SPACES

Bringing systems approaches, methods and tools to international development

A consortium supported by the
US Global Development Lab at USAID

Global Health Supply Chain: Conducted an evaluation of global health product supply chain programs. Findings covered topics including the impact of diversifying suppliers, the potential benefit of regional distribution centers and data collection. Also, developed systems maps and models to test supply chain redesigns.

South Africa: Developing a systems map to capture the main functions and processes of the health system to determine how they're influenced by ASELPH graduates. Also, conducting a social network analysis to understand the extent to which the graduates networked with their peers on health-system issues.

Zambia: SPACES assisted the MOH to: pinpoint geographic areas where cross-border population in-flows and out-flows are influencing health service delivery, quantify the degree to which border crossing occurs in different locations and identify drivers of cross-border health seeking behavior.

Guatemala: Developed a systems map of the actors, institutions and linkages within the political economy to: better understand why their governance system fails to deliver public goods to the majority of the citizens, and to identify leverage points for improving the system. SPACES also trained the USAID team in systems-mapping.

Uganda: SPACES developed several maps of the health system which visually identified the key actors, institutions, linkages, leverage points for interventions and suggested indicators to track progress throughout the system. The mission will then intervene at designated leverage points to strengthen the health system.

Bangladesh: Assisted the RDC activity by utilizing a network analysis to understand systems dynamics in the network of grantees as well as changes throughout program implementation. SPACES also trained the RDC team on how to conduct an EgoNet analysis.

Office of Acquisitions and Assistance: Developed a systems map of the current USAID workforce distribution decision-making processes as well as a model which allows users to simulate current staffing systems and test changes to funding, staffing and organizational goals across missions to understand the impact.

Nigeria: Conducted a systems-based retrospective analysis of USAID's health product supply chain. Lessons learned included the need to streamline the rollout of new regimens and improve supportive supervision focusing on stock management and responsiveness to reporting.

Ethiopia: Conducted a systems analysis of the healthcare supply chain to provide insight to examples including supply chain operations, commodity availability, the cost and impact of integrating vaccine supply chains, the skills and capacities needed for effective supply chain management.

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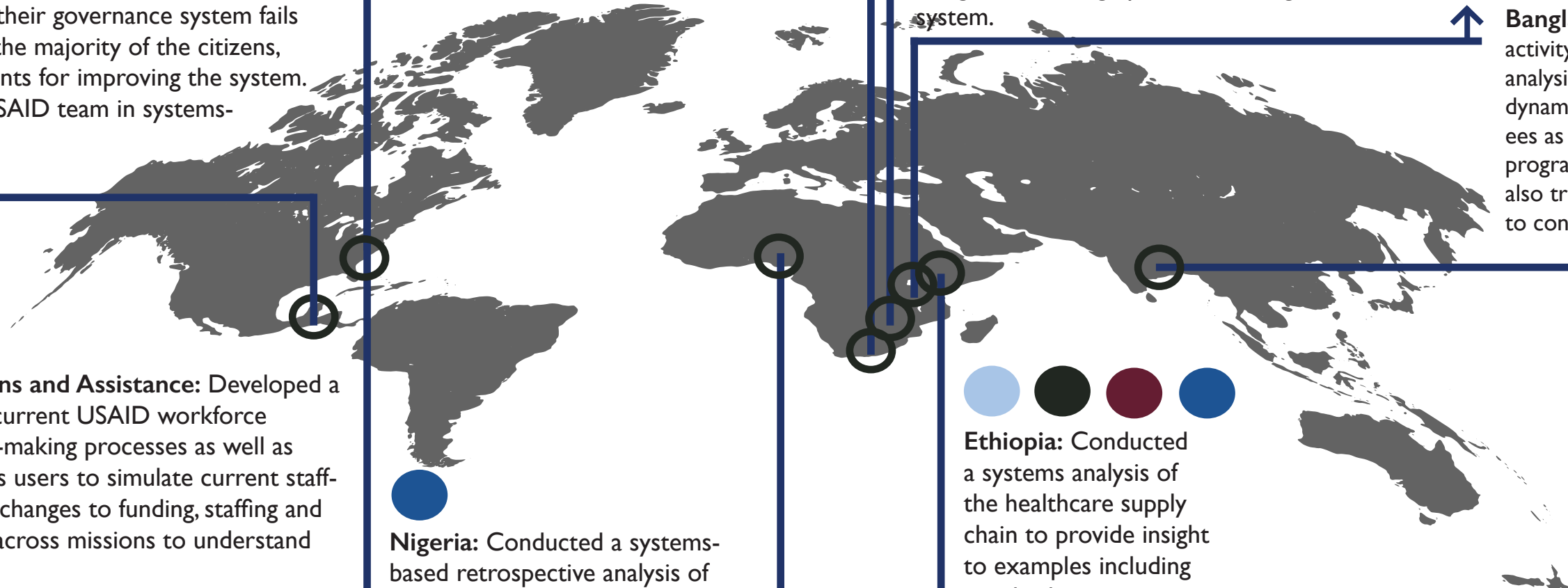
KEY:

Narrative-based Approaches

Systems Mapping

Systems Modeling

Indicator-based Approaches

WHAT IS THE CHALLENGE?

All development efforts involve working in complex systems. Unaided by systems approaches, methods and tools, 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 can even lead to unintended consequences. There is a need for approaches, methods and tools to better understand and address systems relevant to international development.

WHAT ARE THE SOLUTIONS?

SPACES aims to bring systems approaches, methods and tools to international development issues. This includes, narrative-based approaches, systems mapping, systems modeling and indicator-based approaches. Narrative-based tools utilize descriptive inputs to capture key system features, including actors, interactions, resources and outcomes. Systems mapping involves visually mapping key actors and elements in a system and their relationships, and involves identifying which parts and relationships are expected to change and how. While systems modeling establishes the players and their interconnections, mathematical and computational modeling techniques fill in all of the other relationships, processes, actions and other factors that compromise the system. Modeling can incorporate dynamics to the system, allowing users to see how the current system may evolve and how changes to the system may affect it over time. Indicator-based approaches provide a standard against which to measure, assess or show the progress of an activity against stated targets.

The SPACES consortium consists of:

- **GLOBAL OBESITY PREVENTION CENTER (GOPC)**
- **GLOBAL KNOWLEDGE INITIATIVE (GKI)**
- **LINC**
- **RESILIENTAFRICA NETWORK (RAN)**

ACRONYMS:

- ASELPH: The Albertina Sisulu Executive Leadership Programme in Health
- DGO: Democracy and Governance Office
- MOH: Ministry of Health
- RDC: Rice Diversity and Crops
- SPACES: Strategic Program for Analyzing Complexity and Evaluating Systems

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