LAB EVALUATION, RESEARCH, AND LEARNING PLAN

EVIDENCE BRIEF

SUMMER 2019 UPDATE



QUESTION 3 How can the Lab maximize development impact via support to innovators, entrepreneurs, and researchers?



U.S. GLOBAL DEVELOPMENT LAB This Evidence Brief was produced as part of a series of outputs from the U.S. Global Development Lab's Evaluation, Research, and Learning (ERL) Plan - a utilization-focused learning agenda supporting evidence-informed decision making in Lab operations and science, technology, innovation, and partnerships (STIP) programming. A process and set of products, the ERL Plan facilitated Lab learning and adaptation around four bureau-wide areas of inquiry: uptake of products, services, and approaches; adaptive management tools and practices; support to awardees and partners; and sustainability of results.

Insights from the ERL Plan are shared here as a record of emerging opportunities for evidence-based adaptation that could be acted on by USAID and other development actors. This work also contributes to the evidence base for the Agency-wide Self-Reliance Learning Agenda - an effort to support USAID as it reorients its strategies, partnership models, and program practices to achieve greater development outcomes and foster self-reliance with host country governments and our partners.

INTRODUCTION

The U.S. Global Development Lab (the Lab) provides substantial non-monetary assistance to the innovators, entrepreneurs, and researchers it funds. Staff at the Lab do so because their awardees are often experts in fields such as engineering, agriculture, healthcare, or an academic science, not experts in entrepreneurship, public policy, or international development. As a result, many awardees know little about marketing, business strategy, or the governmental processes of the countries in which they work prior to their partnership with the Lab. Lab staff, therefore, support innovators, entrepreneurs, and researchers to increase the likelihood of their development impact. This support takes many forms.

To ensure entrepreneurs and innovators have businesses structures that can grow with the demand for their innovations, Lab teams provide consulting on business processes and development, market analysis, and marketing support, among other individualized services. These support services can range from assistance simply moving an accounting system from handwritten logs to a computerized system that allows the innovator to track higher volumes of purchases and orders as their company grows, to more sophisticated analysis that helps an innovator segment potential markets so they can diversify their products to reach more people.

To ensure Lab-funded researchers impact the countries in which they work, the Lab takes measures to increase the visibility of the results of the projects it funds. It does this by assisting researchers to translate results into less technical language for broader consumption and encourages researchers to present their results to local policymakers and non-governmental actors. The Lab, however, understands that simply increasing the availability of results can be insufficient in some circumstances. Therefore, it is exploring additional pathways to increase the development impacts of the research it funds.

In addition to these two types of non-financial support, some teams within the Lab also help awardees with monitoring and evaluation plans, and Lab staff also support awardees to improve compliance with USAID requirements. This is a necessary form of support, as many Lab awardees are not traditional USAID implementing partners, so have no experience complying with these requirements.

At first glance, the needs of entrepreneurs, innovators, and especially researchers may seem distinct, but each of these awardees need assistance transitioning to working with a donor agency. Moreover, each of these types of support seek to fill a gap all awardees have in their skill-sets. It is important to reiterate that many Lab awardees are skilled in their own domains; however, they may lack other skills necessary for their ideas to both thrive and scale. Lab support fills this gap.

The following are select findings, conclusions, and recommendations related to this construct from academic literature, program assessments, and evaluation and learning outputs, intended to prompt deeper inquiry and action.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Individualized Business Consulting

This type of support aims to improve the structure of an innovator's business model via improved processes, efficiency, and its ability to scale. It may also include assistance with market analysis, marketing, and other business.

FINDINGS

- Drexler and colleagues (2014) found that training using rule-of-thumb accounting, rather than more traditional business accounting training, improved small business performance. Yet this improvement was only realized by entrepreneurs who entered with the lowest levels of financial literacy.
- Campos et al, (2017) test a psychology-based curriculum aimed at motivation overcoming adversity can improve entrepreneurial outcomes. The study finds this approach to entrepreneurial training is effective: entrepreneurs increased profits via increased labor and capital inputs, and increased innovation. Moreover, individuals who received this training didn't take out more loans, but the size of those loans were larger (i.e., they increased the risk they took on).
- Karlan and Valvidia (2011) find that business training impacted entrepreneurs with low levels of interest in

the training prior to receiving it. Both of these studies used a standardized curriculum to teach entrepreneurs a set of business skills program designers thought every business would need, regardless of the product, such as basic accounting.

• Bruhn, Karlan, and Shoar (2017) evaluate a program in Mexico that subsidized management consultants to work with individual firms. In this study, firms were paired with consultants whose job was to work with the firms to identify impediments to firm growth and suggest changes that would address those impediments. Employment within firms and wages increase across the entire sample of firms. The study finds heterogeneous impacts on managerial practices across areas including marketing, long-term business planning and accounting. Business consulting is shown to be effective overall in supporting small firms, but may not be cost-effective.

CONCLUSIONS

Standardized business skills programs have mixed results. However, when they do help entrepreneurs, it is generally for those entrepreneurs with the lowest pre-training ability and the least interest in building those skills. These skills are relatively standard regardless of context so finding information is not difficult for highly-motivated entrepreneurs.

The psychology-based curriculum, while somewhat standardized, focused on providing entrepreneurs with the confidence to address adversity and overcome obstacles specific to each firm.

While individualized business consulting in Mexico was successful, causal channels were specific to each firm. Given the wide variety of pathways to improved performance, it is impractical to test each of these individual areas using traditional methods within economics.

Individualized business consulting is effective, but also quite expensive. It remains an open question as to whether it is cost-effective.

RECOMMENDATIONS

In September 2018, the Lab prioritized and committed to action against one recommendation informed by the evidence base on individualized business consulting:

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Incorporate flexibility in all awards to allow for business consulting to be provided—including unexpected needs that arise over the course of the award

The Lab deferred action against two recommendations informed by the evidence base on individualized business consulting:

X

Identify and use a broader set of evaluation methods (not just randomized control trials) to assess the different ways that consulting services improve performance. Each innovator is different; therefore, each will have their own Theory of Change.

X

Examine the costs of providing business consulting, and the benefits to entrepreneurs and innovators to estimate the return to investment on business consulting across an entire portfolio of innovators, ensuring sufficiently informed decision-making about subsidy levels.

External Collaboration

Research evidence to policy action

FINDINGS

- The literature is mostly conceptual, theorizing why policymakers should incorporate evidence when making decisions and suggesting models of how and when policymakers use evidence. Davies (2015)— which exemplifies this literature—outlines three models of evidence use.
- 1. Passive-Diffusion Model—assumes that publishing research findings is sufficient for policymakers because they actively seek out research and are able to understand its implications. Further, policymakers know which journals are credible and how to interpret theory for applied uses.
- 2. Active-Dissemination Model—assumes that the volume of research is so vast that synthesis is required, which needs to be written using non-technical language so any lay persons could understand it. This allows policymakers to better access the research, which can increase the likelihood of its use.
- 3. Coordinated-Implementation Model—assumes that evidence is in competition with other factors often political in nature. It states that academic research may be more rigorous than other sources of information, but not "marketed" effectively to overcome competing interests. This model assumes that evidence needs to be actively pushed via networks and intermediaries with connections to key decision-makers for serious consideration by policymakers.
- The Lab's Center for Development Research (CDR) "evidence-to-action" grants are provided to researchers to visit and discuss their findings with policymakers or mission staff to encourage them to write policy briefs that summarize their research for a broader audience.
- CDR has held workshops for researchers on stakeholder mapping and other tools so they may think strategically about who the non-academic consumers of their work are.

CONCLUSIONS

The empirical evidence in this space is limited.

The passive model is unsupported. Simply funding research and publishing it is insufficient because policymakers may not actively seek out new research findings, and it may be too technical for non-subject matter experts to comprehend.

The Lab/CDR approach fits under the active-dissemination model. They provide support to simplify (or otherwise translate) research findings for policymakers, and are studying how best to deploy and utilize tools to do so. Data collection on the impacts of this work is ongoing, and analysis will be available within the next 12 - 18 months.

RECOMMENDATIONS

The Lab deferred action against one recommendation informed by the evidence base on external collaboration:

X

Experiment with different approaches to test whether they are associated with uptake by policymakers or other more immediate outcomes, including co-creation between researchers and policymakers of award design (e.g. requiring PIs to identify which policymakers can use findings in application, or include a short political economy analysis).

Building Networks of Innovators, Entrepreneurs, and Researchers

FINDINGS

- There is a rich literature on how the geographic clustering of firms can enable innovation and entrepreneurship when positive spillovers exist (Chatterji, Glaeser, and Kerr 2014). They find:
 - Local universities can impact local development of innovation
 - Policy initiatives focusing on large scale employers can crowd out start-ups
 - However, it is generally unclear whether policy can effectively shape/encourage clustering, and ultimately entrepreneurial behavior, or whether clustering occurs in response to underlying factors.
- Networks can provide different types of resources to entrepreneurs, including money, information, credibility in new markets, and emotional support to encourage risk (Hoang and Yi 2015).
 - Larger networks increase the volume of resources accessible to entrepreneurs from others in the network, but there are diminishing returns if the network is too large.
 - A firm's centrality to the network impacts outcomes, with more central firms accessing more resources.
 - Large networks, where firms have weak ties, have more diverse information available to members.
 Information spillovers are particularly prominent when entrepreneurs come from multiple localities.
 - Networks must evolve as firms grow or they may become a constraint on firms.

- Acemoglu, Akcigit, and Kerr (2016) look over two 20-year time horizons for their analysis and find:
 - Scientific innovation is a function of current resources (human and monetary) and the base of knowledge from which that technological silo and proximate silos have already accumulated.
 - Network building can lead to additional innovation, but time horizons are long.
- There are both spillovers within and across silos so networks should have both similar types of innovators and different types of innovators. If the network is too homogeneous or diverse, then effects might be muted.

CONCLUSIONS

USAID programs should identify the purpose behind network building - whether for encouraging spillovers from information sharing, or for connecting awardees to network resources for additional growth, as there may be trade-offs.

USAID can provide credibility for an innovator within the network, connecting them to resources.

Time horizons for impacts related to innovation, entrepreneurship, and research are long, and detectable impacts should not be expected within a typical 5-year award window.

To spur information spillovers, USAID can leverage its "convening power" to bring innovators and researchers together.

To this point, researchers have looked back at innovation clusters that have formed and attempt to analyze which factors led to their formation. There are very few examples, however, of cluster formation in developing countries outside East Asia or India. Lab/CDR's attempt to set up an innovation network anchored by local universities in Africa is unique. Clusters can produce positive spillovers (e.g. Silicon Valley), but it is not known whether this process can be jump-started by policy

RECOMMENDATIONS

In September 2018, the Lab prioritized and committed to action against two recommendations informed by the evidence base on building networks of innovators, entrepreneurs, and researchers:

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Support face-to-face interaction between researchers and innovators regularly to encourage the exchange of information.

Conduct research on innovation clusters in developing countries (e.g. the Resilient Africa Network - a Lab Center for Development Research Higher Education Solutions Network member).

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Opinions presented in the document do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. Government. Feedback and questions may be directed to the Lab's Office of Evaluation and Impact Assessment at LabEIA@USAID.gov.

FURTHER READING

USAID REPORTS AND DOCUMENTS

Amulya, Joy, James Chung, Stephanie Monschein, and Charu Vijayakumar. 2016. *Midterm Performance Evaluation of the Higher Education Solutions Network (HESN)* (link).

Björklund, Gunilla, Ken Caplan, Dirk Van Esbroeck. 2016. Mid-Term Review of Securing Water for Food: A Grand Challenge for Development (link).

Benschoter, Eric, Carolyn Fonseca, Deborah A. Caro, Caitlin Nordehn, and Ingrid Orvedal. 2017. *Mid-Term Evaluation of the Partnerships for Enhanced Engagement in Research (PEER) Program (link)*.

Glass, Sarah. 2018. Accelerating Entrepreneurs: Insights from USAID'S Support of Intermediaries (link).

McMahan, Ku. 2015. SWFF Annual Report (link).

ACADEMIC WORKS

Acemoglu, Daron, Ufuk Akcigit, and William Kerr. 2016. "Innovation Network." NBER Working Paper No. 22783 (link)

Blase, Melvin. 1968. "Discussion: Why Overseas Technical Assistance is Ineffective." American Journal of Agricultural Economics 50(5): 1341–1344 (link)

Brautigam, Deborah and Stephan Knack, 2004. "Foreign Aid, Institutions, and Governance in Sub-Saharan Africa." *Economic Development* and Cultural Change 52(2): 256–85 (link)

Brautigam, Deborah and Tang Xiaoyang. 2011 . "African Shenzhen: China's special economic zones in Africa." The Journal of Modern African Studies 49(1): 27–54 (link)

Bruhn, Miriam, Dean Karlan, and Antoinette Shoar. 2018. "The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico." *Journal of Political Economy* 126(2): 635–687 (link)

Campos, Francisco, Michael Frese, Markus Goldstein, Leonardo IacoVone, Hillary C. Jophnson, David McKenzie, and Mona Mensmann. 2017. "Teaching personal initiative beats traditional training in boosting small business in West Africa." *Science* 357(6357): 1287–1290 (link)

Chatterji, Aaron, Edward Glaeser, and William Kerr. 2013. "Clusters of Entrepreneurship and Innovation." In Innovation Policy and the Economy, Volume 14, edited by Josh Lerner and Scott Stern. 0 129–166. University of Chicago Press (link)

Davies, Philip. 2015. "Getting evidence into policy and practice." Journal of Development Effectiveness 7(4): 393-401 (link)

Drexler, Alejandro, Greg Fischer, and Antoinette Schoar Schoar. 2014. "Keeping It Simple: Financial Literacy and Rules of Thumb." American Economic Journal: Applied Economics 6(2): 1–31 (link)

Easterly, William. 2007. "Are Aid Agencies Improving?" Economic Policy 22(52): 635-678 (link)

Forss, Kim and Henrik Schaumburg-Mueller. 2009. Synthesis of Evaluations on Support to Business Development. Report for the Ministry of Foreign Affairs Denmark, Danida 2009/5 (link)

Godfrey, Martin, Chan Sophal, Toshiyasu Kato, Long Vou Piseth, Pon Dorina, Tep Saravy, Tia Savora, and So Sovannarith. 2002. "Technical Assistance and Capacity Development in an Aid-dependent Economy: The Experience of Cambodia." *World Development* 30(3): 355–373 (link)

Hoang, Ha and An Yi. 2015. "Network-based Research in Entrepreneurship: A Decade in Review", Foundations and Trends in Entrepreneurship 11(1): 1–54 (link).

Karlan, Dean and Martin Valvidia. 2011 . "Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions. *The Review of Economics and Statistics* 93(2): 510–527 (link)

Loomis, Ralph A. 1968. "Why Overseas Technical Assistance is Ineffective." American Journal of Agricultural Economics 50(5), 1329–1341 (link)

Saxenian, AnnaLee. 1996. "Inside-Out: Regional Networks and Industrial Adaptation in Silicon Valley and Route 128." Cityscape: A Journal of Policy Development and Research 2(2): 41–60 (link).

Tan, Justin. 2006. "Growth of industry clusters and innovation: Lessons from Beijing Zhongguancun Science Park." *Journal of Business Venturing 21*(6): 827–850 (link).

Williams, Peter. 1964. Technical assistance: a factual survey of Britain's aid to overseas development through technical assistance. London: Overseas Development Institute (link)