

STRATEGIC PROGRAM FOR ANALYZING COMPLEXITY AND EVALUATING SYSTEMS (SPACES MERL)

SPACES MERL aims to bring a variety of tools and methodologies that decision makers can use (separately or in combination) to enhance assessment of innovation impact potential and to provide a comprehensive systems analysis. This will improve decision-making and enhance program interventions.

THE CHALLENGE

All development efforts involve working in complex systems. Unaided, understanding and addressing such systems can be difficult. Without an understanding of the dynamics of a system, interventions can be unsustainable, resulting in multiple secondary, tertiary, and reverberating effects, and even lead to unintended consequences. There is a need for tools to better understand and address systems relevant to development.

THE INNOVATION

Tools to help better understand and address systems have transformed numerous other fields such as transportation, manufacturing, aerospace engineering, and meteorology. Currently, there is a need for a suite of tools to help decision makers dealing with complex systems in international development. Simply translating tools from other fields is not enough, since international development has unique elements and challenges. There is a need for a suite of systems tools tailored appropriately for international development.

THE APPROACH

Our SPACES MERL Consortium will first conduct a landscape analysis of the systems and complexity tools available for international development issues, including tools that the consortium partners bring.

SPACES MERL will then help match available systems tools to different current international development issues and questions around the world and, in selected pilot studies, adapt and test the appropriate systems tools to address these issues and questions. Based on findings from these pilot studies, SPACES MERL will establish a toolkit of systems and complexity tools that can be used separately or in various combinations by decision makers. Systems tools cover the following categories: systems mapping approaches, systems modeling approaches, narrative-based approaches, and indicator-based approaches.



Tools: Innovation impact potential assessment; innovation pipeline tracking and optimization; systems mapping; computational modeling; social and organizational network analysis.



Partners: Johns Hopkins University (prime), Global Knowledge Initiative, LINC, Resilient Africa Network at Makerere University School of Public Health



Funding mechanism: Cooperative Agreement (buy-in option for USAID operating units)



Period of performance: 10/01/2015 – 9/30/2024

COMPLETED PILOTS

Global Health Supply Chain: In 2016, SPACES conducted an in-depth analysis of USAID's Global Health Supply Chain program for malaria, HIV, and family planning products. A key result from this pilot project was the identification of the types of data needed, and where those data are most often lacking, in order to accurately understand, map, and evaluate the outcomes of supply chain management projects in development. The pilot also made specific recommendations around systems-conscious shipping route redesign and supplier diversification aimed at improving stability and cost savings in the supply chain.

USAID/Bangladesh: In 2017, SPACES teamed up with ACDI-VOCA to support the USAID-funded Bangladesh Rice and Diversified Crops (RDC) activity. Our challenge was to develop a network analysis tool that could be easily understood, transferred and utilized by project managers, while still generating meaningful insights to inform systems change and adaptive programming strategy over the course of the multi-year RDC project. This was addressed through a step-wise approach, establishing a close collaboration between SPACES experts and RDC Monitoring Evaluation and Learning (MEL) staff, training and mentoring activities, and gradually demonstrating the powers of network analysis for both design and adaptive management to program leadership.

USAID/Guatemala: USAID staff in Guatemala sought the development of a complex systems mapping tool to be linked to a Political Economy Analysis (PEA), assisting the Democracy and Governance Office (DGO) team to best manage and align its expanded portfolio and inform Mission vision and thinking in lead-up to the next CDCS. This pilot demonstrated that political economy analysis and systems mapping are complementary and mutually enhancing approaches that can be paired for increased impact in development project design, implementation, and evaluation. The mapping approach allowed the mission team to identify leverage points as well as intended or unintended downstream impacts from potential interventions.

USAID/Nigeria: SPACES was asked to do an in depth analysis of the supply chain program for malaria, HIV, and family planning products in Nigeria. This included identifying areas of missed opportunities and recommendations for innovation and/or increased efficiency, particularly with regard to systems strengthening technical assistance. The analysis identified two key areas driving stocking issues in the supply chain: overstocking some medications and HIV testing campaigns not being coordinated with procurement teams, leading to stockouts.

In addition, SPACES completed pilots USAID/Uganda, USAID/South Africa, and the Operational Innovation team with the Lab.



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