Complexity-Aware Monitoring
USAID's Learning, Evaluation, and Research Office

Briefing on USAID’s Discussion Note

Heather Britt & Melissa Patsalides
Have you ever encountered a project (or aspects of a project) in which – (choose all that apply)

- Cause and effect relationships are poorly understood, thereby making it difficult to identify solutions and draft detailed implementation plans in advance

- Expected results required revision to take advantage of new opportunities

- Adaptive management is necessary to steer effectively in a dynamic context

- The purpose is to influence social change or innovate to discover solutions
What is Complexity?

Simple: “one size fits all”
- Cause and effect is clear & stable across contexts; agreement on intended results & certainty about how to achieve them.

Complicated: multiple components, but ultimately predictable
- Long chains of cause and effect; multiple paths to results; causality works differently in different contexts; multiple agendas and values; expertise required.

Complex: emergent & inherently unpredictable
- Uncertain & unpredictable cause & effect; appropriately adaptive in response to emergent needs and opportunities
What is Complexity?

Certainty / Agreement Matrix

Cynefin Framework

Complex
- Cause and effect: understandable in retrospect but do not repeat
- Probe - Sense - Respond
  - Undisordered contexts

Complicated
- Cause and effect: detectable but separated over time and space
- Sense - Analyze - Respond
  - Ordered contexts

Chaotic
- Cause and effect: not detectable
- Act - Sense - Respond

Simple
- Cause and effect: repeatable, perceivable, and predictable
- Sense - Categorize - Respond
Myth #1

• Complexity is synonymous with conflict.

(Closer to the) Truth

• Most development contexts include complexity.
• Terms like “complex environments” can be confusing.
Myth #2
• We should treat everything as complex.

(Closer to the) Truth
• Some aspects of projects can be appropriately treated as simple or complicated.

• Plan, implement, monitor and evaluate according to the characteristics of simple, complicated & complex.
Myth #3

• Operating effectively in complexity requires expensive technical tools or specialized knowledge.

(Closer to the) Truth

• Simple rules and principles steer effective practice in complexity.
Frisbee Flight Simulation

- Models based on initial speed, shooter angle, and shooter height
- Holding all other factors constant
- Can’t account for changes in wind speed and direction, and other factors
Operating in Complexity
Performance Monitoring measures the predicted.

Results intended by us
Pathways of change planned by us
Implementation strategies designed by us
Indicators
Targets
Complexity-Aware Monitoring tracks the unpredictables.

**Results** (beyond those originally intended by us)
- Factors & actors outside the project
- Multiple pathways of change & feedback loops
- Systems qualities
- Triggers
Performance monitoring & complexity-aware monitoring complement one another.

Performance monitoring for simple & complicated aspects of projects and strategies.

Complexity-aware monitoring for complex aspects of projects and strategies.
Practicing Complexity-Aware Monitoring

3 Principles

5 Approaches
1. Synchronize monitoring with the **pace of change**

2. Attend to performance monitoring’s **3 blind spots**
   a. broader range of outcomes
   b. alternative causes
   c. full range of non-linear pathways of contribution

3. Consider **relationships, perspectives, and boundaries** (**3 key systems concepts**)
   a. the structures, processes, and exchanges linking actors and factors within a system
   b. different perspectives within a system
   c. what is in and what is outside the system
1. **Sentinel Indicators**: Proxy for the system that signals the need for further investigation (example: stock-outs)

2. **Stakeholder Feedback**: Seeks diverse perspectives of partners, beneficiaries or those excluded from a project

3. **Process Monitoring of Impacts**: Tracks predicted & emergent processes transforming outputs to results

4. **Most Significant Change**: Captures broad range results and makes diverse perspectives explicit

5. **Outcome Harvesting**: Captures broad range results and works backward to describe & verify contribution
5 Recommended Approaches

A Sentinel Indicator:

• Is a proxy for complex processes that are difficult to study in their entirety
  – A sentinel species is a proxy for an eco-system
  – Stock-outs are a proxy of market efficiency
• Is easily communicated
• Signals the need for further analysis and investigation

Why important?
• A simple way to monitor complexity
Stakeholder Feedback

- Family of approaches
- Privileging perspectives of partners, beneficiaries or those excluded from a project
- Seek diversity rather than consensus

Why important?

- Complexity is diverse
- Knowledge of the system is partial and predictability is low.
Process Monitoring of Impacts

- How a result at one level is used to achieve results at the next level (outputs to 1st level results)
- Predicted and emergent processes
- Between results boxes in a LogFrame

Why important?

- Bounds areas of complexity most critical to success
- 2 blind spots: factors outside the project, feedback loops
Most Significant Change

- Collection and analysis of stories describing the most important project outcomes
- Perspectives of different stakeholder groups are represented in the criteria for determining a significant change

Why important?
- Captures broad range results (intended/unintended, positive/negative).
- Makes diverse perspectives on results explicit.

5 Recommended Approaches
Outcome Harvesting

- Discover results without reference to predetermined objectives, and work backwards to determine the contribution.
- Emphasis on verification and describing contribution

Why important?
- Captures broad range results (intended/unintended, positive/negative).
WANTED

COMPLEXITY CHAMPIONS
TO
TEST NEW METHODS

REWARD

LER SUPPORT
1. Selecting an appropriate M&E approach to meet the information needs and suit the project and its context

2. Applying the M&E approach. Which adjustments facilitate use and which ones compromise data?

3. Lack of intentional learning that can contribute to guidance about applying the approach in USAID programming
Learning Circles collaborate to --

1. Select a suitable monitoring approach
   • Meet the project’s monitoring needs
   • Good fit for the project & context

2. Apply the approach to meet monitoring needs
   • Expert TA from C-AM Resource Panel; collaborative problem-solving
   • Balance rigor with flexibility; apply methods systemically.

3. Foster intentional learning through learning circles
   • Protect space for experimentation
What’s in it for you?

- Improved monitoring information to steer projects in complexity
- TA from international experts
- Share information with other early adopters
- Create and sustain space for innovation in your organization and the field
- Contribute to shaping USAID guidance and resources for M&E innovation
Identify monitoring challenge → Determine approach → Develop learning plan for trial → Be part of a network → Share examples and resources from trial

Identify monitoring challenge

Implement approach and participate in Learning Circle

Provide detailed feedback
Discussion Note

Complexity-Aware Monitoring

US Agency for International Development (USAID) typically uses a specific approach to monitoring, referred to as performance monitoring. Performance monitoring uses indicators designed to measure results that contribute to broader country strategy results frameworks or project results frameworks. Annual (or semi-annual) review of country strategy (CDS) performance data is intended to inform high-level decision making. At the project and activity level, monitoring is intended to inform implementation. Performance monitoring practice involves collecting baseline data, setting targets, and comparing actual figures to targets. (For more information on USAID’s approach to performance monitoring, please see the Automated Directive System section 201.3.2).

Outside the Agency, the term “monitoring” may be used to describe a much broader array of practices with roots in diverse theoretical perspectives. For example, monitoring, for other organizations, does not necessarily involve results, indicators, baselines, or targets.

This discussion note outlines general principles and promising approaches for monitoring complex aspects of USAID development assistance. Complexity-aware monitoring is distinct from performance monitoring as practiced in USAID and is intended to complement performance monitoring when used for complex aspects of projects and strategies. Complexity-aware monitoring may be considered “normal” monitoring by some working in other organizations or contexts. Nevertheless, consideration of these principles and approaches may strengthen practice.

This Discussion Note is designed to prompt inquiry and experimentation within USAID with new approaches and methods for monitoring complex aspects of development assistance. Rather than prescribe a single method or approach, this note highlights principles and methods used by development practitioners outside of USAID. Developed in consultation with outside experts in the principles and methods described and with USAID staff who are already experimenting with new M&E methods, it is a starting point for USAID staff wishing to experiment with methods that suit some aspects of their portfolio better than performance monitoring as described in ADS 303. After a period of experimenting with and learning how these methods and approaches work in USAID’s programming context, this Discussion Note may be turned into a How-To or Technical Note that will broaden USAID’s M&E toolkit.

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Next Steps: Answer 6 Questions

1. Describe the project in 2-3 sentences.
2. What aspect of this project is complex? (Short statement)
3. What monitoring needs should a complexity-aware monitoring approach serve? What monitoring needs are currently not being met by performance monitoring?
4. What questions should be answered through a monitoring approach?
5. Who will use the monitoring data?
6. What will they use it for?
Next Steps: Contact LER

Travis Mayo
Tmayo@usaid.gov
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Thank you!