, resulting in 143 applications. Thirteen finalists were chosen, and invited to a co-creation workshop (May 2017). Development and testing of solutions occurred (Jun-July 2017), providing acceleration and support to finalists. An assessment was carried out in August 2017, followed by prize award in September.

USAID Involvement. Teams from the former U.S. Global Development Lab's Center for Development Innovation (CDI) and the Center for Digital Development's (CDD) "Digital Development for Feed the Future" team collaborated on a prize competition that would identify, develop, and test digital tools and approaches for smallholder farmers to make their practices more data-driven and successful. Based on consultations with the Digital Development for Feed the Future team, they identified USAID/Nepal as a strong candidate for doing the prize. In conjunction with implementing partners DAI and Nesta, USAID convened a group of local and international agricultural and technical partners such as Microsoft Nepal and CIMMYT to assist in developing the criteria for prizes and judging them.

Results to Date. This competition awarded four prizes. Two top prizes of \$100,000 USD each were awarded to the most viable products, won by Db2map - which created GeoKRISHI, integrating government, GIS and crowd-sourced data in to one platform -- and PEAT, which created Plantix, a mobile diagnostic application for farmers allowing farmers to take a picture of crop diseases and receive a diagnosis remotely. Two prizes of \$50,000 were awarded for products with the most potential. First was ICT for Agriculture, a mobile and web platform capable of producing localized content such as market prices, crop advisory and weather forecasts and on-demand inquiries. The second winner was Spero Analytics which created the Soil Moisture Mesh Network which uses soil moisture data to help farmers in Nepal manage their water resources with more precision.

In addition to successful prizes, all participants benefitted, saying they learned more skills by participating in the process. 58 percent of entrants were from Nepal, and 70 percent of finalists established new business partnerships as a result of the competition. There also was consensus that a global call for local applications could succeed, that the testing and development phase, and that private sector engagement was critical elements of the prize.6

Based on the learning associated with this experience, USAID published a competition fact sheet, design case study, video, and process note. The success of this prize also spurred a similar prize competition in the USAID Fall Armyworm Prize, and its success in Nepal led to both increased private sector engagement and Government of Nepal's public declarations for the importance of entrepreneurship and data-driven farming. As of mid-2021, over 1.7 million Nepali smallholders have used innovations from the Data-Driven Farming prize to increase their efficiency, productivity, and market sales.

DEVELOPMENT IMPACT BONDS

CAMBODIA RURAL SANITATION DEVELOPMENT IMPACT BOND

KEY FACTS	
Period of Performance	November 2019 – 2023 (4 years)
USAID Office/Mission	USAID/Cambodia
Implementing NGO ⁷	iDE
Outcomes Funders/Payers	USAID
Impact Investor/ Upfront Funder	Stone Family Foundation
Value	\$9.99 million
Location(s)	Cambodia

Overview: The Cambodia Rural Sanitation Development Impact Bond (DIB) aims to scale existing market-based solutions to achieve universal sanitation coverage in six provinces with the ultimate goal of reducing stunting among children and preventing the spread of disease and contamination of drinking water by achieving open-defecation free (ODF) status in 1,600 villages across the provinces of Svay Rieng, Kandal, Prey Veng, Kampong Thom, Siem Reap and Oddar Meanchey.⁸ By eradicating high rates of open defecation, the DIB will accelerate the Cambodian government's efforts to reach universal sanitation and eliminate open defecation by 2025.

The DIB includes an investor (the Stone Family Foundation), an outcome funder (USAID), and an implementer (iDE). USAID has an agreement with the Stone Family Foundation for achievement of outcomes, and separately, the Stone Family Foundation has an agreement with iDE to work towards achieving the outcomes. In addition to the \$9.9 million DIB, the \$16.5 million SMSU 3 received funding for separate activities funded by a diverse group of stakeholders, including \$6 million provided by the Australian Department of Foreign Affairs and \$235,000 from UNICEF.



The Cambodian Rural Sanitation DIB supports Phase 3 of iDE's Sanitation Marketing Scale-up Program (SMSU) which began in 2009, funded by the Stone Family Foundation, and which took latrine coverage in project provinces from 29 percent in 2009 to 67 percent in 2018. Phase 3 focuses on expanding the program into some of the hardest to reach provinces throughout Cambodia, and ambitiously aims to take rural sanitation coverage in these provinces from 67 percent to 85 percent by reaching some of the poorest and most marginalized households that still practice open defecation. This DIB deliberately focuses on ODF status as an outcome. If the DIB were to focus only on outputs, such as installation of latrines, independent of the intended outcome (community ODF status), it would be difficult to determine if the outputs (latrines) led to an ODF community. Each village's ODF status will be determined based on the satisfaction of a holistic set of predefined metrics including hygiene and sanitation metrics as well as latrine installation.

Given how challenging it is to reach these villages and households through market-based solutions rather than traditional service delivery models, the Stone Family Foundation needs to learn, iterate, and adapt during implementation, more so than they did during previous phases of SMSU. The work is therefore not 'more of the same'. In this context, the DIB adds value over other funding approaches by providing flexible funding that allows for adjustment of the implementation approach according to what works in different regions or with different populations. Since the DIB would be tied to sanitation outcomes and would allow USAID to pay only for results achieved, there would be reduced risk to the U.S. government due to potential ineffective implementation.

Timeline. In 2018, the cross-sectoral team working on Feed the Future activities in Cambodia began to focus on new designs to reduce stunting rates, a main objective of the U.S. government's Global Food Security Strategy. The team began discussions with the Stone Family Foundation on whether alternative funding mechanisms could better suit the next stage of Cambodia's rural sanitation challenge. USAID decided to pursue the development of a DIB which would be structured have USAID pay only for sanitation outcomes achieved. The Stone Family Foundation saw this as an opportunity to begin shifting from being a grant funder to being an impact first investor in the first-ever sanitation DIB.

USAID and the Stone Family Foundation co-designed the DIB, with facilitation support from Social Finance, in a process that took approximately 9 months, starting in February 2019 through launch of the DIB in November 2019. The Stone Family pursued a feasibility study implemented by Social Finance which identified promising core elements for a DIB for phase three of the SMSU program. The SMSU Phase 3 program was already operating with a strong foundation for data collection. Additionally, there were already key parties identified – the Stone Family Foundation as the investor and iDE as the implementing partner (iDE) – and a DIB was well suited to account for risk allocation especially operating in higher risk SMSU Phase 3 provinces.

It is notable that there is no intermediary or validation agent, which was an intentional decision arrived at early in the design process. Those involved in developing the DIB noted that verification of results was an aspect of DIBs which in the past was done through separately contracted third-party verifiers. This was a component they wanted to look at making more efficient and they were able to mitigate this in the design with two key features. First, the outcome indicator—whether a village has achieved ODF status - is clear and simple and can be verified two ways. Given the strong data collection foundation already established for ODF by iDE in Cambodia, there is an existing robust database in which iDE maintains household-level data for every village they work in regarding achievement of ODF requirements. Second, village ODF status is also approved by the Government of Cambodia, through a separate set of documents that are verified, stamped, and signed by commune chiefs for submission for government verification. These two verification methods, plus USAID's presence in-country and ability to check-in on the ground as needed, were deemed sufficient to verify achievement of outcomes for payment.

In the determination of the approach, USAID identified a fixed amount award (FAA) as the most appropriate instrument to use for the Cambodia Rural Sanitation DIB. With the DIB's pay-for-results approach, the FAA is appropriate as a type of non-cost-based grant or cooperative agreement in which USAID provides payments based on meeting measurable goals and objectives. Given the design of this DIB, which is structured around meeting a sanitation outcome (ODF village status), the FAA was ideal. From USAID's perspective the goal for the DIB was to keep the structure as simple as possible, minimize the management burden for USAID, and have USAID only pay for an outcome-level result. The Stone Family Foundation agreed to split its expected return with iDE based on good performance – a deliberate design choice to incentivize iDE and to align the goals of both the Stone Family Foundation and iDE.

The instrument, an FAA agreement, was chosen by USAID both for its simple milestone-based structure and the fact that it is not a cost-based mechanism but reimburses based on results achieved. Before proceeding with the FAA, USAID needed to address one hurdle. Under USAID's Automated Directives System, fixed amount awards cannot exceed a term of three years unless a waiver is in place. After determining that a three-year period of performance was not sufficient to meet the needs of the DIB, USAID was able to issue a four-year FAA after securing approval for a policy deviation. In addition, reviewing a cost application that included a potential return to the investor was new to the Office of Acquisition and Assistance team. USAID had to review and determine that the milestone payment amounts were reasonable compared to the independent government cost estimate completed by USAID during the design process. Given this is not a cost-based mechanism, if the Stone Family Foundation spends more than it estimated to reach milestones, the payments received from USAID would not increase to align with increased costs. If the Stone Family Foundation did not reach milestones, but spent funds trying to reach milestones, the Stone Family Foundation would not be reimbursed. With the additional implementation risk taken by the Stone Family Foundation, USAID reviewed the cost application and determined it to be reasonable to achieve ODF status in 1,600 villages.

Results to date. Overall, the program has made significant progress since launching in November 2019 and was not significantly affected by the initial COVID-19 lockdown in Cambodia. The payment milestones are the achievement of ODF status across 250 villages approximately every six months. The program overperformed in the first period of performance, achieving 250 villages with ODF status at the end of March 2020. By May 2021, the first three performance claims had been made successfully with over 750 villages achieving ODF status. As a result, the Stone Family Foundation was able to roll over some outcomes into the next period of performance. The DIB has remained ahead of schedule to date, but stakeholders are monitoring the situation carefully as Covid-19 became more serious in Q1 2021. The flexibility that the DIB structure allows in regards to implementation flexibility to achieve the outcomes is an advantage, if in future external events hamper performance.

Within the first year of implementation, it also became evident that the simple structure of the DIB, with one payment metric and limited parties involved, has reduced the level of effort required by USAID to manage the award. Stone Family Foundation is able to work with iDE to pivot its service provision with increased flexibility without having to develop and seek workplan approvals or agreement modifications from USAID. The DIB structure has also been a process of adjustment for the Stone Family Foundation as they have shifted from grant funder to investor. As they have taken on more risk as the investor, there has been an adjustment in their role, including greater engagement with service delivery challenges as an investor compared to when they were a grant funder.

COVID-19 experience to date. There have been two distinct phases to Cambodia's experience of the COVID-19 pandemic. It is still too early to determine the full impact of COVID-19 on the DIB.

With initial lockdowns in 2020, there was considerable fear of the virus in the communities prioritized for the DIB and iDE realized that their operating model of door-to-door visits and group sales meetings would need to change to retain people's trust. To stay relevant to their communities, they trained >250 field agents to deliver the UNICEF communication campaign on COVID-19. With approval from village authorities they began all their village interactions with public health messaging around the pandemic, utilizing their existing last-mile penetration, before progressing to sanitation. Case numbers were initially very low. Since February 2021, community transmission has been rising with an increasing Covid-19 caseload and more extensive restrictions to try to halt its spread. As basic understanding of hygiene and control measures was judged to be good in priority villages, once the virus re-surfaced, iDE changed their campaign message to promote vaccination. Throughout the pandemic, iDE has ensured that their staff have appropriate personal protective equipment. They also bring soap and sanitizer to meetings with village leaders. As iDE already had staff located across all six provinces, restrictions on movement did not hamper their activities significantly.

Under the DIB structure, all of these operational changes were agreed between iDE and Stone Family Foundation without the need for approval or additional funding from USAID. With flexible management of the SMSU3 program, iDE expects the additional cost of COVID adaptations to be less than I percent of their total program costs. Any impact on the pace of achieving ODF villages has yet to be seen. If it costs more than originally planned for the Stone Family Foundation to achieve the agreed-upon outcomes of the DIB, the Stone Family Foundation will still only receive the agreed upon repayment of up to \$9.9 million from USAID. In addition, there is flexibility built into the agreement for when the Stone Family Foundation has to reach each payment metric so if there is a delay in the future due to COVID-19, an agreement modification is not needed to amend the due date of each milestone. The risk of not achieving the outcomes is managed by the Stone Family Foundation with iDE.

To date, progress to achieve the agreed outcomes has been strong and the DIB continues to be ahead of schedule. There is, however, acknowledgement that this may be because the first villages targeted were the low hanging fruits and progress may become more difficult in time. An advantage of using the government ODF claim process in the outcomes verification protocol is that verification did not have to be paused, as in other DIBs, due to restricted movement for survey teams or similar during the pandemic. The chiefs of each village, whose sign-off is required on an ODF claim, are all still in their villages and so verification of ODF status can continue.

There have been no changes made to the DIB and both Stone Family Foundation and USAID praised the flexibility in the Fixed Amount Award which allows outcomes claims of 250 ODF villages to be made as they are reached, rather than against a fixed payment schedule. This means that even if COVID-19 forces a slowdown in operations in future, this will not necessarily force a revision of the Fixed Amount Award. It would, however, affect the cashflow to Stone Family Foundation if smaller or fewer outcomes payments are made and therefore, potentially negatively impact operations of iDE, depending on how the cashflow is managed between Stone Family Foundation and iDE. This would be an issue managed by the by the Stone Family Foundation as they are responsible to USAID for achieving outcomes.

USAID developed the simple structure of this DIB, and decided to utilize the FAA, based on lessons learned from the two previous DIBs launched by USAID. The structure has resulted in a low activity management burden for USAID Cambodia as well as strong results due to the flexibility the Stone Family Foundation has to adjust to conditions on the ground and external shocks like COVID-19 as they continue to achieve ODF outcomes.

UTKRISHT DEVELOPMENT IMPACT BOND

KEY FACTS	
Period of Performance	Agreements signed in November 2017; Implementation from Spring 2018 – Spring 2021 (3 years)
Implementation Manager	Palladium
Service Providers	Population Services International (PSI) and Hindustan Latex Family Planning Promotion Trust (HLFPPT)
Outcomes Funders/Payers	USAID and MSD for Mothers
Impact Investor/Upfront Funder	UBS Optimus Foundation (UBS)
Independent Verifier	Mathematica
Value	\$9 million (total outcomes payments of \$8 million, with \$1 million set aside for verification of results)
Location(s)	Rajasthan, India

Overview: The Utkrisht Development Impact Bond is the world's first health-focused DIB, with the goal of improving the quality of maternal care in Rajasthan, India's private health facilities by supporting a minimum of 360 and up to 440 Small Healthcare Organizations to meet government quality standards and to adhere to them over the long term. This DIB complements existing Government of Rajasthan initiatives related to improving maternal and newborn health outcomes and is a partnership between UBS Optimus Foundation (impact investor/upfront funder), Palladium (implementation manager), Population Services International (PSI) (service provider), HLFPPT (service provider), MSD for Mothers (outcome funder), and USAID (outcome funder).

Timeline. Although initial discussions of this DIB began as early as 2015, the final contracts were not signed until the end of 2017. As this was still a very new concept to USAID, there were significant questions around how the



procurement would be completed and by what mechanism, leading to some apprehension by USAID/India to take on the impact bond structure without fully understanding the extent of management at the agreement level. Ultimately, the mechanism for this impact bond is through a funding agreement using Other Transactions Authority (OTA).

The DIB was intentionally designed to focus on saving lives however determining how to "price" a life saved was difficult. Given the strong, well-documented link between quality improvements in facilities and improvements in health outcomes, the DIB partners agreed that the output that would trigger repayment would be improvements in quality of care, based on government accreditation schemes.

From the USAID award management perspective, the management burden has been significantly reduced in implementation as there are only two deliverables that serve as the basis for assessing payment triggers – a report on the achievement, and a claim to verify the report. There are no work plan approvals – just outcome payment based on these two documents. However, the preparation in the design phase for this set up was heavily labor intensive, and the contractual arrangements and negotiations took a significant amount of time to reach compromise and consensus among all parties involved. A specialist advisor, Social Finance, was brought in to advise and support the detailed design and contractual negotiations, with funding and oversight from the center for Impact and Innovations under the Global Health Bureau at USAID/Washington. In total, there are six contracts: one contract between USAID and UBS Optimus Foundation; another between co-outcome funder Merck for Mothers and UBS Optimus Foundation; an agreement between UBS Optimus Foundation as the investor and with implementation manager Palladium; flow down agreements from Palladium to PSI and HLFPT as the two service providers; and finally an agreement between MSD for Mothers and Mathematica. Separately, there is also a process evaluation contract between UBS Optimus Foundation and Catalyst Management Services (CMS), which is partially funded by USAID through the UBS contract. Programmatically, each agreement must match in terms of timing, cost, governance, and management structures, implementation schedule. Given the complexity, the local agreements office was not a part of the structuring of agreements or legal negotiations.

Results to date. Although the agreement was signed in November 2017, implementation did not begin until May 2018 because the investor, UBS Optimus Foundation, needed to raise capital from a group of impact investors. Outcomes funders made a total of \$9 million available of which \$1 million has been set aside for the independent evaluator, Mathematica, leaving \$8M available for outcomes payments. UBS Optimus Foundation's initial working capital investment was \$3.5 million, with a limit of 8 percent on their return on investment. Program implementation began in May 2018, with a six-monthly payment cycle. Thus, assessment of progress takes place every October and March, and any associated payments are issued in December/January or June/July. While some areas of burden related to award management have been reduced in implementation, there have been several challenges in operationalizing the DIB structure from the USAID award management perspective, including the difficulty assessing cost accruals and the long outstanding pipeline of funds that are highly dependent on the level of achievement and associated payment for those varying levels.

In the first payment cycle for this DIB, USAID and MSD for Mothers made outcomes payment for the first set of hospitals submitted for independent verification. However, USAID and MSD for Mothers did not make an outcomes payment for the second round because Mathematica found that the facilities submitted for verification, did not all meet clinical standards for accreditation. This reduction in the anticipated cashflow was managed by the investor, UBS Optimus Foundation, and the project was then able to catch up and delivered 167 hospitals ready for evaluation for certification by the third verification round in October 2020. The DIB concluded in spring 2021 with final verification (round six) disrupted by COVID (see below). By this time, the project had 405 hospitals fully ready for certification, overachieving the minimum target by 12.5% with around 6% savings in costs, in spite of the COVID related lockdowns and closures.

USAID employs several methods of monitoring progress and learning, including at the programmatic level, via the payment trigger thresholds, through process level learnings, and eventually through the final impact analysis post-completion of the DIB interventions. There is a routine project management

information system which gives USAID visibility into the progress of the program against performance indicators, including the number of complex cases handled by hospitals that are part of the program intervention, and some specific clinical interventions that are applicable. USAID has been tracking these types of non-payment-related management information system indicators to help the agency understand if performance has improved, the level of costs incurred and how they are associated with bringing different hospitals up to standard for certification, and relatedly if these metrics indicate that USAID should calibrate efforts in different hospitals (for instance, comparing hospital quality in a densely populated city against a rural community). These management information system indicators are built into the cost structure for Mathematica's independent verification of payment triggers.

After project implementation began, USAID and UBS Optimus Foundation engaged CMS to conduct a process evaluation. The goal of this process evaluation is to evaluate the higher-level structuring of the DIB, including assessing the effectiveness of the partnership structure, governance structure, whether the payment system could be improved, and if this DIB structure ultimately demonstrated cost savings to USAID. Finally, when the program comes to an end in 2021, the partners plan to engage another party to conduct another impact evaluation to focus on lives saved and a comparison against the initial risk model developed during the design phase, which indicated an expected 10,000 lives to be saved over a period of five years, including two years post project end.

COVID-19 experience to date. During the first global wave of the COVID-19 pandemic from March to May 2020, India was put into a sudden and severe lockdown which meant that round four of the DIB results verification had to be suspended. The rapidly imposed restrictions on people's movement left no time to plan for alternative verification approaches and so no outcomes payments were made for round four. Accredited hospitals were rolled forward to the fifth verification round.

Operationally, program implementation switched from in-person training for program hospitals, to online sessions, hampered by unstable internet connections in many clinics and a cultural switch to an online working mentality. In time, as lockdown restrictions eased, a hybrid implementation model was developed involving a mix of both in-person and online support. One of the two DIB service providers managed to effectively innovate and adapt their delivery model, driving cost savings and ensuring that the final DIB results have been achieved well within the original budget. With a cap on the returns to the upfront funder at 8%, there are options explored to use the remaining cost savings to have more hospitals accredited for quality certification in an extended time frame.

The outcome verification process has also seen significant changes as a result of the pandemic. Verification round five, in October 2020, was expanded to enable clinics that could not be assessed during the abandoned round 4 to be included. By this point all verification was done remotely, following the amended government accreditation board processes. This required online document, photo and video submissions from participating facilities, as well as calls and video tours with facility clinicians. Mathematica switched their staffing during this verification round, from non-specialist evaluators to the same clinical specialists involved in government accreditation processes. Stakeholders noted that this significantly improved the alignment of results expectations between facilities and service providers, generating a much smoother process.

As the second, devastating, wave of COVID-19 hit India in 2021, the final (sixth) verification round had to be cancelled after a week of field work. Participating facilities were overwhelmed with demand to care for COVID patients, overflow for other medical needs or overflow from other maternity facilities, which had been reassigned to care for COVID patients. As the DIB was ending and there was no potential to catch up in the future, DIB Steering Committee members agreed to accept completed government certification of one of the two sets of facility standards as sufficient to trigger outcomes payments. Previous evaluations had found that the correlation between the two sets of standards

originally required for payment is strong. USAID staff reflected that, in the future, independent verification of outcomes may not be needed for similar programs if government certification is timely. Use of existing data / processes would make outcome verification both simpler and more cost-effective.

In most ways the DIB structure has been resilient to COVID-19; no contractual changes were required to targets or budgets. Adaptation has been driven by the implementation and verification teams with the Steering Committee providing oversight and approval where necessary.

Having both service providers and the implementation manager co-located in one office in Jaipur was seen as a strength in being able to rapidly pivot the approach, while the financial risk for program adaptation rested solely with the upfront funder. This enabled greater flexibility of funding as there was no need for USAID approvals for changes to budgets or workplans. USAID only pays for the outcomes achieved.

VILLAGE ENTERPRISE DEVELOPMENT IMPACT BOND

For more information on the Village Enterprise Development Impact Bond, see "Case Study: Village Enterprise Development Impact Bond" (June 2020, Updated September 2021).

PERFORMANCE-BASED AWARDS

GHANA FINGAP - FINANCING GHANAIAN AGRICULTURE PROJECT

KEY FACTS	
Period of Performance	2013- 2018 (5 years)
USAID Office/Mission	USAID/Ghana
Implementer	Palladium
Value	\$22 million
Location(s)	Ghana

Overview: USAID had been investing in agriculture in northern Ghana for many years, with a large suite of Feed the Future projects and a focus on production in rice, maize, and soy. However, the supply chain was not adequately built out and doing so would cost hundreds of millions beyond USAID's budget. At the same time, banks were lending less than five percent of their portfolios to agriculture because of the risks of rain-fed agriculture and its low margins, despite various DCA products having been put in place. DCA products in Ghana had been moderately effective, but they are relatively high cost for USAID and often suffered from low utilization rates from financial institutions in Ghana. An open-minded USAID Mission, along with support from USAID/Washington, decided to create FinGAP with the express purpose of trying pay-for-results as a way to catalyze financing.

The incentives were structured in two categories, targeting both the supply and demand for finance. As the implementer, Palladium had a long track record dating to the 1990s of using the pay-for-results in economic growth projects, with a particular focus on using it to incentivize the demand for finance – essentially, hiring business advisory services (BAS) providers to develop business models and bankable business plans, and then paying them when those plans were financed by banks. FinGAP's design innovated on this model and addressed the supply of finance, by offering incentives directly to financial institutions, compensating those that made loans to businesses in target value chains and geographies.

Palladium's design of pay-for-results rewarded "first-mover" financial institutions and BAS providers and penalized those that did not make quick use of USAID sub-award resources. This adaptive management was critical, and required flexibility from the implementer's technical team, contracting and grants staff, as well as a flexible USAID Mission that permitted the implementer to manage without undue burdensome oversight.

Timeline. Implemented from 2013-2018, FinGAP was a complementary project to ADVANCE and ADVANCE II, USAIDs projects working on production and market access in the rice, maize, and soy value chains. While FinGAP had the mandate to work with some of the same actors as ADVANCE, businesses supported under this project ultimately made up a very small percentage of FinGAP's pipeline. Instead, hiring a deal-focused team of transaction advisors and deal finders provided a much greater pipeline of businesses, particularly in rural areas. Initially, the design had been to pay a flat fee to financial institutions as a percentage of money disbursed, to take an agnostic and transparent view across the sector. However, over the life of the project it was jointly decided between Palladium and USAID that individual negotiations with banks based on their size, appetite for agricultural lending and risk, etc. would lead to better outcomes in terms of behavior change.

Results to date. Overall, FinGAP was a pay-for-results success. By the close of the project, USAID incentive payments to financial institutions and BAS providers had unleashed \$266 million in lending, and there was a 344 percent increase in the number of farmers receiving loans. Qualitatively, there was also clear behavior change by banks, creating a "feeding frenzy" of interest in businesses in these sectors, and increasing their percentage of lending to agriculture generally. With about \$4 million of incentives paid, leverage achieved was over 60:1 (private dollars catalyzed against incentives paid).

HAITI HOME OWNERSHIP AND MORTGAGE EXPANSION (HOME)

KEY FACTS	
Period of Performance	2015 – 2020 (5 years)
USAID Office/Mission	USAID/Haiti
Implementer	World Council of Credit Unions (WOCCU)
Value	TBD
Location(s)	Haiti

Overview: Haiti HOME was designed as part of USAID Haiti's post-earthquake efforts to solve the crisis of affordable housing in Haiti. Even before the 2010 disaster, there was a shortage of 200,000 affordable, well-constructed housing units, and post-earthquake that number more than doubled. Conceived as a three-year project to demonstrate a market-based approach to affordable housing in Haiti (through encouraging mortgage lending and development of more affordable housing units by real estate developers), Haiti HOME was designed to use pay-for-results as a key driver to accomplish the desired results of increasing affordable housing.

There were two groups of actors which could benefit from pay-for-results incentives. The first was banks and other finance providers, which could earn incentives based on the amount of mortgage financing lent. At the start of the project, there were approximately 1,000 housing mortgages in the entire country for a population of 12 million, so this was a new market that needed development. A payment incentive was implemented for finance providers that subsidized the cost of a borrower's down payment, as this had been a binding constraint to lending expansion, particularly at credit unions that targeted less affluent customers. Other incentive structures were useful as well in generating more inclusive lending, particularly a fee-based payment to banks when mortgages were given to women-led households.

The second group targeted with an incentive was housing developers who would develop "down market" products targeting a more affordable housing segment, which was coupled with technical assistance on developing business plans. Builders were also paid when they achieved certain desirable product profiles like EDGE certification, a form of green building code standards. Finding these developers took significant effort - identifying who was interested in this segment, what their risk profile was, and whether they had products close enough to the target market to be adapted were all critical and time-intensive questions that had to be asked to ensure that the right kind of participants existed and were interested in participating. The size of the incentive also varied and was negotiated with each developer based on its own risk tolerance and business profile.

This approach required a mindset shift for the implementing partner and for local stakeholders. Haitian entities knew USAID as a grant maker rather than a catalyst for private capital, so building trust and developing relationships was critical for the project team. Once success was happening, the demonstration effect took over. Within the project team and the USAID mission, there was a concerted effort to change the way donors thought about engaging with the private sector – this ultimately worked, but took time, and was only possible with a very open-minded and innovative agreement officer.

Timeline and results to date. When the pay-for-results approach showed success, a two-year extension was given, ending June 2020. As of the end of Q2 FY20, HOME's commitments under the HOME Facility catalytic grant funded 21 activities, seven on the demand side and 14 on the supply side of the housing value chain, spread across six housing developments. As of March 2020, private capital committed by developers and financial institutions partners reached \$37.4 million. Thus far, HOME has leveraged \$19.8 million of these private funds in activities such as owner-led housing microfinance products, developer-led housing infrastructure investments, and mortgage products in return for \$2.9 million in incentives.9 The leverage achieved was almost 7:1. But the overall value of the activity was the demonstration effect that housing developers could build and sell affordable housing on a profitable basis, and that Haitian finance providers could profitably lend to middle-income Haitian households.

FEED THE FUTURE KENYA INVESTMENT MECHANISM

KEY FACTS	
Period of Performance	2018-2023
USAID Office/Mission	USAID/Kenya
Implementer	Palladium, in conjunction with CrossBoundary, Open Capital, Research Solutions Africa Inc., and Lattice Training Limited
Value	\$23 million
Location(s)	Kenya

Overview: The Feed the Future Kenya Investment Mechanism (KIM) program is a five-year USAID project designed to unlock \$400 million in capital investment for key sectors of Kenya's economy, including agriculture, and for regional trade and investment opportunities under the Prosper Africa initiative. The program is addressing two principal market failures that have discouraged financiers from financing certain segments of the clean energy and agriculture sectors: insufficient quality consulting services and limited availability of finance for agriculture and other key sectors of the economy. In addition to technical assistance, there are similar pay-for-results incentives as described in the Ghana FinGAP description above – targeting financial institutions, the supply of finance, as well as paying business advisory service (BAS) providers based on driving capital to business plans ¹⁰. KIM's design was intentionally like the successful FinGAP.

In the targeted value chains of dairy, horticulture, livestock, and clean energy (which have historically been the focus of some of Feed the Future's production and market access work in Kenya), Palladium implements an opportunities team to develop partnerships with SMEs to develop a network of businesses ready for finance and an investment team to work with financial institutions to de-risk investments. Unlike the FinGAP model, the pay-for-results approach is not just applied to participating

financial institutions and BAS providers, but to the implementer as well. This required a longer design period, and more intense negotiations between the implementing partner and USAID.

Timeline and Results to date. As of the end of June 2021, KIM had mobilized over \$220 million in finance. \$5 million of that was facilitated by the KIM team, \$102 million by business advisory service providers (BASPs) and \$110 million by financial institutions. This represents another example of a high leverage ratio of USAID dollars spent to capital raised, proving the promise of this model. Working in conjunction with 40 deals from the Prosper Africa pipeline, over \$1 billion in potential transactions are in the pipeline, with nearly 400 transactions totaling over \$600 million currently under engagement. There was no significant impact of COVID-19 on activity operations.

7AMBIA SCALING UP NUTRITION TECHNICAL ASSISTANCE

KEY FACTS	
Period of Performance	2019 – 2026 (4 years, with three option years based on performance)
USAID Office/Mission	USAID/Zambia
Implementer	DAI
Value	\$75 million
Location(s)	Zambia

Overview: Scaling Up Nutrition (SUN) is a multi-country activity, and in Zambia USAID support takes several forms. One component is assistance to district-level authorities on reducing stunting in children. Because the goal of SUN is quantitative and easily measured through surveys conducted by both USAID and Government of Zambia (GoZ), USAID decided to issue a Request for Proposals that linked the implementer's fee to achieving a clear goal of reducing stunting by 2 percent per year per district where local officials approve the project's workplan. Addressing stunting requires multisectoral interventions (health, WASH, economic livelihoods work, etc.), and therefore USAID did not want to prescribe activities but harness the innovations implementing partners could present along all project activities.

Timeline. Several considerations were considered in the design phase that required working a bit differently than normal. Because stunting is a linear study that takes longer to address than the typical maximum period of performance of five years, a special waiver had to be received to permit a 7-year project implementation. Because outcomes and measurement were clear, regular, and independently verifiable, this proved to be relatively straightforward. However, given the large size of the contract (\$75 million), it was decided that there would be a base performance period of 4 years, at which point a major mid-line study on stunting progress would have been completed, which would be the principal driver to determine whether the last 3 years and remaining \$35 million would be awarded. Another design element was a Request for Information process that was important because the team wanted to ensure that implementing partners would be bringing new innovative solutions to the table rather than implementing what they thought USAID needed to be done. An element of the contracting process preaward was a round of oral presentations, which was included to pressure-test these innovations and which the technical evaluation team cited as critical to their confidence that a pay-for-results approach would achieve the desired results. Finally, a Performance Work Statement was part of the contracting mechanism used, to reinforce that the contractor was choosing its own activities and strategies to achieve programmatic results.

Because each district has different challenges that are linked to stunting (i.e. one district may have too much rainfall leading to WASH issues while another has lower nutritious food availability in markets), early indications are that the implementer has taken a diversified approach and is employing a range of tools, which was USAIDs intent.

Results to date. Implementation has been ongoing for only one year, so tangible results are not yet available. The main focus of project implementation thus far has been on working with districts to accurately refine the preferred approach to address stunting at the household level. There are clear signs that this contract incentive has strengthened relations between the implementing partner and the Mission's technical team, as they have had to align closely on strategy. There also has been a clear strengthening of relations between the implementing partner and local government officials. Because one requirement for payment is to receive local government endorsement of a workplan, there has been much better engagement between the project and GoZ than on other projects. Further, the contractual relationship with the implementer's home office is also closer, with higher than usual level staff at home office involved, given the importance placed on a contract with fee at risk.

COVID-19 experience to date: COVID-19 was one of several factors that impacted the WASH component of the project. Training sessions, previously designed for 50-70 participants were reduced to a maximum of 30. Heavy rains, along with government restrictions on movement of officials (who are critical to implementation), also caused mobility challenges, resulting in delays in achieving targets. At the request of the implementer, targets were adjusted downward for year 1, and USAID agreed to push some of the expected year I targets into year 2, with the idea that all targets will still be met at the end of implementation. Generally speaking, the pay-for-results nature of the contract had led to closer collaboration and frequent communication between the implementing partner and CO and COR, so it was easier to jointly agree on new targets as they were revised.

ENDNOTES

USAID Office of Private Capital and Microenterprise. (2017). "Pay for Results in Development – A Primer for Practitioners." Retrieved from https://www.usaid.gov. (Accessed June 2020)

² GALVmed, "About the Project." https://www.galvmed.org/foot-and-mouth-project/about-the-project/ (Accessed June 2020)

³ UNICEF, "Zika Virus (ZIKV) Diagnostics." https://www.unicef.org/innovation/zika-virus-zikv-diagnostics (Accessed June 2020)

⁴ UNICEF. (2019). "Innovation Case Study, November 2019, Zika Virus Diagnostics for Testing at Point-of-Care." Retrieved from https://www.unicef.org. (Accessed June 2020

⁵ Summary of Evaluator Findings and Lessons Learned from AgResults Prize Competitions 2013 – 2020, accessed at https://agresults.org/learning#learning-agresults July 2021

⁶ https://datadrivenfarming.challenges.org/resources/

⁷ Note that to USAID, Stone Family Foundation is the implementer as they are the prime partner. iDE is a subpartner to USAID, although they are considered the implementing NGO under this DIB arrangement.

⁸ iDE. (2016). "Fact Sheet: Sanitation Marketing Scale-Up Phase 3 (SMSU3)." Retrieved from https://s3.amazonaws.com/www.ideglobal.org. (Accessed June 2020)

 $^{^9}$ World Council, "Haiti HOME Ownership & Mortgage Expansion July 2015 – January 2021" https://www.woccu.org/programs/current_programs/haiti/haiti_home (Accessed June 2020)

 $^{^{10}}$ USAID. (2020). "Fact Sheet: The Feed the Future Kenya Investment Mechanism." Retrieved from https://www.usaid.gov/documents/1860/feed-future-kenya-investment-mechanism-kimprogram#:~:text=The%20Feed%20the%20Future%20Kenya%20Investment%20Mechanism%20(KIM)%20program%2 0is,under%20the%20Prosper%20Africa%20initiative. (Accessed June 2020).