



WILLIAM DAVIDSON INSTITUTE
AT THE UNIVERSITY OF MICHIGAN

PROJECT LIST

DEC 2018–NOV 2019

Overview

[The William Davidson Institute at the University of Michigan](#)

(WDI) was founded in 1992 on the belief that a thriving private sector was essential to the development of an economy. WDI partners with firms in low- and middle-income countries (LMICs) to develop profitable business models. We also apply business approaches to non-profit organizations working in markets that are not served by the for-profit sector.

We apply our extensive experience working with firms in LMICs to develop private sector models with a focus on professional education, healthcare, finance and energy, in addition to offering measurement and evaluation services across these business sectors. Our engagement model involves WDI staff, research fellows, faculty from the University of Michigan (U-M) and other leading business schools, and teams of U-M graduate and undergraduate students. We partner with our clients and assemble multidisciplinary teams to develop solutions. These solutions are tailored to the clients' comparative advantage while accounting for the constraints and opportunities specific to the target market.

The following is an overview of ongoing or completed projects during the last 18 months, categorized by sector or service area.

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CIPE Entrepreneurship Program Training (EPT) (Papua New Guinea)

For the past three years, WDI has been working in partnership with the Center for International Private Enterprise (CIPE) to develop curriculum and instructional materials to be introduced at universities in Papua New Guinea. Initially, the project supported three PNG universities; a fourth was added in 2018—the Institute of Business Studies University (IBSU). WDI Faculty Affiliate Julie Felker will take her fifth visit to Port Moresby in November 2019 to run a training workshop on entrepreneurship and advise the four universities on next steps in their entrepreneurship course development.

CIPE Access to Finance (Algeria)

WDI is working with CIPE to develop curriculum and teachers' guides for a training program on access to finance for entrepreneurs in Algeria. Working closely with WDI staff, a WDI consultant is developing modules in the areas of financing fundamentals, financial management for growth, creating business plans and business pitching. WDI's curricular modules will be used by local trainers in Algeria in a four-day interactive course targeted at owners of fast-growing, small- and medium-sized enterprise.

Youth Entrepreneurship Pilot (Macedonia)

CIPE contracted WDI to enhance an entrepreneurship and civic participation training program in North Macedonia targeting recent university graduates (21–26 years old). In the current phase of this multi-phase engagement, a WDI consultant will review and provide input and feedback on the existing training curriculum, which was developed by Youth Educational Forum (YEF) based on the recommendations by WDI in 2018. The consultant will also advise YEF on the development of a new module for the training on scaling internationally. The consultant will travel to Skopje, North Macedonia to provide refresher training on lean start-up and customer discovery, and will assess the mentorship capacities of YEF and advice on creating a mentorship program.

Livelihoods Innovation through Food Entrepreneurship (LIFE) (Turkey)

WDI is collaborating with a consortium led by the Center for International Private Enterprise (CIPE) on the Livelihoods Innovation through Food Entrepreneurship (LIFE) Project, funded by the U.S. Government. In addition to CIPE and WDI, consortium members include IDEMA, Union Kitchen and The Stimson Center. The mission of the LIFE Project is to support and encourage entrepreneurship, job creation and cross-cultural engagement in the food sector. The LIFE Project's entrepreneurship incubation program builds sustainable livelihoods by equipping refugees and members of the host communities with the skills and knowledge they need to build successful businesses. Underlying all LIFE Project activities is gastrodiplomacy—that is, leveraging food as a medium for cross-cultural engagement. Since 2017, the LIFE Project has established two Food Enterprise Centers (based in Istanbul and Mersin, Turkey) where entrepreneurs participate in the entrepreneurship incubation program and have access to shared kitchen space for testing and producing their products.

In July 2019, a WDI team of two staff members and a WDI faculty affiliate traveled to Istanbul and Mersin to run workshops on several topics, including leadership, customer service and social media marketing. While there, the WDI team met with some of the graduates of the program and conducted interviews to assess what elements of the program's curriculum have been most impactful, as well as what new material could be added to enhance the program. The team also paid visits to the businesses of several program graduates to offer one-on-one business consulting. During the trip, the team attended a business pitch competition in Mersin, with the faculty affiliate serving on the panel of judges and a WDI staff member kicking off the competition with an opening speech. WDI is currently finalizing a project workbook that will be used by all program participants as they proceed through the four-month entrepreneurship incubation program.

MADE (India)

WDI is a founding partner of the Michigan Academy for the Development of Entrepreneurs (MADE), along with Poornatha Foundation in India and the Zell Lurie Institute at the University of Michigan's Ross School of Business. MADE was established to support small- and medium-sized enterprises (SMEs) in low- and middle-income countries through local Entrepreneur Development Organizations (EDOs). MADE connects the resources of the University of Michigan (U-M) with the EDOs in the field through its governance. The governing

board includes seats for different institutes at the University of Michigan and EDOs in different countries around the world. Thus, the EDOs have a direct role in determining the products and services offered by MADE. MADE has involved students and/or faculty from the University of Michigan's Ross School of Business, psychology department, Institute for Social Research, Stamps School of Art and Design, Law School and School of Education.

Over the past year, MADE finalized an instrument used by entrepreneurs to clarify the business model for their organization, developed a new tool for project management and provided guidance to Poornatha, the EDO in India, on how to expand geographically within India beyond the initial set of SMEs with whom they have been working. MADE also worked with Poornatha to codify its finance training program and get it set up for delivery to a much larger group in its next delivery. The goal is to expand to 120 SMEs over the next year. MADE has also started working with Lviv Business School in Ukraine on a marketing tool and African Institute of Management in Senegal on succession planning.

Lviv Business School (Ukraine)

The Lviv Business School (LBS) in Lviv, Ukraine is one of the leading business schools in Ukraine. It is interested in beginning a consulting service to complement its short-term executive and graduate programs. This project focused on the development and implementation of a consulting service and identified a sales program as the place to start given the skills at the school and the needs of the market. LBS has now officially started a consulting program within the school, starting with the sales program as outlined and recommended. LBS is on a path to become an EDO within MADE in the coming year.

Business & Culture: A Virtual Practicum (USA, Egypt, Libya, Lebanon)

WDI is a collaborative, multi-disciplinary organization. As a result, it often engages multiple sector and services teams in our work. The following project undertaken by both our Education sector and Performance Measurement and Improvement service demonstrates our holistic approach.

The Education sector is implementing Business & Culture: A Virtual Practicum—a classroom-to-classroom, action-learning course on international business cultures that brings together undergraduate students from Egypt, Lebanon, Libya and the U.S. The course is expected to run four times at the Ross School of Business, starting in Winter 2020. Participants will attend lectures by international faculty, work on interregional teams through synchronous and asynchronous exchange, employ field research methods to learn about one another's business cultures and create a final project that captures their cross-cultural learnings. The program will equip young people in the U.S. and MENA region with the competencies they need to communicate, problem-solve and collaborate in a global team environment—all essential 21st century skills in an interconnected world.

In collaboration with the Education sector, the Performance Measurement and Improvement service is leading the design and implementation of an impact evaluation of the program on students in the U.S., Libya, Lebanon and Egypt. In addition to assessing the impact of the program on student outcomes (e.g. empathy, cross-cultural communication skills, business skills and knowledge), the data will also be used to improve the course and develop generalizable knowledge on how to increase the impact of virtual exchange courses.

NGO Leadership Program (Poland, Slovakia)

WDI is working with the Weiser Center for Europe & Eurasia (WCEE) at U-M for the fifth year to offer an NGO Leadership workshop to non-profit leaders from across central and southeastern Europe. The workshop offers modules in marketing, strategic planning, resource mobilization, fundraising and management to help NGOs run more effectively and sustainably. In 2019, the workshop will be held in two locations: a spring workshop in Warsaw, Poland held in cooperation with WCEE and Warsaw-based partner Education for Democracy Foundation; and a fall workshop in Bratislava, Slovakia held in cooperation with WCEE and a new Bratislava-based partner, Ambrela.

Palestine Polytechnic University (Palestine)

WDI has been working with Palestine Polytechnic University (PPU) to develop a life skills orientation course for incoming undergraduate students. The goal of the course is to prepare students with important life skills before they begin their university courses so they are better

prepared for their academic and professional careers. WDI developed a curriculum, held a one-week “train-the-trainer” program to prepare PPU faculty members to run the program. WDI faculty affiliate Julie Felker traveled to Hebron in December 2018 to deliver the workshop.

Seminarium (South America)

WDI offers professional management education programs with Seminarium International, which serves Latin American markets. In 2019, WDI and Seminarium are offering programs in Project Management, Negotiations, Leadership & Decision Making, and E-commerce in Chile and Colombia. In 2020, WDI and Seminarium plan to offer programs in Strategic Thinking & Decision Making, Strategic Go-To-Market Planning, and Supply Chain & Logistics Management in Chile and Colombia.

SSE Riga (Latvia): Professional Education

WDI offers joint professional education programs with Stockholm School of Economics in Riga, Latvia (SSE Riga). In 2019, WDI and SSE Riga are offering programs in Supply Chain & Logistics Management, Decision Making, Advanced Negotiations and the 10-day mini-MBA Strategic Management Program (SMP). In 2020, WDI and SSE Riga plan to offer programs in Supply Chain & Logistics Management, Advanced Negotiations and the 10-day mini-MBA Strategic Management Program (SMP).

ENERGY

SEAS Master’s Project (in collaboration with Erb Institute) (India, Uganda)

This research project aimed to identify the factors influencing the performance of energy enterprises in emerging markets and provide a framework and methodology for documenting and assessing these models. Based on a literature review, the team of six School for Environment and Sustainability (SEAS) master’s students identified factors that relate to the technical, business, policy and socio-economic contexts that energy enterprises operate within. These factors were then used to develop an interview guide for expert interviews in India and Uganda. As part of the final report, the team compiled a repository of energy business models using these factors as a consistent assessment methodology.

Bagdumur Mini-grid Pilot (Bangladesh)

WDI is working with local partners to develop a proposal for a pilot mini-grid project that would seek to implement a mini-grid for productive use in the village of Bagdumur in Bangladesh. The pilot would seek to determine the parameters under which the financial performance of the mini-grid business model is commercially viable. The pilot would also seek to determine the types of economically productive use that can be facilitated within the village to provide sufficient demand at price levels that are commercially viable.

FINANCE

Remittances—Awash Bank (Ethiopia)

Awash Bank in partnership with WDI is exploring the development of a program that will leverage remittances as both collateral for the loan and information about the borrower. By allowing the borrower to develop a credit rating, the remittances can increase access to capital for SMEs at a reasonable rate. A loan product with a complete description and requirements is available to be used with the diaspora.

Ethiopia Investment: Due Diligence (Ethiopia)

Due diligence was conducted on five SMEs for investment readiness for the Infra Group, a to-be-launched private equity fund that aspires to invest in Ethiopian SMEs using hard currency. A due diligence checklist was also developed that can be used by anyone conducting due diligence on SMEs.

International Investment Fund (India)

In 2019, Ross School of Business kicked off the International Investment Fund, a WDI supported initiative. As part of that effort, WDI worked with students and faculty from Ross to establish the protocol, review the legal requirements both from the US and Indian side, and completed an initial round of due diligence. The due diligence was conducted on four SMEs from the Michigan Academy for Developing Entrepreneurs (MADE—cofounded by WDI). The SMEs are located in the state of Tamil Nadu, India and were identified by Poornatha (a MADE partner). Recommendations on investment readiness

for each of the SMEs included appropriate financial instruments to use. Preliminary conclusions identified a good potential investment and further investigation is taking place. In addition, the Fund members are developing a mechanism for filtering potential investments in the future and preparing to conduct due diligence on more companies.

HEALTHCARE

Go-to Market Strategy Dual Pill

WDI will provide consultancy services to define go-to-market strategy for the dual pill with Children's Investment Fund Foundation (CIFF). This is a multi-purpose technology incorporating contraception and HIV prevention, and involves CIFF's partnership with a pharmaceutical manufacturer. Andrea Bare from WDI was asked to contribute technical consulting services to a global health consulting firm contracted by CIFF to conduct this work. An extension has been requested for ongoing contribution.

Kisii Eye Hospital Production and Revenue Generation (Kenya)

Kisii Eye Hospital in Kisii, Kenya plans to improve operations so that it can grow to 5,000 surgeries per year, later reaching 10,000 surgeries per year. Recommendations on operations, organization and revenue generation were developed, some of which are being implemented over the coming months. We are also helping them develop a business plan to be used with potential investors.

Ethiopia Biomedical Waste (Ethiopia)

International Clinical Laboratories (ICL) and its partners have been approached by the Ethiopian government to develop a business that would safely dispose of medical waste for healthcare facilities across Ethiopia. Through a series of projects, WDI has worked with ICL to develop a business and operations plan for biomedical waste that includes financials and an in-depth analysis of the various training requirements, operations complexities and expected costs. The proposal was presented to the Ethiopian Government and there is a plan to begin operating in January 2020.

Ghana Emergency Medicine Collaborative—Digital Revenue Cycle Methods (Ghana)

WDI's Healthcare Initiative has collaborated since early 2018 with physicians in Michigan Medicine's NIH-funded Ghana Emergency Medicine Collaborative (GEMC) to improve emergency department (ED) operations, finances and clinical delivery. The sites include 1,200-bed Komfo Anokye Teaching Hospital (KATH) and 2,200-bed Korle Bu Teaching Hospital (KBTH) in Kumasi and Accra, respectively. MBA MAP teams have worked in each hospital in March-April 2018 (at KATH) and 2019 (at KBTH), with much recent work focusing on measuring the debilitating consequences of paper billing and payments (called "cash & carry") that are presently made by patients exclusively in hard currency. WDI has introduced simple tools at each hospital to track patient flows (e.g., a daily ED census), measure payments-related delays, seek to establish sustainable business processes and identify root causes of operational dysfunction. WDI has also recommended specific, step-wise actions at both hospitals that begin with offering patients a simple mobile payments option and thereafter proceed to digitize and restructure the entire revenue cycle (i.e., the process of generating a bill and collecting payment) and all of the surrounding clinical workflow. WDI is working with development officers from Michigan Medicine's Emergency Medicine Department and GEMC to line up funding for further work. Several publications are being readied for submission to peer-reviewed journals (e.g., using census collected at KATH and KBTH) and two white papers are also near completion.

Ethiopian Oxygen Supply (Ethiopia)

WDI has been working with Ethio-American Doctors Group, Inc. (EADG) for five years in developing a world class hospital in Addis Ababa, Ethiopia. Work with EADG this year focused on developing the capacity to produce medical gases internally to satisfy EADG's needs.

CURE: Market Entry Tool

CURE is a network of pediatric surgical hospitals operating in low-income countries around the world. CURE has many opportunities to expand into other countries and wanted to develop a systematic approach to determining which opportunities to pursue. In response, a strategic Comparison Assessment Toolkit (CAT) was developed to help CURE assess and recommend market entry opportunities in the pediatric orthopedics market. It provided a more strategic method to evaluate hospital site selection opportunities to ensure that

resources are being used effectively. Further, an ongoing measurement criteria was developed that would help in evaluating current CURE hospitals and inform a hospital exit strategy.

PAMS: Business Plan for Gastroenterology Clinic (Peru)

PAMS in Chinchu, Peru operates a primary care clinic that offers some specialty services. Since 2017, WDI has been working with the leadership to develop a business model that would enhance its gastroenterology services and turn it into a service that helps fund the rest of the clinic. Building on market analysis completed last year, this year recommendations on changes in operations and revenues were made. A business plan is in the final stages of completion and will be presented to potential funders.

Aravind: 5-year Strategy for Developing Clinical, Training and Research (India)

WDI has been working with Aravind Eye Care Hospitals, one of the largest eye care hospitals in the world, for twenty years. This year's work included developing a five-year strategic plan for the newest Aravind Eye Hospital (AEH) located in Chennai. The plan focused on three pillars: clinical care, academics and research. The goal of AEH in Chennai is to treat 3,000 patients and conduct 300 surgeries per day. Recommendations were provided around operations and human resources that could support the higher future patient inflow.

AIM Tech: Market Analysis and Entry Strategy (India)

The market analysis for NeoVent, a low-cost non-electric ventilator, for the Indian market was conducted. Based on the market attractiveness, a comprehensive market entry strategy was developed that included identification of customer segments (including geographies and sector), distribution channels, regulatory strategy, partnerships with various stakeholders including the government etc.

Grace Care Center: Business Model for Diabetes Assistants (Sri Lanka)

WDI has been working with Grace Care Center for the past five years on a model for providing diabetes care in Sri Lanka. All of this work is feeding into developing a financially viable business model for diabetes care that involves reducing

the burden on doctors. This year we are beginning to look at a hub and spoke model that capitalizes a successful diabetes center operating in Colombo.

E-heza Electronic Health Records (Rwanda)

For ten years, WDI has been working with the Ihangane Project and Ruli District Hospital in Rwanda to improve hospital operations. This year focused on evaluating the efficiency of the current data reporting systems used in Rwanda and E-Heza (tool developed by the Ihangane Project) in terms of timeliness, cost and data quality. A tool was created that allows evaluation on a continuing basis.

Ruli Food Fortification (Rwanda)

Also working with Ruli District Hospital, a value chain and market analysis was conducted to assess the feasibility of developing a locally procured and processed Ready-to-Use Therapeutic Food (RUTF) to address the challenge of severe acute malnutrition amongst children in Rwanda. The work focused on three main components: (1) ingredients feasibility; (2) the RUTF market; (3) operational and production capacity. Conclusions: Some but not all of the principle ingredients can be procured entirely locally, with other ingredients either readily available to import or feasible locally with time. The market is vast, though incumbent competitors and regulatory requirements make entry challenging. There are important advantages to locally organized procurement and production, including outreach and education with local farmers, better risk-sharing and contractual performance, and overall ease of coordination.

Harmonization of Donor and Country HIV-Related Budgets and Expenditure (Rwanda)

This project is focused on supporting donors and country governments in understanding how much money is spent on each type of HIV-related intervention. While this seems like it should be straightforward, it is not; because both the donors and countries use different budget formats, making it very difficult to compare line items between budgets. The long-term objectives of this work are to: (a) understand the current costs of HIV-related programs and (b) use this information to advocate for change (increased funding or increased efficiency, depending on the results).

Taxes on Tobacco, Alcohol, and Sugar-Sweetened Beverages in Low- and Middle-Income Countries

In high-income countries, increasing taxes on “bads” such as tobacco, alcohol, and sugar-sweetened beverages has been shown to generate government revenue and reduce consumption. In many low- and middle-income countries, taxes on these products exist, but rates are so low that the effect on consumption is minimal. Moreover, policymakers are unsure whether increased tax rates would result in an amount of additional tax revenue that is meaningful when compared to indicators such as out-of-pocket expenditure on healthcare. WDI developed a set of excise tax revenue simulations for these “bads” in 16 low- and middle-income countries. Simulations used several alternative calculation methods to “triangulate” estimates for the additional tax revenue that could be generated with higher excise tax rates. Results indicate that the additional excise tax revenue would cover a significant proportion of current out-of-pocket expenditure on health for the 16 countries. These results were used during a workshop on domestic resource mobilization in low- and middle-income countries organized by the Center for Global Development.

Institut Africain de Management (IAM–Senegal)

WDI has been working with the Institut Africain de Management (IAM) in Dakar, Senegal since 2016 on an academic partnership focused on developing a supply chain Masters program. With support from the Bill & Melinda Gates Foundation, the goal of the partnership is to graduate students that multinational companies will want to hire for their supply chain needs in West Africa. WDI began the partnership by working with IAM on the business model for delivering a supply chain program that will be profitable. At the end of 2018, the second cohort of students began the program and are expected to complete the program at the end of 2019. This class is using a case study on a local company that was completed jointly by IAM and WDI. Another locally based case study is expected to be completed this year.

The program includes three key features:

1. A curriculum that is consistent with the best business schools in the world while offering the flexibility needed by the Senegalese audience. For example, while the program is designed as a Masters in Supply Chain Management, students with more specific educational needs or interests will be able to take only courses that are relevant to them.

2. Pedagogy that takes advantage of recent advances in technology and the science of learning by incorporating all forms of teaching, including online courses, simulations and action-based learning.
3. Collaboration with the private sector to ensure the students understand the application of concepts in companies and to ensure the school has a mechanism to remain in touch with private sector challenges.

HIV Core Sustainable Financing for HIV NGOs (Dominican Republic)

WDI's Healthcare team has provided diagnostic and consultative services on revenue generation and operational efficiency for three HIV-focused NGOs in La Romana and Santo Domingo since June 2018, in WDI's role as a technical contributor and consortium member of the SHOPS Plus USAID-funded project. SHOPS Plus stands for 'Strengthening Health Outcomes through the Private Sector,' which is a natural fit with WDI's mission. The three recipient organizations in the Dominican Republic have historically received a significant portion of their funding from President's Emergency Plan for AIDS Relief (PEPFAR) and are now preparing for transition to sustainable social enterprise models. WDI's onsite diagnostic and related technical assistance was highly customized to the business models and needs of the individual organizations. WDI developed actionable recommendations for the NGO decision makers on how they could modify their strategies and/or operations to work towards financial sustainability. Return visits will be conducted to assess progress and provide additional assistance to the organizations.

Improving Reproductive Health Supply Chain Design Through Rapid and Flexible Cost Modeling

An effective and efficient supply chain is critical to building a strong health system, however, identifying and implementing high-performing supply chain designs can be a challenge for many healthcare leaders. Data on supply chain costs and performance are often lacking, as are benchmarks for understanding how much a supply chain should cost. Analyzing potential future design improvements is difficult without expensive, specialized modeling software. WDI's Healthcare Team, in collaboration with VillageReach, is addressing this gap by developing and disseminating an Excel-based rapid supply chain modeling tool. The goal of this tool is to simplify the process of creating, testing and analyzing different supply chain design scenarios within a given country context.

Through this simplified approach, WDI's tool can help health program leaders more quickly and easily identify ways of improving the efficiency of their supply chain.

A Total Market Approach to the Last Mile: Learning from a Private Sector Wholesaler Landscape Analysis (Malawi)

The global reproductive health community is increasingly seeking to engage the private sector in meeting the needs for reproductive health in low-resource regions of the world. Countries such as Malawi in Eastern Africa have a high level of donor dependence and market conditions which inhibit commercial sector development, particularly for serving the more rural and remote areas. In this project, WDI's Healthcare team conducted a contraceptives distributor landscape analysis and delivered actionable and stakeholder receptivity-tested concepts for stimulating the private sector provision of family planning products and services in rural, remote and other underserved populations. The landscaping assessment involved field research and in-country discussions with market actors, but also utilized a stakeholder-centric methodology to generate ideas for market building. The results and recommendations are being shared with Malawi country stakeholders, as well as with funders and implementers for potential market building efforts, in Malawi and similar countries.

Total Systems Effectiveness (TSE) Gates Investment Support

Through this project, the WDI Healthcare team is creating a model to assess the business case for various initiatives or technologies that will allow investors to understand whether a specific technology or initiative would be appealing to business partners, and, if not currently appealing, to determine how much funding would be needed to make the technology financially appealing. The project also provided overall conceptual support to WHO TSE Steering committee meetings.

Evaluating the Impact of New Vaccine Technologies on Immunization Coverage Rates

Populations in low-and-middle-income countries face a variety of barriers to receiving vaccinations, such as vaccine stockouts, cold chain breakdowns, difficulty traveling to a clinic or a lack of sufficiently trained clinic staff. New vaccine technologies have the potential to reduce or eliminate many of these barriers, but the impact of such reductions on actual immunization rates is not clear. To address this gap, WDI's Healthcare Team is developing a model to estimate

the change in immunization coverage rates associated with a new vaccine introduction. The model includes six main barriers that can be addressed by new technologies. It first considers the prevalence of these barriers in the target population and then considers how effectively a new technology can address those same barriers. Those two factors are combined to estimate the change in population experiencing a barrier, which in turn influences overall immunization coverage levels. This model will help inform donor investment strategy by identifying high-priority new vaccine attributes and pairing them with high-impact target populations.

Surfacing Costs and Benefits to Increase Vaccine Access

Vaccines play a critical role in improving global health. While the return on investment of vaccines is on average higher than any other health intervention, there is still a critical need to evaluate the expected return of each individual vaccine presentation. The key driver of the expected return on investment of a vaccine is the price of the vaccine relative to the value that it is expected to generate through increases in coverage/equity. While simple on its face, estimating price and value is often complex since both are multi-factorial. The objective of this work was to provide the Bill & Melinda Gates Foundation and partners (buyers) with a structured way of evaluating and negotiating potential investments related to the manufacturing of specific vaccine presentations. WDI team members hypothesized they could facilitate negotiations between buyers and manufacturers of vaccines by developing a flexible tool that incorporates their respective investment decision drivers and key levers related to price and value. To accomplish the objective, WDI had three aims:

1. Understand the investment decision drivers for the Foundation & partners, and potential manufacturers.
2. Identify the key levers that would form the basis of a contract that the Foundation and partners could use in negotiations with potential manufacturers.
3. Build a tool that the Foundation and partners can use to evaluate scenarios with potential manufacturers.

The output of this work is currently being applied to Foundation-related investment questions.

Collaborative Project to Advance the Practice of Hospital Pharmacy (Pakistan, Namibia)

WDI's Healthcare team is collaborating with the International Federation of Pharmacists (FIP), Hospital Pharmacy Section and associated pharmacy faculty (including Dr. James Stevenson at the University of Michigan) with the objective of advancing implementation of best practices in hospital pharmacy. This project grew out of an initial collaboration, including funding and assignment of a University of Michigan PharmD graduate student to conduct a baseline assessment in Namibia during June–July 2018. This project will focus on leveraging the findings from the Namibia assessment, as well as a Pakistan assessment in order to advance the diagnostic results into capacity building intervention and funding development for the two countries.

Landscaping of Women's Health Social Enterprises & Investment Opportunities (Latin America)

WDI's Healthcare team is conducting a project for the Linked Foundation to inform social enterprise investment in Latin America. The Foundation seeks to identify market-based, impact investment opportunities specific to women's health in Latin America, based on an integrated assessment of the major unmet needs in combination with identification of high-impact solutions and opportunities to foster the enterprise ecosystem and sustainable women's health solutions. WDI developed an analytic methodology, conducted a landscaping for Colombia and Peru, and is now finalizing the report. Linked anticipates this work will inform their investment strategy as well as catalyzing additional resources to the most-needed areas in women's health in Latin America.

This project has generated significant visibility for WDI, as Linked Foundation has invited the WDI team to present at three conference settings, and the reports are co-branded by Linked Foundation and WDI.

Designing Global Health Supply Chains for the Future

WDI helped build alignment and a clear vision among donor agencies, governments and private companies regarding supply chain investments that must be made now to prepare for future changes in healthcare demand. These investments are driven by a convergence

of trends in technology, innovation, economic growth and shifting disease burdens. WDI helped provide this clear vision through a number of different research avenues:

- Synthesizing reports on future trends across several industries, breaking down the meaning and applicability of those trends for the governments, donor agencies, private companies and patients who comprise the global health supply chain.
- Developing quantitative models to estimate future changes in health supply chain demand levels, based on existing epidemiological, socioeconomic, and medical trends research.
- Simulating the impact of future demand changes on supply chain capacity needs and choice of optimal strategy.
- Through these various approaches, WDI successfully started a global conversation about the need for more future-oriented supply chain investments.

Development of Tool to Estimate the Efficiency of Global Fund's HIV, TB and Malaria Investments (Nigeria)

WDI worked with the Global Fund to develop an Excel-based tool to estimate how much money the Global Fund was spending to achieve specific health outcomes for Nigeria, one of its largest country portfolios. This project was started after recognizing the dearth of information regarding what each outcome should cost. This meant that it was difficult for the Global Fund to negotiate with providers for lower costs. This project was done under an ongoing contract with the Global Fund.

HANSHEP Health Enterprise Fund (HHEF) Research Study (Year 3)

Funded by USAID through Abt Associates, this is a longitudinal study checking in annually with a cohort of the original SHOPS grantees: Jacaranda (a low-cost maternity center), Afya Research Africa (health kiosks located in urban slums) and Telemed (call center). The study will capture quantitative data on the extent to which these enterprises increased access to family planning during and since the end of the Health Enterprise Fund. The study will also capture qualitative data through in-person and remote interviews to better understand the role of the Health Enterprise Fund interventions in these results and how such interventions might be improved in the future.

In the first year of this study, the research identified a set of capacities that were considered by participating enterprises to be important in achieving increases in access to family planning. In the second year of the study, the team sought to better understand the sources and types of support received by these enterprises in addition to the Health Enterprise Fund, any gaps that remained and how the implementation of donor interventions to increase access to family planning, such as the Health Enterprise Fund, can be improved. Year 3 of the study focused on understanding the quality assurance standards and quality improvement processes put in place by these enterprises, and the motivations for implementing high-quality services.

Year 4 of the HHEF study will seek to better understand and document the experience of HHEF grantees thus far in their efforts to balance affordability, quality and sustainable growth. This work will also explore the barriers these enterprises face in taking the next step towards sustainability at scale, and how such private enterprise approaches might be enhanced and replicated in the future.

SHOPS Plus Madagascar Health Enterprise and Innovation Ecosystem Mapping (Madagascar)

Health enterprises that seek to be financially sustainable and provide access to health services to low income populations are an important part of delivering healthcare through the private sector. These enterprises provide investment opportunities for private capital, they develop innovations that can lower the cost of healthcare through new technologies or business models and they help to identify barriers or gaps in the market environment that, if addressed, could provide opportunities to improve the effectiveness of private sector healthcare delivery more broadly. However, such enterprises require significant support to identify and experiment with financially sustainable opportunities, and design business models to serve these markets. A key first step in understanding how best to support such enterprises in Madagascar is to understand the current landscape of organizations, projects and initiatives that currently operate in the country with these objectives, and what gaps might remain.

Funded by USAID through Abt Associates, WDI conducted a Health Enterprise and Innovation Mapping activity that identified innovative health enterprises in Madagascar, and the partners and types of support available to them. This information was compiled into a Madagascar

Health Enterprise and Innovation Directory that illustrates the types of financial and technical support available to health enterprises, and the partners that provide various types of support.

WDI leveraged the insights gathered through the mapping to contribute to the development of recommendations that explore how USAID/Madagascar can promote enterprise innovation, leverage private sector resources and maximize priority health outcomes through financially sustainable health enterprises.

In the coming year, WDI will provide advice and support to SHOPS Plus Madagascar to implement some short-term activities to support health enterprises through a business plan competition and a series of information sessions on private sector healthcare business models.

Infection Prevention and Control (Kenya)

The William Davidson Institute is a collaborative, multi-disciplinary organization. As a result, WDI often engages multiple sector and services teams in our work. The following project undertaken by both our Healthcare sector and Performance Measurement and Improvement service demonstrates our holistic approach.

WDI is working with global medical device company, Becton, Dickinson & Company (BD), to assess the impact of a new program, Infection Prevention and Control, in Kenya. The program is part of the President's Emergency Plan for AIDS Relief (PEPFAR) public-private partnership with BD, the Office of the Global AIDS Coordinator and the Centers for Disease Control and Prevention. The goal of the program is to strengthen health worker and patient safety through appropriate safe intravenous infusion therapy practices, leveraging BD's longstanding knowledge and safety-engineered technology for averting HIV, hepatitis and other blood-borne pathogen transmission.

Labs for Life (Kenya, Uganda, Ethiopia, Rwanda, India, and Haiti)

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WDI is working with BD to measure the impact of Phase III of the Labs for Life program, which is part of the President's Emergency Plan for AIDS Relief (PEPFAR) public-private partnership with BD, the Office of the Global AIDS Coordinator and the Centers for Disease Control and Prevention. The goal of the program is to support quality laboratory systems which are needed in order to effectively scale-up HIV prevention, care and treatment efforts. WDI's work includes developing the Monitoring and Evaluation design and implementation plan and collecting data to measure the impact of the program activities that include Strengthening Laboratory Management Towards Accreditation (SLMTA) training and BD mentorship, in multiple labs across Kenya, Uganda, Ethiopia, Rwanda, and Haiti.

PERFORMANCE MEASUREMENT

Using Gender Impact Data to Develop Strategies to Increase Engagement of Women in the Coffee Sector

With funding support from the Aspen Network of Development Entrepreneurs (ANDE) at the Aspen Institute and Canada's International Development Research Centre (IDRC), WDI is working with Gente del Futuro (GDF)—a for-profit partnership between three private players within the coffee sector. Together, GDF and WDI are working to collect empowerment data from women working with GDF in Colombia. GDF believes that making coffee more profitable and empowering young people, particularly women, through practical and technical training can promote a more inclusive approach to develop better functioning coffee chains.

To help accomplish this objective, WDI is supporting GDF to pretest and pilot a short quantitative survey that examines how empowerment differs based on women's role in the coffee value chain. The data will be used to use to inform GDFs operations, in particular how they can better engage and empower women. The survey will be administered to a sub-sample of the 300-500 women that GDF has worked with over the years in Colombia and will assess decision-making and empowerment at home and work.

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of the program activities that include Strengthening Laboratory Management Towards Accreditation (SLMTA) training and BD mentorship, in multiple labs across Kenya, Uganda, Ethiopia, Rwanda, and Haiti that are participating in the third cohort of the program

For the second cohort of the program, WDI conducted a quantitative and qualitative analysis of impacts on the program in one specific lab in Kenya. WDI also conducted a quantitative assessment of the Kenyan National Public Health Laboratory Center of Excellence for Equipment Calibration, Certification and Training, which was set up and initiated by BD in partnership with the Ministry of Health.

Advancing the Use of Developmental Evaluation at USAID (DEPA-MERL)

DEPA-MERL under the U.S. Global Development Lab's Monitoring, Evaluation, Research and Learning Innovations (MERLIN) program at the United States Agency for International Development (USAID) is testing the effectiveness of developmental evaluation in the USAID context. Developmental evaluation was created to evaluate and facilitate evidence-based adaptive management of innovative programs that operate in complex environments and are thus expected to adapt over time. The DEPA-MERL consortium consists of Social Impact (prime), Search for Common Ground (Search), and the William Davidson Institute (WDI) at the University of Michigan. Social Impact and Search are implementing developmental evaluations while WDI is playing the role of an independent evaluator and is assessing the effectiveness of developmental evaluation within and across pilots.

WDI seeks to answer the following three research questions for each developmental evaluation:

1. How is developmental evaluation effective in the USAID context?
2. What are the barriers and enablers to implementation of developmental evaluation in the USAID context?
3. What do key informants consider to be the value (added or lost) of conducting a developmental evaluation compared to a traditional evaluation approach in this instance?

For this project, to date PMI has conducted evaluations of three DE pilots:

1. Bureau for Food Security (BFS) which supported their knowledge management needs as it transitioned to a new Bureau: the Resilience and Food Security Bureau (RFS).

2. Uptake which explored, documented and provided feedback on how the various programs within the Global Development Lab approach their scaling objectives within and beyond the Agency.
3. Family Care First Cambodia (FCF) which leveraged a collective impact model and sought to support local stakeholders from different sectors in the development of a strategic framework for safely and systematically reducing the number of children without access to safe and stable home environments.

Findings from these evaluations will be used to develop guidance for conducting developmental evaluations in different contexts.

Business & Culture: A Virtual Practicum

The William Davidson Institute is a collaborative, multi-disciplinary organization. As a result, WDI often engages multiple sector and services teams in our work. The following project undertaken by both our Education sector and Performance Measurement and Improvement service demonstrates our holistic approach.

The Education sector is implementing Business & Culture: A Virtual Practicum—a classroom-to-classroom, action-learning course on international business cultures that brings together undergraduate students from Egypt, Lebanon, Libya and the U.S. The course is expected to run four times at the Ross School of Business, starting in Winter 2020. Participants will attend lectures by international faculty, work on interregional teams through synchronous and asynchronous exchange, employ field research methods to learn about one another's business cultures and create a final project that captures their cross-cultural learnings. The program will equip young people in the U.S. and MENA region with the competencies they need to communicate, problem-solve and collaborate in a global team environment—all essential 21st century skills in an interconnected world.

In collaboration with the Education sector, the Performance Measurement and Improvement service is leading the design and implementation of an impact evaluation of the program on students in the US, Libya, Lebanon and Egypt. In addition to assessing the impact of the program on student outcomes (e.g., empathy, cross-cultural communication skills,

business skills and knowledge), the data will also be used to improve the course and develop generalizable knowledge on how to increase the impact of virtual exchange courses.

Integrating Monitoring, Evaluation, Research And Learning With Design For Good Program Management (BALANCED-MERL)

The [Balanced Design, Monitoring, Evaluation, Research, and Learning \(BalancedD-MERL\)](#) consortium is a mechanism under the U.S. Global Development Lab’s Monitoring, Evaluation, Research, and Learning Innovations (MERLIN) program at the United States Agency for International Development (USAID). The consortium believes good program management integrates monitoring, evaluation, research, and learning (MERL) activities with program design (D) and implementation to achieve program objectives. Program design and implementation should not be thought of as separate from its MERL activities; these are indeed iterative processes that are deeply interconnected.

The consortium examines how balanced integration across all aspects of D-MERL enables teams to rapidly learn and incorporate findings into program design. The consortium also assesses how four principles—relevant, right-sized, responsible, and trustworthy—can be incorporated into D-MERL to enable sustainable integration of MERL with program design and adaptive management.

The BalanceD-MERL consortium consists of World Vision (prime), Innovations for Poverty Action, Institute for Development Impact, Search for Common Ground, and the William Davidson Institute at the University of Michigan.

The Work

1. Women + Water Global Development Alliance (Nov 2016–Jan 2018)

The BalanceD-MERL consortium served as MERL technical experts to the [Women + Water Global Development Alliance](#) collaboration among USAID, Gap, Inc., CARE, Water.org, the Institute for Sustainable Communities and the International Center for Research on Women. Together, these organizations are leveraging their complementary strengths to improve and sustain the health and well-being of women and communities

touched by the apparel industry. The consortium developed a MERL strategy for the Alliance and captured lessons learned in the following two resources:

- a. [Guiding Questions](#): Nine action-oriented questions that private sector companies can ask to strengthen the design and implementation of their work with USAID.
- b. [Case Study | Executive Summary](#): A document that shares the experience of applying the BalanceD-MERL approach in the Women + Water program and provides key takeaways along with action-items for decision-makers, program implementers, and MERL practitioners to undertake to enhance the effectiveness of this approach.

2. BalanceD-MERL Maturity Matrix

The [BalanceD-MERL Maturity Matrix](#) is a tool that can be used by both program staff and MERL staff. It can facilitate program design (D) and implementation through improved performance management and/or evaluation.

3. Global Health Ebola Team (Dec 2016–Dec 2018)

The consortium conducted an [endline performance evaluation](#) and data quality verification activity for the Global Health Ebola Team within the USAID Global Health Bureau. The Global Health Ebola Team managed a portfolio of activities aimed at addressing the second order impacts of the unprecedented Ebola virus disease outbreak in Guinea, Liberia, and Sierra Leone between 2014 and 2016. The following publications were produced from this work:

- a. [Guidance for Building a Balanced D-MERL System in a Post Response Recovery](#): The paper comprises six building blocks of strategies which will strengthen and balance D-MERL systems during post response recoveries.
- b. [Heuristic Tool for Building a Balanced-D MERL System](#): The purpose of this document is to help USAID staff plan for, and implement, effective and efficient programs and MERL systems in a post response recovery. This heuristic tool is a quick reference document developed to assist program managers and MERL practitioners navigating the process of building the balanced D-MERL system in this evolving context.
- c. [Case study](#): This document provides an inside look at the application of the BalanceD-MERL approach in the Global Health Ebola Team technical assistance pilot.



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