



# **Breaking News: We Can't Control Everything!** *Using Systems Thinking to Understand Context in Development Projects*

---

*Presented by ANSER and LINC, members of the USAID Local Systems Practice (LSP) Team*



## Who Are We?



ANSER is a not-for-profit research institute specializing in analytic support for complex government problems. ANSER has invested in developing and using applied systems thinking approaches for over a decade.



Sibel McGee  
PhD, PMP



Frances Veasey  
MS, PMP



[www.linclocal.org](http://www.linclocal.org)

LINC is a US-based small business that assists local and international organizations to design effectively, increase institutional capacity, forge lasting partnerships, and measure impact. LINC is the prime implementer of the LSP project.



Patrick Sommerville  
MPA, LSP P.I.

*ANSER and LINC are members of the Local Systems Practice (LSP) consortium, funded by USAID's Local Works Program*

# PROLOGUE



**USAID**  
FROM THE AMERICAN PEOPLE

## Context Matters: Same Program, Different Outcome

- We all intuitively understand that the same program implemented in two different contexts can lead to dramatically different results. However, while working on a project for USAID, we noticed that the impacts of contextual factors as either barriers or facilitators to success are rarely tracked and probed
- Although it seems obvious that the context of a program would condition, shape, and potentially limit the outcomes of that program, there is actually very little research into:
  - WHICH context factors or attributes promote or limit development success
  - HOW MUCH these attributes contribute to project outcomes, and
  - HOW certain attributes interact to foster positive development outcomes
- Instead, most evaluations and literature that assess success factors in development focus on project management related factors (i.e., things we can control)

## Using Systems Thinking to Understand Context

- When donors and designers do spend time considering local factors, they lack an analytic framework or body of knowledge that tells them which context factors are known to be important, so they may overemphasize some unimportant factors while overlooking critical ones
- These factors help us understand why programs produce the results they do. We need to increase awareness of evaluators and funders that **WHY** questions and related local context drivers are not only important, but also accessible through Systems Thinking
- Systems methods are uniquely well suited for capturing local context attributes -- such as actors, factors, processes, and perceptions, as well as how these come together through relationships and interactions to shape program outcomes
- They are particularly necessary in complex environments – they help us manage complexity
- Better understanding of and accounting for program and context interactions can help evaluators design high-quality programs and targeted and ethical evaluations

## Toward a Context-Based Approach

- What would a context-based approach to evaluation look like using systems thinking tools?
  - Seven context attributes that help or hinder positive change
  - Systems tools that can be used to understand complex environments
  - Case Study: A systems-thinking examination of stability programming in Afghanistan
  - Case Study: A network analysis for agriculture project decision-making in Bangladesh

# SEVEN CONTEXT ATTRIBUTES THAT HELP OR HINDER POSITIVE CHANGE



**USAID**  
FROM THE AMERICAN PEOPLE

# Research Design and Results

- There is limited research into what local system factors contribute to development success. Most evaluations focus on what worked/what did not work without elaboration on reasons
- Those that addressed “critical success factors” either focused on project implementation strategies (things we can control) or mentioned factors at a high level with no systematic & rigorous treatment
- This ad hoc treatment needs to be replaced with a more structured and complexity-aware approach

***View the research report and other resources here:***

***<https://sites.google.com/view/lsp-users-guide/additional-resources?authuser=0>***

## Objectives

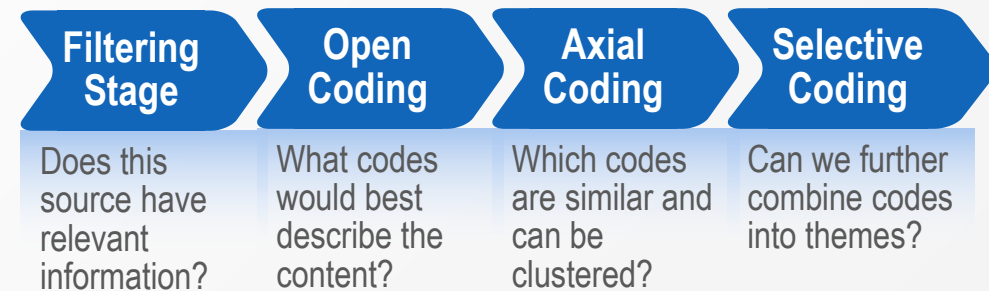
- ☐ Develop a list of local system attributes that may contribute to positive development outcomes
- ☐ Identify gaps in current knowledge

## Data Collection

- ☐ Review of prior public domain research and extant literature from fields of project management, public administration, international aid and development
- ☐ 60 sources reviewed; 33 included in subsequent analysis

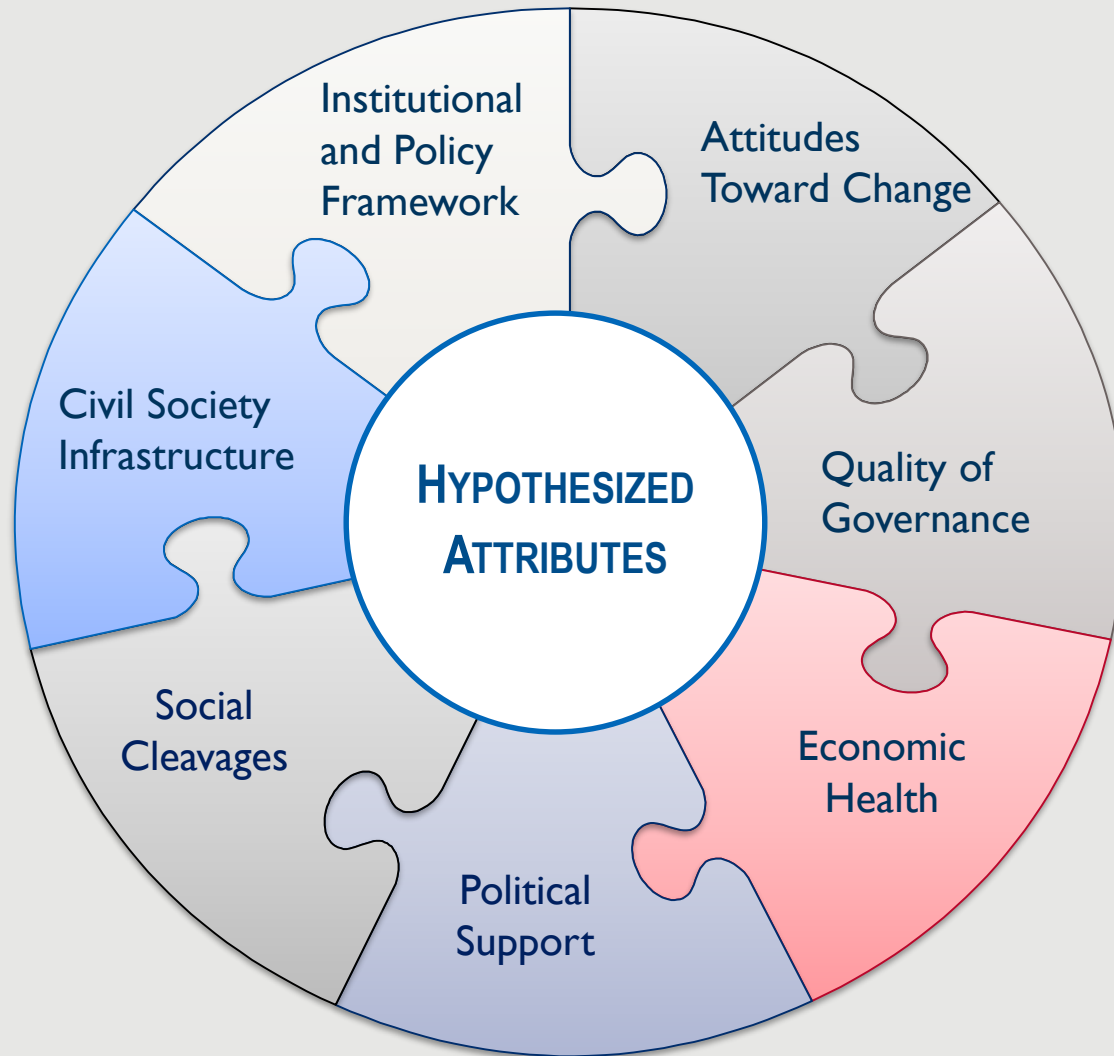
## Methodology

- ☐ Qualitative data analysis using modified constant comparison technique (Glaser & Strauss 1967; Straus & Corbin 1998)





# Which Context Factors Shape Outcomes?



*Based on our research, we developed a proof of concept thinking framework that comprises seven high-level attributes that may help characterize a given local context.*

- Social cleavages
- Civil society infrastructure
- Institutional and policy framework
- Attitudes towards change
- Quality of governance
- Economic health
- Political support

# Example: Quality of Governance Attribute



**Definition:** The traditions, principles and practices by which government authority is exercised in a country.

**Sub-Elements:** Rule of law; accountability; transparency; feedback channels; operating space for civil society; and political fragility.

---

## Authoritarian Governance

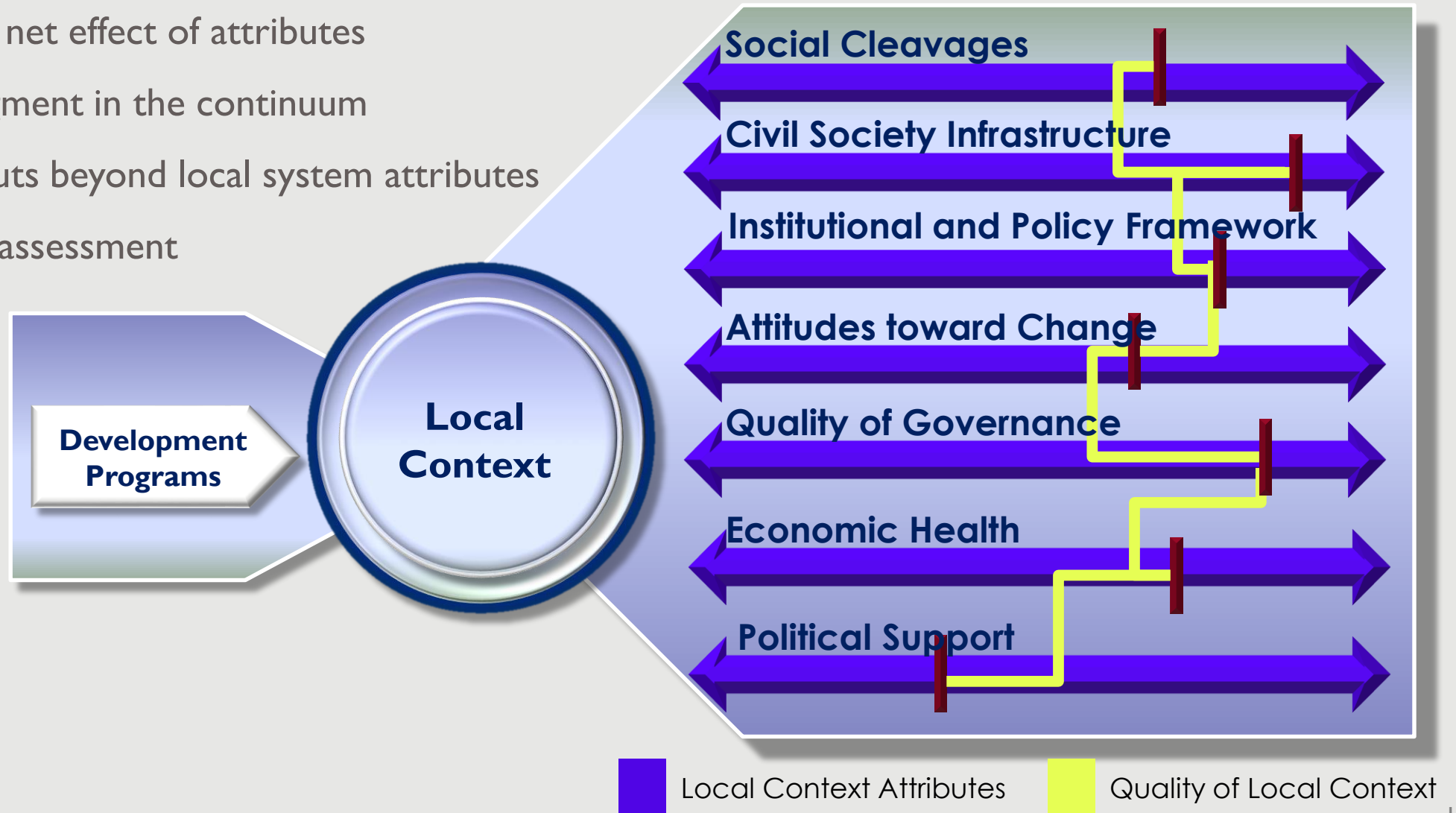
- Exercise of authority not bound by rule of law
- No or minimal accountability measures
- Low transparency into decision-making and related actions
- No or limited feedback channels
- No or limited liberties and support essential for civil society mobilization
- Political fragility is high

## Liberal Governance

- Rule of law is a key principle in governance practices
- Strong and extensive accountability measures
- High transparency into decision-making and related actions
- Extensive and diverse feedback channels
- Extensive liberties and support for civil society mobilization
- Political fragility is low

# Thinking About Context Attributes in a Systemic Way

- Understanding the net effect of attributes
- No normative judgment in the continuum
- Understanding inputs beyond local system attributes
- Need for iterative assessment



## The Way Forward...

- This is a long-term research agenda to see if there are potential patterns about levels and combinations of local system attributes and development outcomes that hold across different localities
- We can't control local context and given the complexity of systems that development practitioners deal with, this is expected!
- Yet, the local context impacts development outcomes and we must aspire to know as much about it as we can
  - The proof-of- concept framework presented is a limited step in the right direction
  - We may or may not be able to offset constraining effect of local system attributes but understanding the local context will help us understand the limits of our efforts, help design the most suitable and targeted programs, and help manage our expectations as well as those of our stakeholders, including local populations

# SYSTEMS TOOLS FOR UNDERSTANDING COMPLEX ENVIRONMENTS

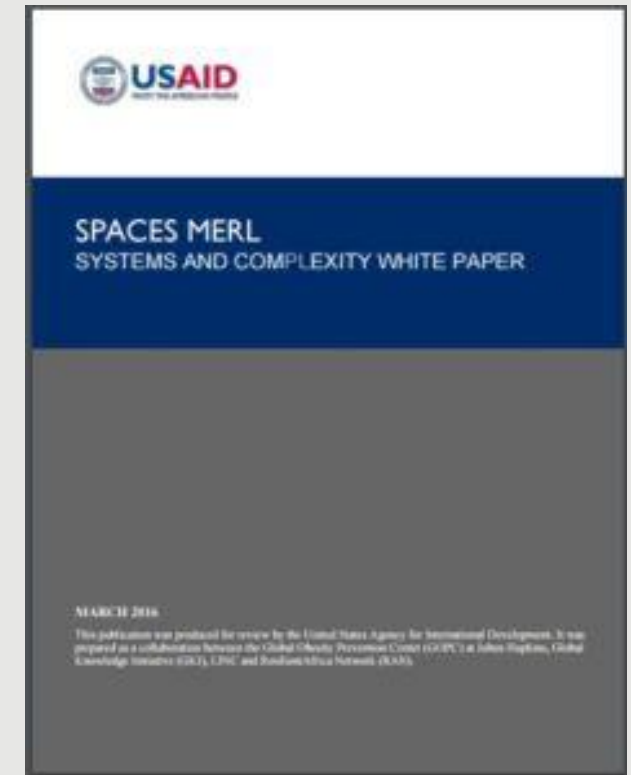


**USAID**  
FROM THE AMERICAN PEOPLE

# Systems Tools for Understanding Complex Environments

In March 2016, under the USAID / Global Development Lab-funded “SPACES MERL” project, LINC worked with Johns Hopkins University (prime), Global Knowledge Initiative, and the Resilient Africa Network to author a “Systems and Complexity White Paper”.

**Purpose:** This White Paper is a resource for local and international development practitioners considering new methods for design and evaluation of their projects, ways in which context and complexity can be more effectively captured and designed into program strategy.



[Full Version](#) - [Abridged Version](#)

*Click above or search online for  
“SPACES Systems and Complexity  
White Paper”*

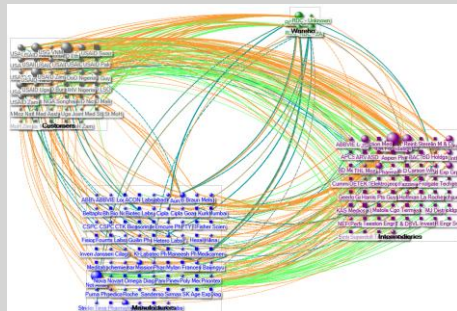
# Systems Thinking Tools

For development practitioners considering undertaking a systems thinking initiative, the White Paper presents multiple tools, organized into four areas:

## Visualization Methods: Mapping

Identify key partners and how they are connected through tools:

- *Network Analysis*
- *Systems Mapping*
- *Participatory Systemic Inquiry*



## Visualization Methods: Modeling

Model the systems and test changes to the system through tools:

- *Simulation Modelling*
- *Causal Loop Diagramming*



## Narrative Based Approaches

Find where best to intervene through tools:

- *Outcome Harvesting*
- *Most Significant Change*



## Indicator Based Approaches

Understand social context of system through tools:

- *Sentinel Indicators*
- *Dynamic Project Trajectory Tracking*
- *Organizational Performance Index*

Static indicators	Bridging indicators			Dynamic indicators				Trajectory
	A	B	C	...D...	(C-A)/(B-A) %	(C-A)/(B-A) % Shortest	Emergent explanatory indicators	
	Order Date/Amount	Date Due (Can Reset)	Date Attained	Lull-time	Variance (cycle times; delay signalled)	Variance (Related to shortest cycle)	Short explanation for variance (250 characters)	E.g. Stockouts (Headline tracker)
Reliability								-Cum. Orders
Covariate Overlays								-Cum. cost
Quality								-Cycle times
Product loss								
Systems strengthening								
Leadership and partnership								
Operational Excellence								

# CASE STUDY: A SYSTEMS-THINKING EXAMINATION OF STABILITY PROGRAMMING IN AFGHANISTAN

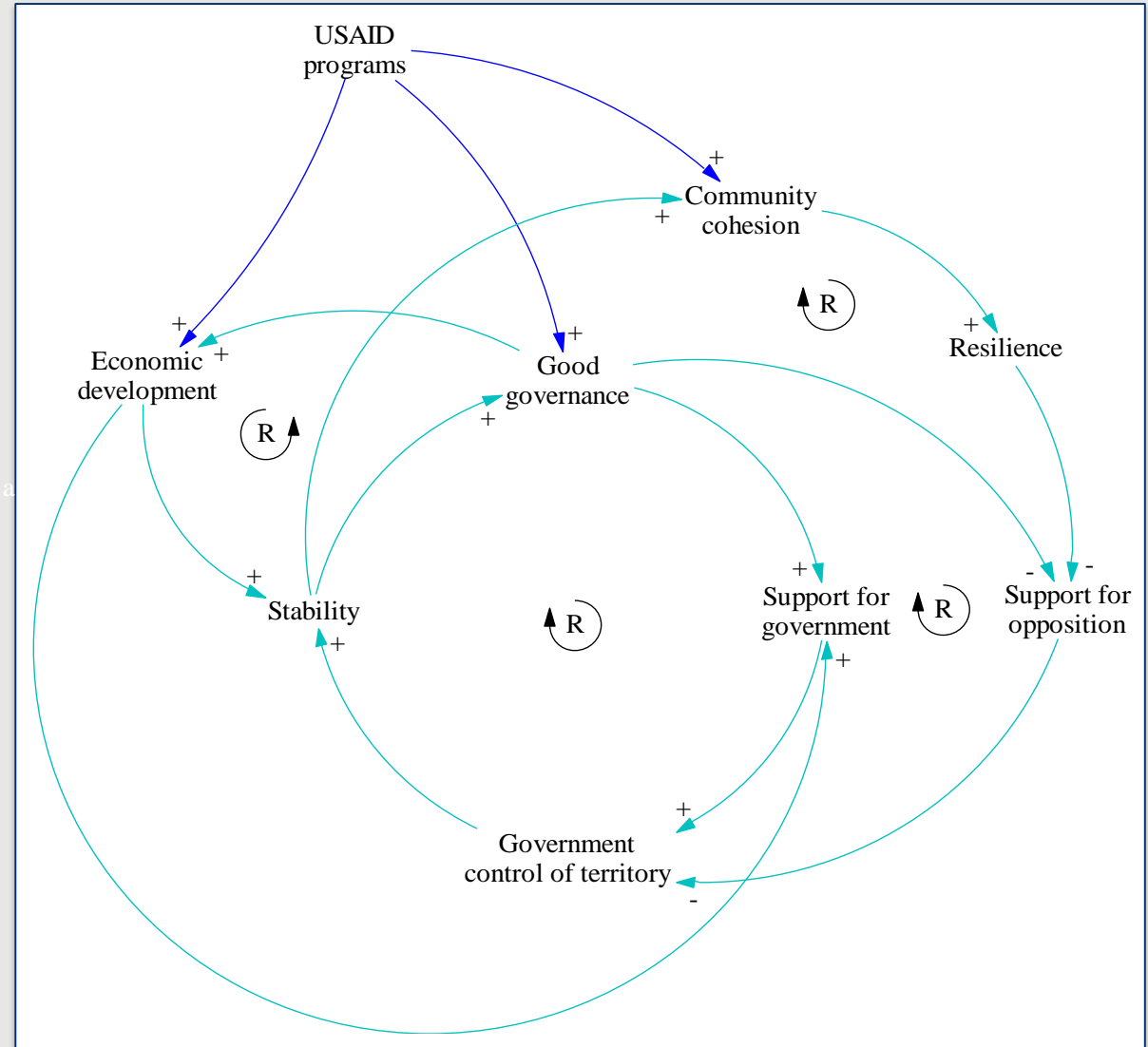


**USAID**  
FROM THE AMERICAN PEOPLE



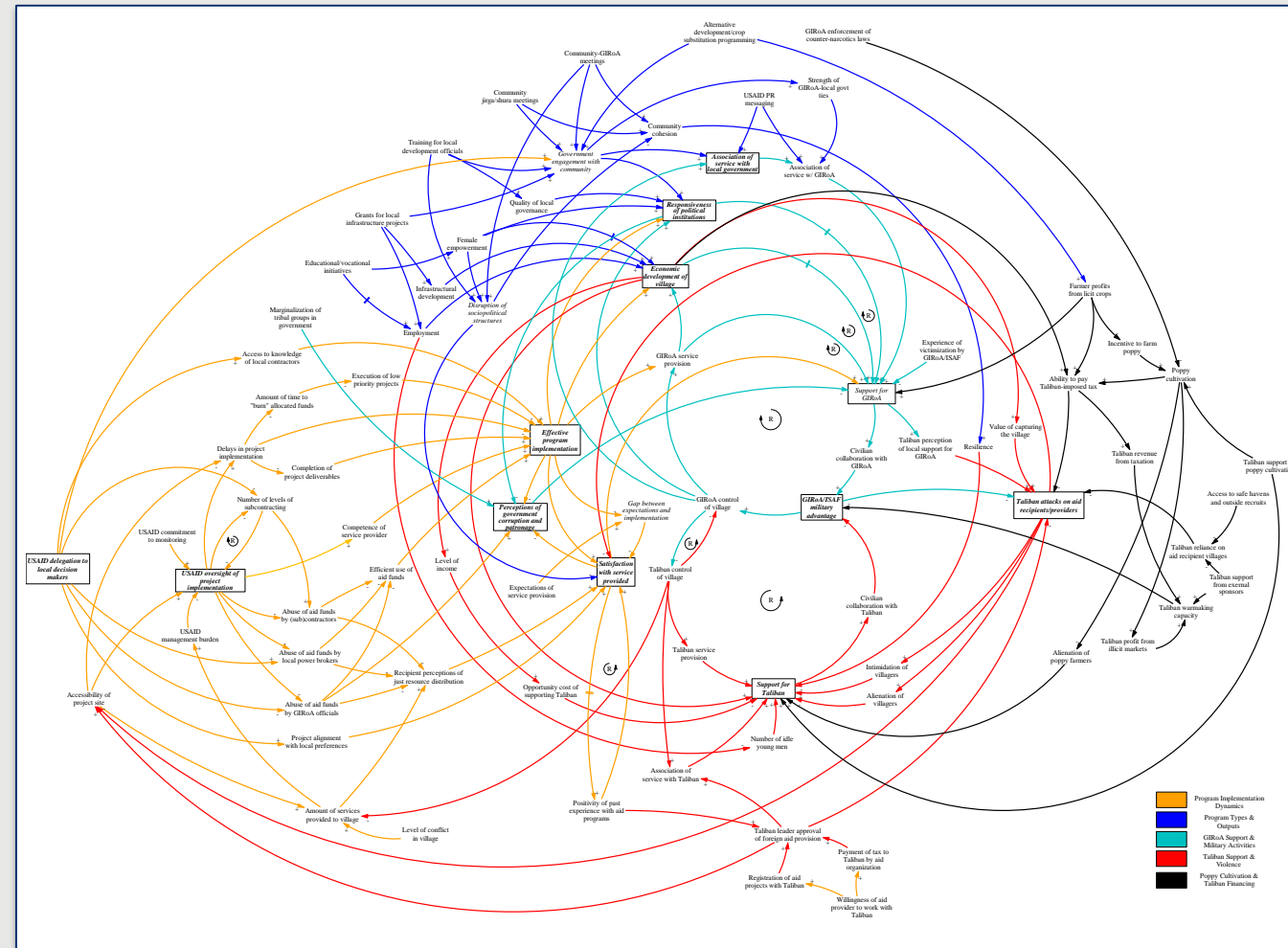
# Stability Programming in Afghanistan

- ANSER used systems thinking analysis to interpret data from the *Measuring Impacts of Stability Initiatives* (MISTI) evaluation.
- The study concluded that \$100 Billion in non-military stability funding had little to no effect on stability, and in some cases made the situation worse.
- To understand **WHY** this happened, we developed a series of CLDs that modeled *ideal* and *as-implemented* cases.
- We conducted leverage analysis to identify high- and low-leverage intervention points.



# Key Insights

- **Not all good things go together.** Some projects undermined progress in other stability areas.
- **When it comes to winning hearts and minds, *perceptions* are crucial.** Perceptions should be a key component in design and evaluations.
- **How a project is implemented is as important as *what* is implemented.** USAID oversight could both hinder and enable success.
- **Aid interventions in unstable contexts require different approaches.** Traditional development strategies don't always apply.



# Sample Policy Recommendations for Addressing Leverage Points

- **Leverage Point: “Satisfaction with service provided”**
  - Did the project meet expectations?
    - *Prioritize small, realistic projects; manage expectations*
    - *Dedicate more resources to oversight*
  - Was the project wanted by the recipients? Did the project upset people by disrupting sociopolitical structures?
    - *Delegate authority to local decision makers*
    - *Minimize disruption where possible*
  - Was the allocation of resources perceived as fair?
    - *Ensure equitable distribution of aid*
    - *Make allocation decisions transparent*
- **Focus on how to define, measure, produce success on the leverage point – not just with tangible outputs**



# What Does Systems Thinking Contribute?

- Gives a holistic view of a problem space
  - *Consider perspectives of all stakeholders (Taliban, villagers)*
  - *Identify emergent outcomes*
- Captures dynamic complexity
  - *How do other stakeholders respond? What affects their response?*
  - *How does the response affect the program objectives?*
- Enables rigorous assessment of objectives and outcomes
  - *Building a CLD requires thorough consideration of how programs lead to desired outcomes*
- Traces root causes & unintended consequences
  - *Relate (seemingly) disparate parts of a system through causal relationships*
- Highlights feedback loops
- Identifies leverage points
  - *Define system → what can we control?*
  - *Which variables are the most “central”?*



# CASE STUDY: NETWORK ANALYSIS FOR AGRICULTURAL PROJECT DECISION-MAKING IN BANGLADESH



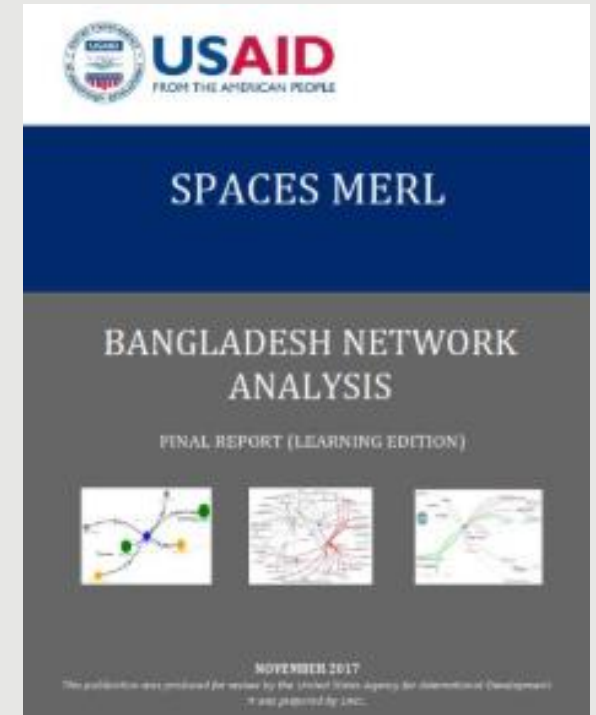
**USAID**  
FROM THE AMERICAN PEOPLE

# Case Study: Network Analysis for Agricultural Project Decision-making in Bangladesh

**The Idea:** Network analysis can be utilized efficiently and cost effectively to inform ongoing program decision-making, flagging promising innovations for scale-up or scale-back throughout implementation.

**The Background:** In 2017, LINC assisted the USAID-funded Bangladesh Rice and Diversified Crops (RDC) to utilize network analysis for program decision-making. Our challenge was to develop a network analysis tool that could be easily understood, implemented cost-effectively, and transferred to project managers, while still generating meaningful insights to inform monitoring and adaptive program strategy over the course of the RDC project.

**The Method:** We achieved this through utilization of an “Egonet” approach, including qualitative interview component, conducted with grantees of the RDC program in multiple iterations. Our work proved insightful, both in terms of what it taught us about project grantee relationships, and the Egonet tool itself.



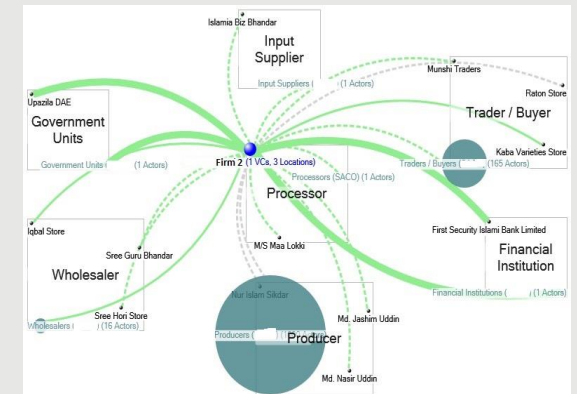
**See this link for further information and full report:**

<http://linclocal.org/2017/11/30/bangladesh-report/>

## Lessons Learned

RDC project staff have been trained in network analysis and have integrated network data collection into ongoing grantee monitoring processes. Relationships (linkages) of grantees are being captured pre and post-intervention utilizing the Egonet method. Lessons indicate that:

- **Training** - Efforts to utilize network analysis as an ongoing project monitoring / reporting tool (rather than one-off study) requires substantial investment in training of staff.
- **Data Collection** - Network data collection instruments should be integrated with standard indicator data collection processes for cost-effectiveness.
- **Targeting** - The ego-network method can be effective for programs investing substantially in a limited number of grantees, with an objective of strengthening, increasing or diversifying relationships.
- **Strength vs. Structure** - The ego-network method is particularly useful in assessing relationship strength and diversity, but not overall network structure.
- **The Big Picture** - Qualitative analysis is an important complement to the Egonet approach.



*Example Ego Map  
excerpted from Network  
Analysis report.*



# QUESTIONS

For more information, please contact:

Sibel McGee [Sibel.McGee@anser.org](mailto:Sibel.McGee@anser.org)

Patrick Sommerville [psommerville@linclocal.org](mailto:psommerville@linclocal.org)

Frances Veasey [Frances.Veasey@anser.org](mailto:Frances.Veasey@anser.org)



**USAID**  
FROM THE AMERICAN PEOPLE