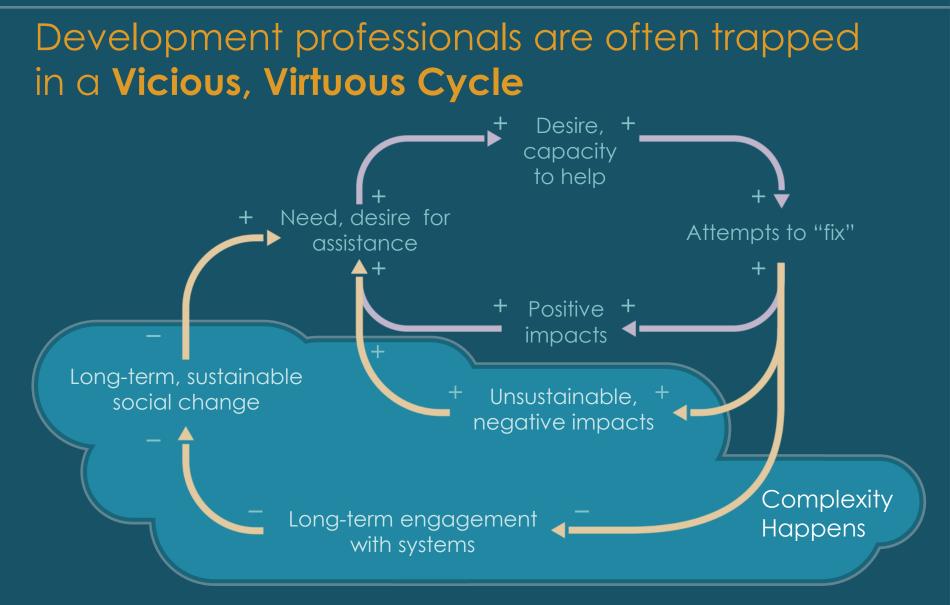


# Systems Thinking

APLU



#### Development professionals deal with two critically different types of environments:

#### Fixable Situations

□ Where you can intervene to solve problems directly

#### **Complex Situations**

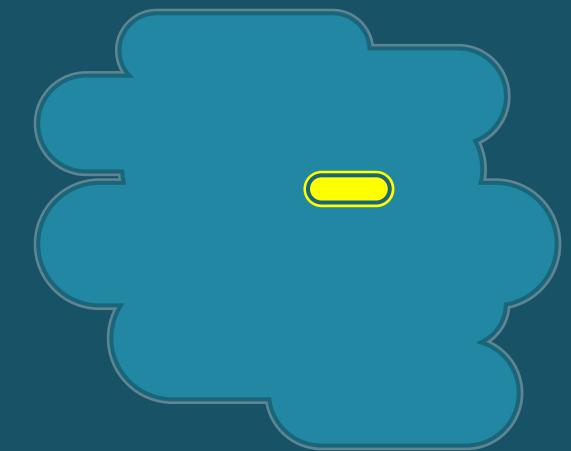
Where you have to engage the surrounding system to improve things over time

#### DEFINING WITH COMPLEXITY

# What distinguishes a complex situation from a "fixable" situation?

Let's say the shape represents the context I am working in

And that the yellow shape is the problem I care about

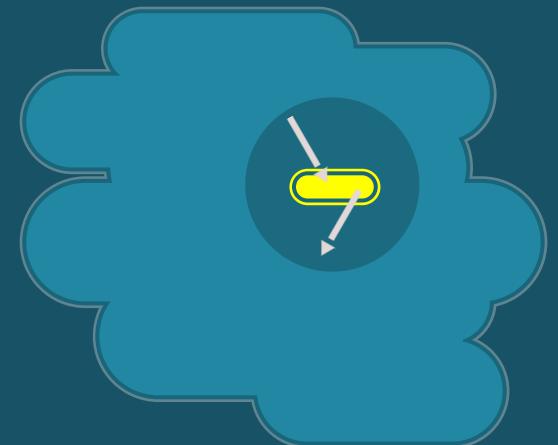


#### PLANET FIXABLE

# Ask: to what degree is the issue I care about inter-dependent with the surrounding context?

If there is a low degree of interdependence...

Then the "cause" of the problem is more likely to reside within the problem itself, and the fix lies in working directly on the problem separate from the context



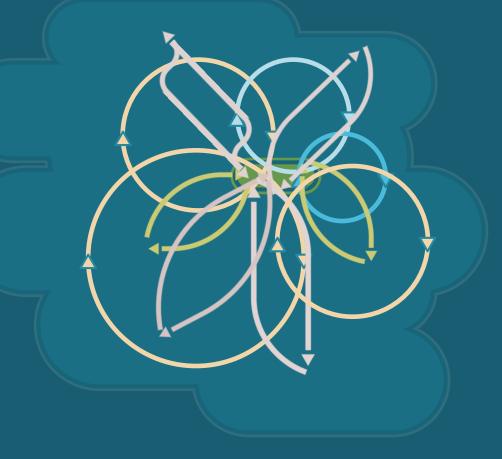
#### PLANET COMPLEX

# Ask: to what degree is the issue I care about dependent on the surrounding context?

If there is a high degree of interdependence...

Then the "cause" of the problem is more likely to reside in the complex relationship between the problem and its context...

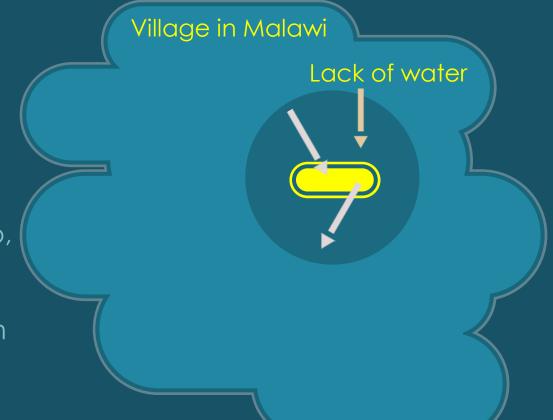
and you can only address the problem indirectly by addressing its relationship with the surrounding context



# Take the problem of an insufficient supply of safe water in the village in Malawi

Is the lack of sufficient safe water due to the lack of a water pump/broken pump?

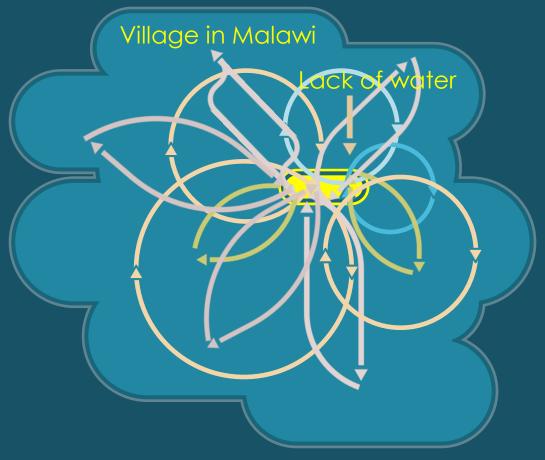
For example, if they had access to a working pump, then their problem of insufficient clean water would be solved long term



# Take the problem of an insufficient supply of safe water in the village in Malawi

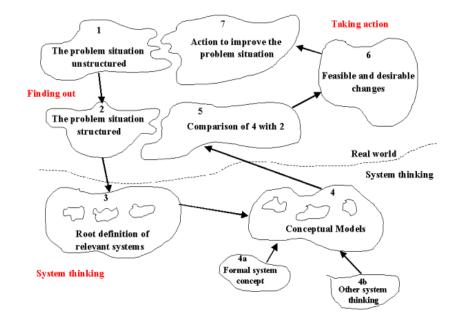
Or is it the result of more complex forces in the village and its surrounding environment?

For example, is it due to entrenched economic interests, tension/violence between local clans, cultural or religious values, competing resource demands, poor governance, etc...





# Systems thinking and development: soft systems







- Interrelationships out there in the "object" and in programming
- Perspectives more yields a clearer picture
- Boundaries the power of who's in and whose perspectives count



## **Systems at USAID**





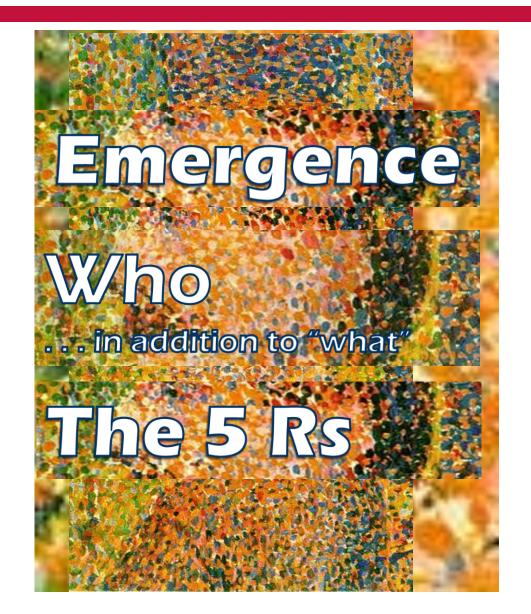
## **Big idea**



Achieving and sustaining any development outcome depends on the contributions of multiple and interconnected actors.



## **Think more systemically**





#### **Ten Principles for Engaging Local Systems**

- **1.** Recognize there is always a system
- 2. Engage local systems everywhere
- **3.** Capitalize on our convening authority
- 4. Tap into local knowledge
- 5. Map local systems
- 6. Design holistically
- 7. Ensure accountability
- 8. Embed flexibility
- 9. Embrace facilitation
- **10.** Monitor and evaluate for sustainability



## (Better) align incentives

# Results

Risk

Focus on project output and outcomes

#### Broaden the results we seek

- Include systems characteristics
- Expect contribution rather than attribution

Measure for sustainability

Eliminate fiduciary risk

#### **Recalibrate risk**

- Recognize risk as threats to achieving sustainability
- Include all risks
- Rebalance risk and risk mitigation

Invest to maximize sustainability



- Local Systems Framework informs USAID understanding of local ownership
- Co-production, context, adaptability, and sustainability linked through Framework:
  - Local Perspectives inform development challenge
  - Local Actors frame solutions and co-produce them
  - Relationships, rules, and roles as "home" for sustained development results
  - Expect dynamism in systems and feedback loops to enable adaptation



# In terms of project design . . .

### Sustainability is:

- An ongoing design consideration that
  - Affects *how* we design
  - Who is involved
  - As well as what we want to accomplish

### Sustainability "Analysis" becomes:

- Documentation of how sustainability was considered/ addressed throughout the design process
- Identification of significant assumptions for realizing sustained development
- Specification of how progress toward sustainability will be measured and monitored



## Thinking "System" thru 5 Rs

#### **Resources**



## **Relationships**

## <u>Rules</u>





# Local Solutions & Local Systems



USAID Forward consists of reforms in these areas:

- Rebuilding policy capacity (PPL, Program Cycle)
- Restoring budget management (M/MPBP)
- Strengthening monitoring and evaluation (Evaluation Policy, CLA)
- Leading on innovation (Lab, Grand Challenges, DIV)
- Supporting capabilities in science and technology (Lab)
- Building the capacity of local institutions (Local Solutions)
- Attracting and retaining talent (DLI)



## Local Solutions Is...

Local Solutions is using, strengthening, and partnering with local actors strategically, purposefully, and cost-effectively to achieve sustainable development.

IPR (Implementation Procurement Reform)

- Means
- 30% as the Driver
- LCD and G2G as ends
- Lots of Awards to Local Orgs
- Capacity Development
- Success msrd by use
- Increase competition

**Local Solutions** 

- Ends
- Sustainability as Driver
- Program Cycle CDCS, PAD
- CDCS & PAD=>Strategic Awards
- Perf. Imprvd=>Effective System
- Success msrd by dev impact
- Small Bus. target 6.5% FY 2014



# The 30% target is **ASPIRATIONAL**

Local Solutions is about Sustainability through Local Ownership



## Localworks

#### Office of Local Sustainability (E3/LS)

FY 2015 Budget \$45 million

#### Process

#### Letter of Interest (LOI)

Missions submit LOIs that address the following questions. What development challenge/s is a Mission trying to address? What resources need to be mobilized to get the job done? How can the development challenge/s be addressed in a locally-owned and led manner?

#### **Design Phase (as long as it takes)**

*localworks* will provide funds to selected Missions to create a comprehensive, evidence-based, and constituent- responsive program.

#### **Implementation Phase (5-9 years)**

Throughout this phase, Missions will issue awards in line with their funded *localworks* design. *localworks* DC will work with Missions to identify challenges, opportunities, successes, and failures as they emerge and to share these within and beyond the Agency.



# Systems Practice

APLU





#### The way we think + the way we work:





#### **Systems Practice/Program Cycle**



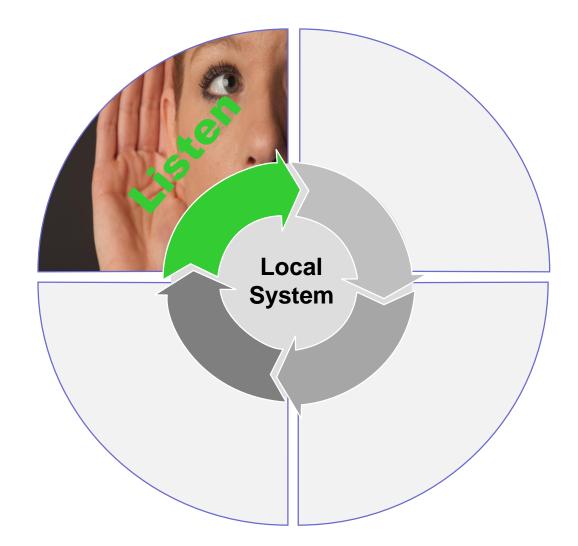




Results	What the local system is producing
Roles	The functions that actors take on
Relationships	The interconnections between actors in the system
Rules	Regulations, policies, norms that structure the system
Resources	Inputs into the system











# Seeking to understand the system "as is":

- 1. Define the result, problem, or issue of interest
- Set a boundary for the system
- Identify relevant actors
- Elicit multiple perspectives
- 2. Begin describing the system along each of the 5Rs.
- 3. Iterate as needed





Elements	Guiding Questions
Results	<ul> <li>What results (good or bad) are currently being produced by the local system?</li> <li>What is the current state of the problem or issue you have defined?</li> </ul>
Roles	<ul> <li>Which roles currently exist in the system?</li> <li>Are actors playing diverse roles?</li> <li>Are multiple actors competing to perform the same role, or collaborating in complementary roles?</li> <li>How intentionally are actors playing their roles?</li> </ul>
Relationships	<ul> <li>How do the actors in the system interact with each other?</li> <li>How are the actors in the system connected through their interactions?</li> <li>Are there clusters of actors who tend to work together? Which actors tend to have productive relationships?</li> </ul>

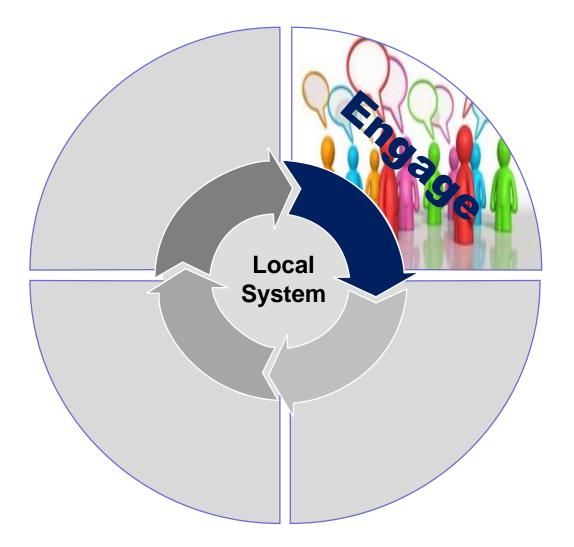




Elements	Guiding Questions
Rules	<ul> <li>What are the formal and informal structures that shape how actors interact within the system?</li> <li>What rules or practices constrain the actions of actors within the system?</li> <li>Are these represented in formal laws and policies?</li> <li>What social norms, practices, or standards of acceptability shape the action of actors within the system?</li> </ul>
Resources	<ul> <li>What does the system have to work with?</li> <li>financial resources</li> <li>human resources</li> <li>Infrastructure</li> <li>information (data)</li> <li>political or economic demand</li> </ul>











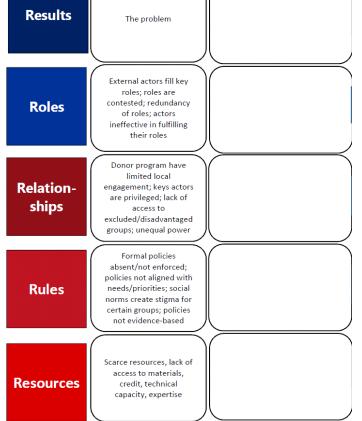
#### Identifying and initiating changes intended to produce the local system as we want it "to be":

- 1. Describe the local system "to be" in terms of the 5Rs (*process is important seek multiple perspectives, include local viewpoints*)
- 2. Establish the gaps/continuities between the system "as is" and the system "to be"
- 3. Validate that intended results are locally-valued (again, process is important seek feedback from multiple stakeholder groups)
- 4. Determine what it will take to make the transition
- 5. Define a project in terms of a set of strategic, viable and feasible interventions designed to support the transition
- 6. Design interventions (activities)
- 7. Initiate interventions



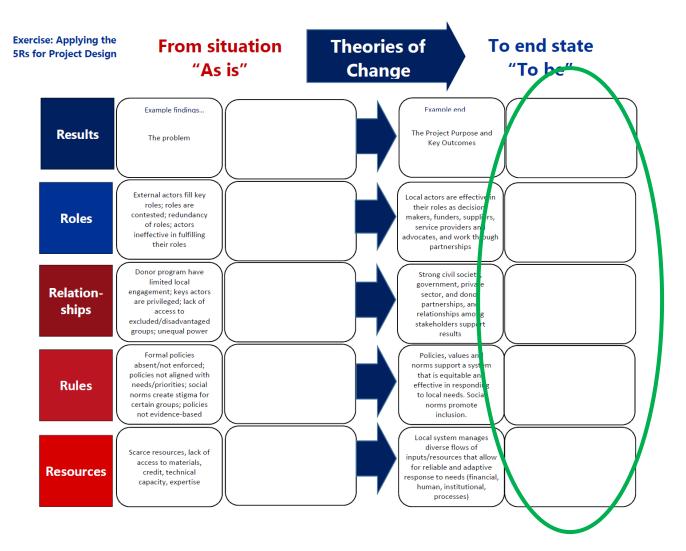


Exercise: Applying the SRs for Project Design "As is" Example findings...



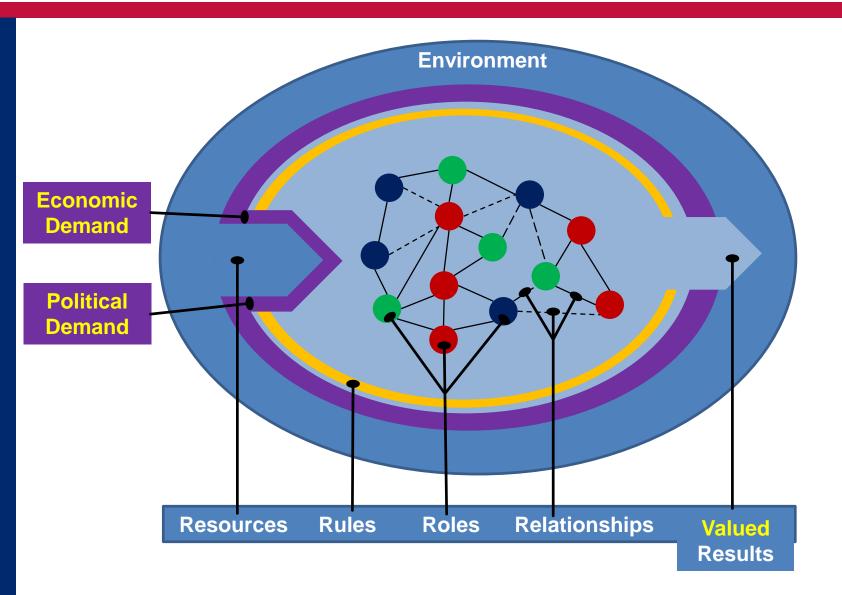


## **Engagement analysis**





#### **Systems and sustainability**



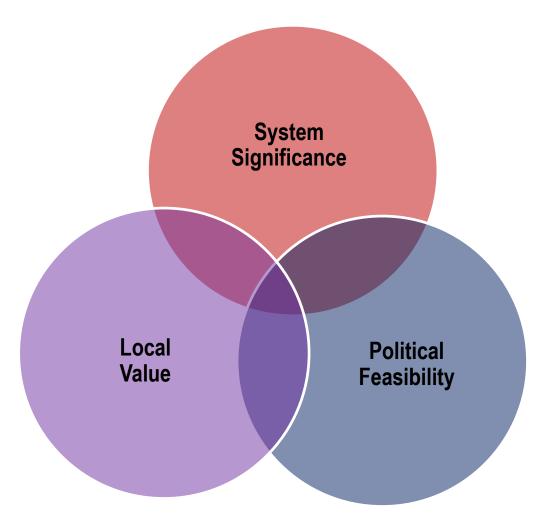


# The 5-Rs: Levers for change

[Target] Results	The specific outcome sought
Roles	<ul> <li>Clarify/Strengthen existing role performance</li> <li>Introduce new roles</li> </ul>
Relationships	<ul> <li>Strengthen existing relationships</li> <li>Modify relationships</li> <li>Create new relationships, esp accountability</li> </ul>
Rules	<ul> <li>Improve enforcement of existing rules, esp. other Rs</li> <li>Reform/modify existing rules</li> </ul>
Resources	<ul> <li>Strengthen "value" feedback loop</li> <li>Promote domestic resourcing</li> <li>Consider resources (infrastructure, data, etc.)</li> </ul>

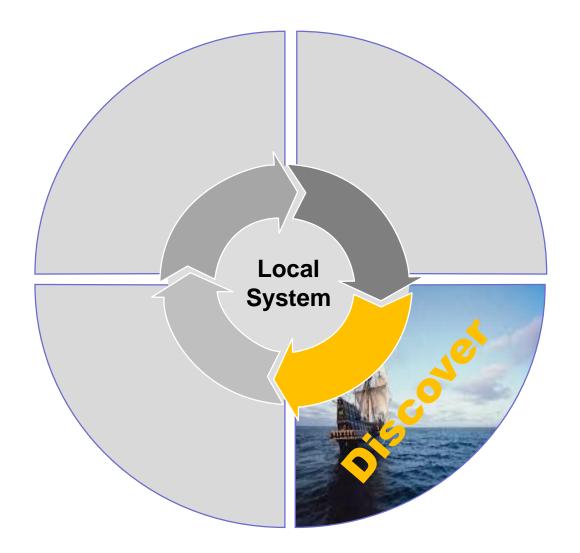


# **Promising interventions**











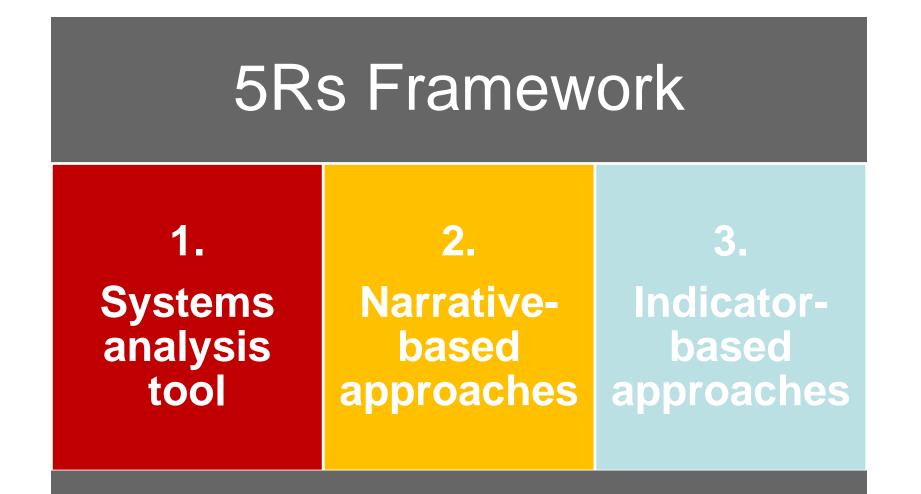


#### Regularly assessing the interventions—both individually and collectively—for effects on the local system and progress toward the system "to be":

- Establish a robust project-level (system-level) monitoring plan that uses multiple methods to track change according to the 5Rs
- 2. Validate monitoring plan with stakeholders to ensure we are measuring what is important.
- 3. Rely on traditional monitoring methods at the activity level
- 4. Organize opportunities to share monitoring results with stakeholders
- 5. Identify modifications to interventions as needed







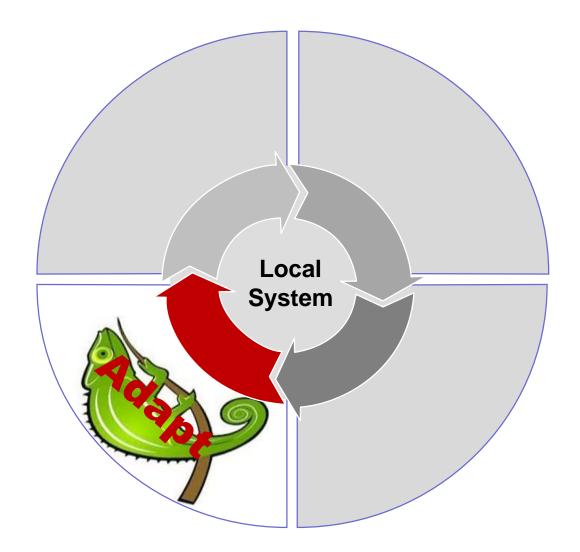


# **Monitoring methods**

Element	Monitoring Methods
Results	<ul> <li>Outcome indicators</li> <li>Citizen feedback/user surveys</li> <li>Outcome harvesting</li> <li>Stakeholder consultations</li> </ul>
Roles	<ul> <li>Social Network Analysis</li> <li>Organizational Performance Index</li> <li>Citizen feedback/user surveys</li> </ul>
Relationships	<ul><li>Social Network Analysis</li><li>Stakeholder consultations</li></ul>
Rules	<ul><li>Rapid Political Economy Analysis</li><li>Stakeholder consultations</li></ul>
Resources	<ul><li>Market studies</li><li>Indicators</li></ul>











#### Modify interventions—or redefine system "to be"—based on ongoing discovery:

- 1. Anticipate adaptation through design, procurement, management and monitoring
- 2. Asses need for adaptation in terms of the 5Rs
- 3. Refine/(re)design interventions using similar approach to initial engagement







Continue listening, engaging, discovering and adapting as needed



# A Review of Some Organized by Purpose Adapted For Systems Concepts in Action by Williams/Hummelbrunner



# Describing and Analyzing Situations

- Causal Loop Dynamics
- System Dynamics
- Social Network Analysis
- Outcome Mapping
- Process Mapping of Impacts
- Strategic Assumption Surfacing and Testing



#### Changing and Managing Situations

- Strategic Area Assessment
- CDE Model
- Assumption-Based Planning
- Cynefin
- Solution Focus
- Viable System Model



- Cultural Historical Activity Theory
- Soft Systems Methodology
- Dialectical Methods of Inquiry
- Scenario Technique
- Systemic Questioning
- Circular Dialogues
- Critical Systems Heuristics



Tools for LISTENING to a system Holistic Assessment: use the Structural, Attitudinal, and Transactional lenses to achieve comprehensiveness without losing comprehensibility

Upstream/Downstream Analysis: see every issue as having multiple causes and multiple impacts

**Systems Mapping:** visualizing key dynamics (patterns) and how they are interconnected



Tools for Engaging a system Finding Leverage Points: areas were an "ounce" of input can get you a "pound" of impact

**Creating Ripple Effects:** max. positive interdependence, min. negative interdependence

Aligning Fast and Slow Variables: engage parts of the system that you can affect in the short term with desired longer-term impacts



**Building a Learning Plan:** use your understanding of the system to identify key hypotheses about both how the system works and how to engage it



Failing Smart: min. the costs of failure and max. the value of learning through quick cycles (flash learning)

**Diversifying Your Definition of Success:** integrity of approach, ability to learn/adapt, impact on dynamics, direct project impacts



#### **1.** Systems practice still applies

- Focus on engagement/discovery
- Still need to listen for perspectives, boundaries, and 5-Rs
- Embrace rapid tempo
- 2. Make several "small bets"
- **3.** Fail smart
- 4. Amplify what works in that context; dampen what does not



#### The most important tool



• No tool is more valuable than time spent understanding the context, the players, and the perspectives