Complexity Aware Monitoring (CAM) Workshop Series

Session 1: Introduction to CAM

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Introduction

- Workshop Format
- Housekeeping
- Resources



Workshop Objectives

Improve participants' knowledge of and understanding of CAM

- Improve participants' ability to use CAM
- Expand participants' networks of CAM practitioners within and outside the MOMENTUM suite of awards

Session Objectives

Introduce participants to the concept of CAM

- Discuss the added value of using CAM approaches and how CAM intersects with other M&E and adaptive learning (AL) efforts
- Provide a brief overview of several CAM approaches, their applicability, and how to select the appropriate approaches based on resources required

Technical Resource

MOMENTUM Complexity-Aware Monitoring (CAM) Guide





Technical Guide

A GUIDE TO COMPLEXITY-AWARE MONITORING APPROACHES FOR MOMENTUM PROJECTS

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Today's Presenters



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Today's Session

PART 1

CAM's Relevance to MOMENTUM Awards

PART 3

Integration of CAM with M&E and adaptive learning efforts

PART 2

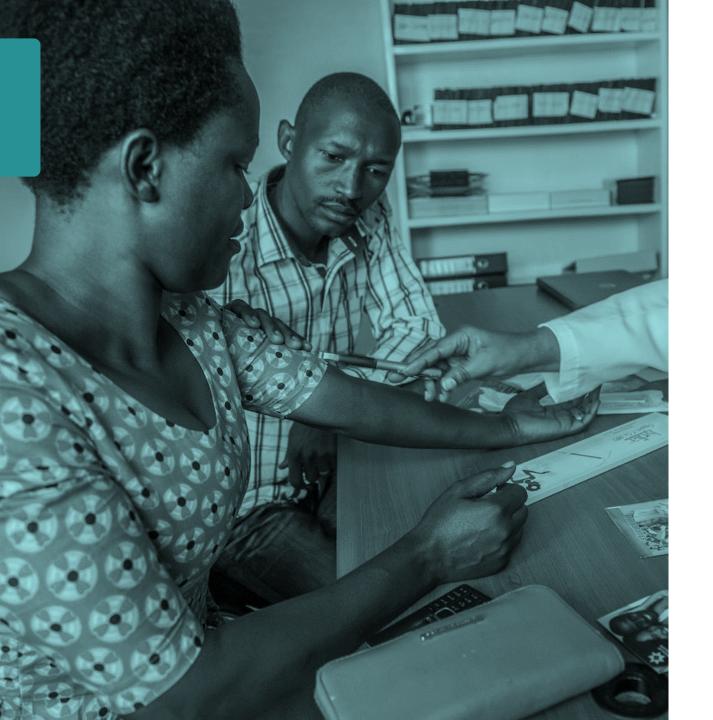
CAM Overview and Selected Approaches

- 1. What is CAM and when should it be used?
- 2. What questions can CAM address?
- 3. What are some of the CAM approaches?
- 4. How do I choose among the approaches?

PART 4

CAM Perspective – Ripple Effect Mapping

1 CAM's Relevance to MOMENTUM Awards



What is Complexity Aware Monitoring?

Complexity-aware monitoring is a type of complementary monitoring that is useful when results are difficult to predict due to dynamic contexts or unclear cause-and-effect relationships.

The Evolution of USAID's Interest in CAM

PROGRAM CYCLE

Discussion Note: Complexity-Aware Monitoring



Link to Complexity-Aware Monitoring Discussion Note (Brief)

Link to SPACES <u>MERL</u> <u>Systems &</u> <u>Complexity (</u>White Paper)

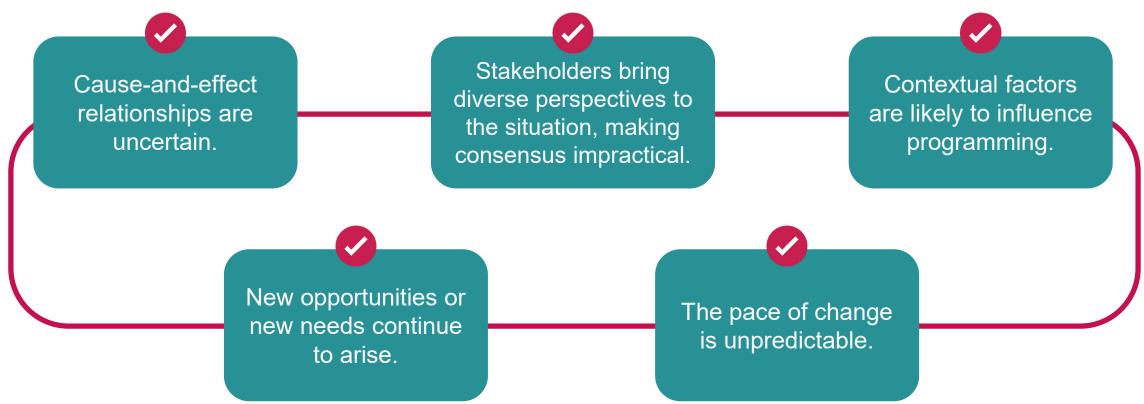
This Note is a starting point for USAID staff to integrate "complementary approaches" to performance and context monitoring for monitoring complex aspects of development assistance. Rather than prescribe a single method or approach, this note highlights principles and methods used by

Introduction

This Discussion Note complements ADS 201 and outlines general principles and promising approaches for monitoring complex aspects of USAID development assistance. Complexity-aware monitoring is a type of complementary monitoring that is useful when results are difficult to predict due to dynamic contexts or unclear cause-and-effect relationships. Key principles of the Program Cycle include applying analytic rigor, managing adaptively, and utilizing a range of approaches to achieve results. ADS 201.3.5.5 identifies three types of program monitoring – performance, context, and complementary.

When to Use CAM

Complexity-aware monitoring is appropriate for aspects of strategies, projects or activities where:



CAM Guiding Principles

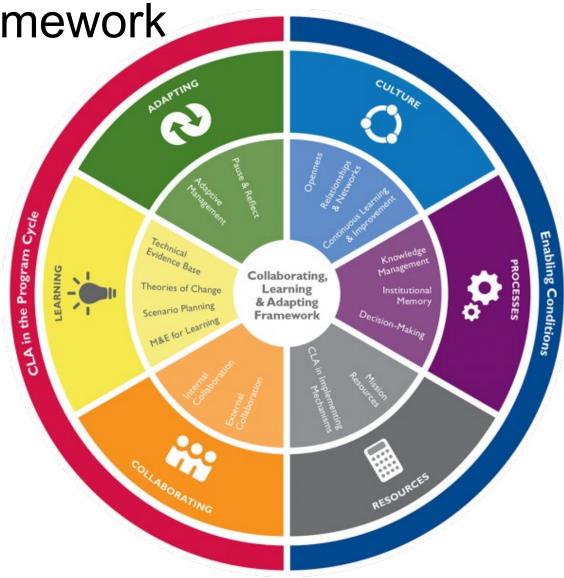
Attend to performance monitoring's three blind spots.

Synchronize monitoring with the pace of change. Consider interrelationships, perspectives, and boundaries.

CAM and USAID's Collaborating, Adapting and Learning Framework

- CLA is an intentional approach to making decisions and adjustments in response to new information and changes in context
- USAID is increasingly recognizing the importance of adaptability for its work to be effective.





Why should MOMENTUM use CAM?

- MOMENTUM is complex— traditional monitoring and evaluation approaches alone are not adequate to convey the richness of anticipated project achievements and generate needed iterative learning for programmatic and policy action.
- CAM is intended for those seeking cutting-edge solutions to monitoring complex aspects of strategies and projects.

How can CAM be used by MOMENTUM?

- 1. Help explore MOMENTUM-wide and award-specific learning agenda questions
- 2. Generate iterative learning that can inform adaptive management of country programs
- 3. Complement performance and context monitoring to help tell the MOMENTUM story
- 4. Assess intervention areas that don't lend themselves well to traditional quantitative M&E methods, such as policy change, global leadership and gender norms
- 5. Measure program achievements and unintended consequences from stakeholder perspectives as part of mid-term or final evaluations.
- 6. Better understand intervention and program performance in dynamic environments

2 CAM Overview & Selected Approaches

Terminology

- Causal framework, such as theories of change and logic models, etc.
- Projects versus interventions
- Outputs versus outcomes versus impact
- Clients versus participants versus stakeholders
- Systems and systems thinking





What is complexityaware monitoring and when should it be used?



What do you think of when you hear "complexity-aware monitoring"?

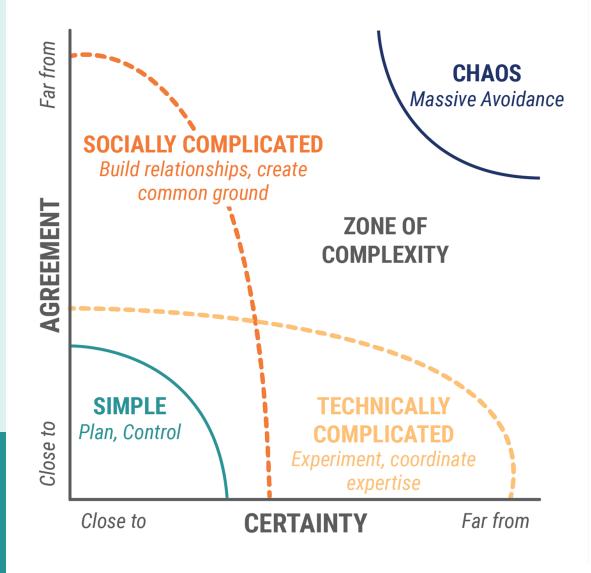
- Using the RiseUp Pad (link in chat) and in just a few words respond to the question.
- For instance,
 - Is it (somewhat) synonymous with something else that you do?
 - Do you have a particular reaction to the term that you can describe?
 - Is there a particular approach that comes to mind?

Defining Complexity

- Complexity is a continuum between simple and chaotic.
- It occurs when there is a lack of both strong expertise and of agreement on what needs to be done.
- A situation can be complex as a result of the intervention, the context, or both.

Are you implementing a simple, straightforward intervention in a stable, well-defined environment?

Do you expect your workplans to be implemented as originally written, without delays or changes?



Source: MQPatton, Developmental Evaluation. (New York: Guilford Press, 2011).

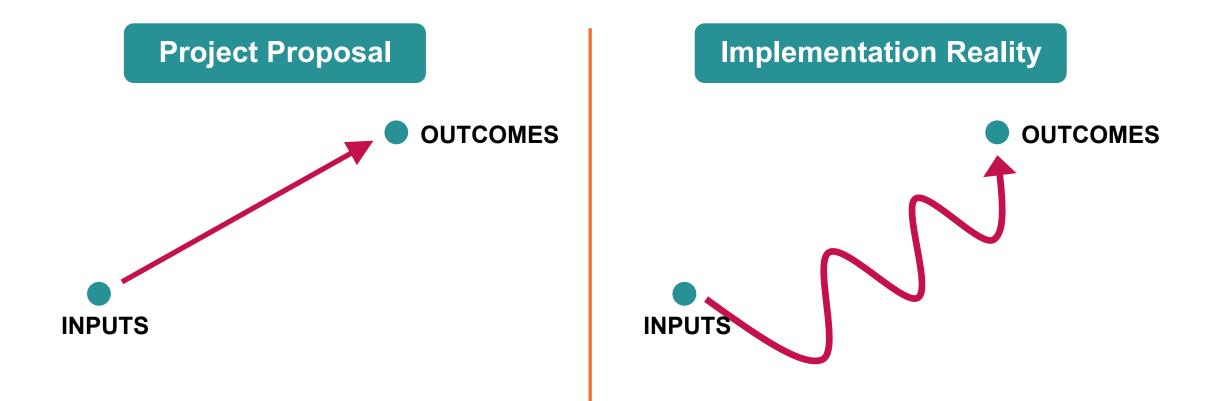
"Socially-Complicated"





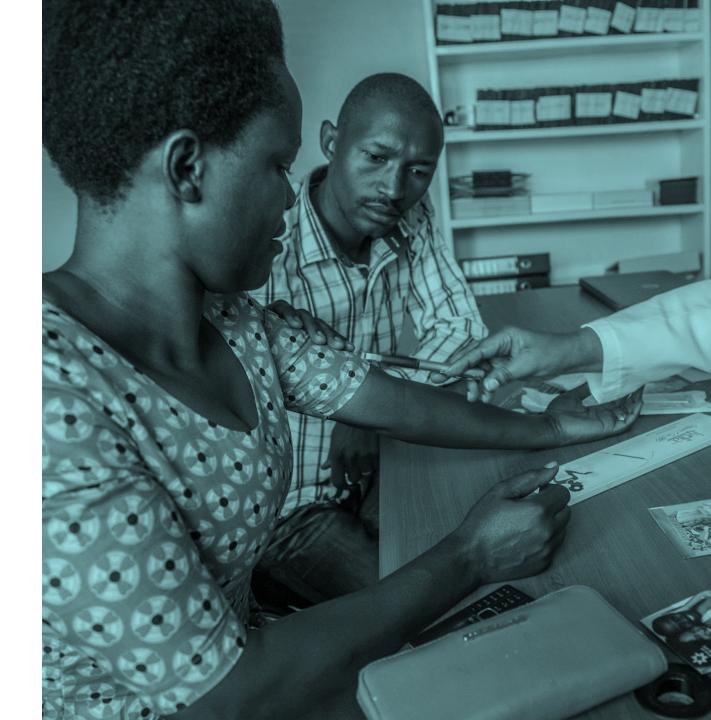
Photos (L-R): Jamie Barnett/FHI 360; Nena Terrell/USAID Ethiopia

"Technically-Complicated"



What is complexityaware monitoring ?

Monitoring approaches that take into account the inherently unpredictable, uncertain, and changing nature of complex situations



CAM approaches can be useful in various situations

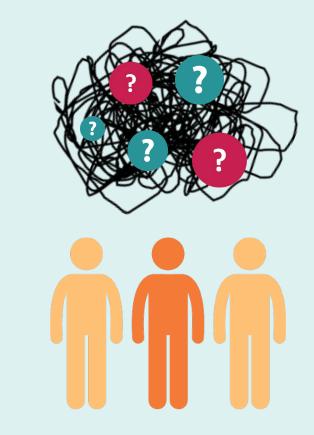
- Innovative practices
- Causal pathways are not clear
- Changing beliefs and/or behaviors
- Multiple changes need to happen together
- Exact steps needed to realize intended outcome/s are not clear
- Context is subject to rapid and unanticipated changes.
- Political and/or social instability



What questions can complexity-aware monitoring address?

The Missing & Difficult Questions

- What outcomes might we be missing?
- What outcomes might yet emerge?
- How do stakeholders perceive the intervention?
- What factors contributed to the observed outcome(s)?
- What is happening in the wider context?



What outcomes might be missing?

- The ability of CAM approaches to capture unintended outcomes is one of its most appreciated aspects.
- Unintended outcomes:
 - Positive or negative
 - Not in your logic model or theory of change
 - Not easily measurable or easily "fit" within an indicator
 - May be occurring in the wider system (e.g., an unexpected partner or stakeholder)
 - Novel situation or intervention not sure what to expect
 - Beyond expectations

EXAMPLES: What outcomes might be missing?

- Using most significant change to evaluate a capacity building intervention may show that some participants were able to make improvements in their work beyond what was anticipated, while others used their new skills in ways counter to the intent of the intervention. Neither outcome would have been included in the original causal framework.
- Ripple effect mapping is also great for identifying unintended or missing outcomes.

What outcomes might yet emerge?

- Change can be a long process; projects are short, and interventions are even shorter!
- CAM approaches can help identify interim milestones that mark progress towards outcomes that are yet to fully emerge.

EXAMPLES: What outcomes might yet emerge?

- Outcome mapping can be used to monitor the progress of scaling a health intervention. If the intended outcome is to have the intervention implemented at scale in a country, the "progress markers" monitored in outcome mapping might include the percentage of districts implementing the intervention and the existence of national-level policy documents to support implementation.
- In causal link monitoring, you can monitor the links between outputs and outcomes, to see if stakeholders are using your outputs, even if the intended outcome(s) have yet to happen. Are health systems leaders actively reviewing and using the data that the project provided them, even if they have not yet directed change to happen based on that data?

How do stakeholders perceive the intervention?

CAM is participatory

Asking those involved, what do they want to see change? What happened from their perspective?

Stakeholder feedback supports:

- adaptive learning
- understanding of causal pathways
- understanding the contributions of an intervention
- triangulation of findings
- engagement of marginalized and/or underrepresented populations

EXAMPLES:

How do stakeholders perceive the intervention?

- Most significant change focuses on asking a wide variety of stakeholders to share what they think the significant changes that occurred as a result of an intervention are. For a skills workshop series like this, one person may say "We implemented a CAM approach..." while another may say "Nothing really changed."
- In pause and reflect, the team (and often stakeholders) reviews and reflects on what has happened thus far, then develops recommendations for improvement. Stakeholder engagement meetings, especially those that happen "mid-term", are often examples of pause and reflect.

What factors contributed to the observed outcome(s)?

- When experimental-design evaluations are not feasible, CAM approaches can provide information on contribution
- Contribution does not equal attribution
 - BUT collaboration and partnership are acknowledged and valued



Photo: Karen Kasmauski/MCSP

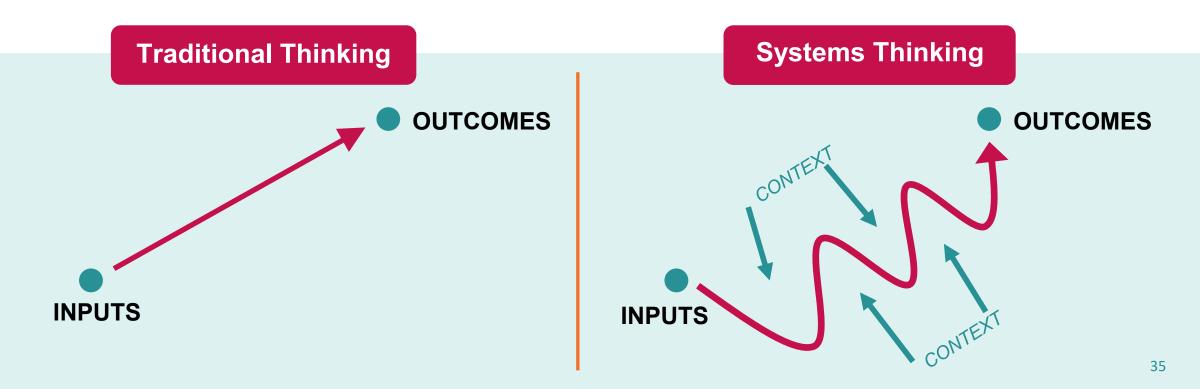
EXAMPLES: What factors contributed to the observed outcome(s)?

- A new policy has been approved by the Minister of Health. Following the process set out in **contribution analysis**, the team can use the theory of change and targeted data collection about the change process to gain an understanding of the factors, such as the project, that led to the change.
- Multiple groups are implementing interventions to mitigate the impact of the COVID-19 pandemic on MNCHN services. Outcome harvesting can be used to identify outcomes and then to trace those outcomes back to the specific interventions that likely contributed towards them occurring.

What is happening in the wider context?

What is out of your control, but likely to impact your project?

In CAM, we recognize that the wider system (context) in which the project operates is likely to have an impact on the project.



EXAMPLES:

What is happening in the wider context?

- Social network analysis can be used in conjunction with a policy change intervention to show how stakeholders interact with each other, how information flows among them, and who has influence, and how those relationships change over the course of advocacy efforts.
- Sentinel indicators can support collaboration across projects. For instance, MOMENTUM could track reports of iatrogenic fistulas as an indicator of need for the MOMENTUM Safe Surgery project to strengthen caesarean section skills.

WRAP-UP: Key aspects that define CAM

• Answering valuable questions about:

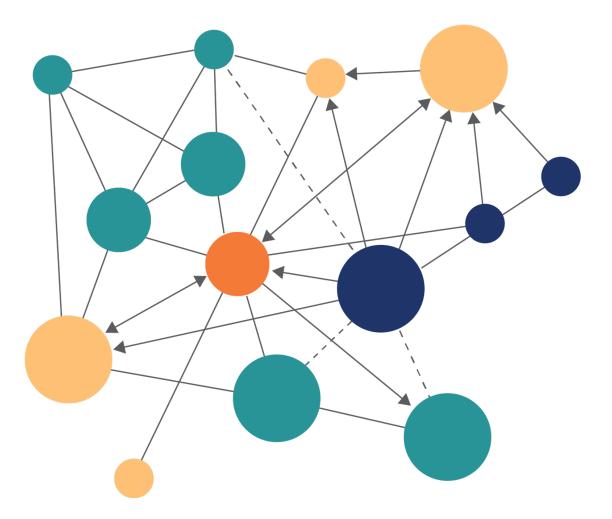
- intended and unintended and unfinished outcomes
- the factors that contributed to change or success
- the perspective and perceptions of stakeholders
- context and how it influences the project (systems thinking)
- Using M&E to learn and adapt programs and M&E systems!



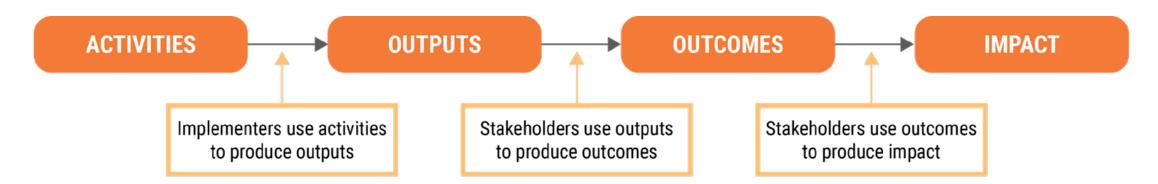
What are some of the CAM approaches?

Social Network Analysis

- Mapping the stakeholders who connect and relate with each other and/or share a common interest or purpose
- Used in design, implementation, and monitoring, especially if repeated
- GREAT FOR advocacy, communication, social change and other intersectoral work. Anything that involves a lot of stakeholders!

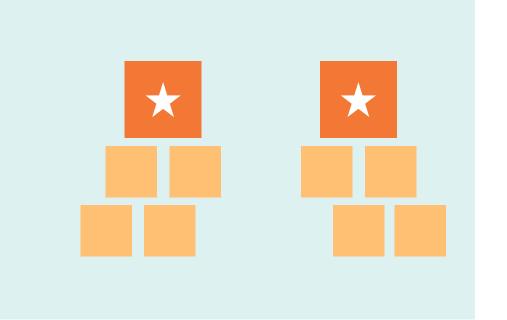


Causal Link Monitoring



- The assumptions or causal links between activities and outputs, etc., along with contextual assumptions, are the focus of monitoring.
- Data is collected based on those causal links to see if the assumptions hold. Adjustments are made as necessary.
- GREAT FOR anything innovative, as well as capacity building, social change, advocacy and other activities in which there is uncertainty in how stakeholders will respond.

Outcome Mapping



- In this (often) prospective approach, the causal framework is expanded upon to identify specific markers of progress towards outcomes - framed as changes made by partners.
- The status of these progress markers is then monitored from both the perspective of the project and the partner who is hoped to change.
- Creating a map of progress markers is a visionary, participatory, brainstorming process.
- GREAT FOR research, advocacy and policy change, social change, innovation, scale-up, and capacity building.

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Sentinel Indicators

- Proxy indicator that alert project staff about the change that is occurring.
- Like a "bellwether", they often signal that further analysis is needed.
- Can be either qualitative or quantitative.
- GREAT FOR fragile environments and those subject to rapid change. Also for interventions aiming to strengthen systems, multifaceted interventions, and/or interventions that might be complex to capture otherwise.



EXAMPLES:

- Stock-outs as a indicator for supply chain strength.
- Changes in relationships amongst stakeholders as an indicator of market strength or advocacy progress.
- In-patient death as an indicator for health care quality at a facility.
- Out-migration as an indicator of local security.

Pause and Reflect

- Often thought of as adaptive learning, pause and reflect collects information that can be analyzed for program improvement - so it also CAM!
- Reflections enable learning about a project or intervention at key points in implementation to support adaptation and improvement.
- **GREAT FOR** everything!



P&R can be implemented as part of:

- Program reviews
- Quarterly check-ins
- Team meetings
- Communities of practice
- After-action reviews
- Peer assists
- Knowledge cafes
- Journaling

Outcome Harvesting

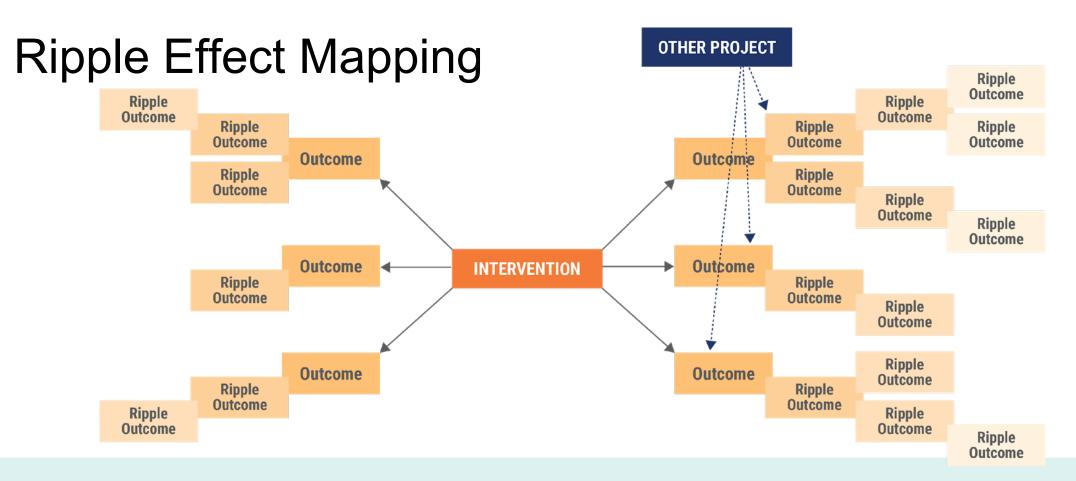


- In this retrospective narrative approach, project staff look for outcomes and then to understand the role of the project in contributing to them.
- As "forensic M&E", it entails sleuthing (and at times slogging) in the search for outcomes.
- GREAT FOR advocacy, research, social and behavior change, capacity building, innovation, and other interventions in which there is limited valuable quantitative data. Any intervention in which you expect there to be unintended outcomes.

Most Significant Change

- Retrospective approach that prompts a wide range of stakeholders to tell their stories of the intervention.
 Stories are prioritized to understand what was most significant and what is values are held by stakeholders.
- Contribution is assigned to the intervention by the story-teller.
- **GREAT FOR** large-scale and/or system-wide interventions when many things might be changing differently for different stakeholders. Also great for innovations. Commonly used in community-based interventions, such as for social norm change.



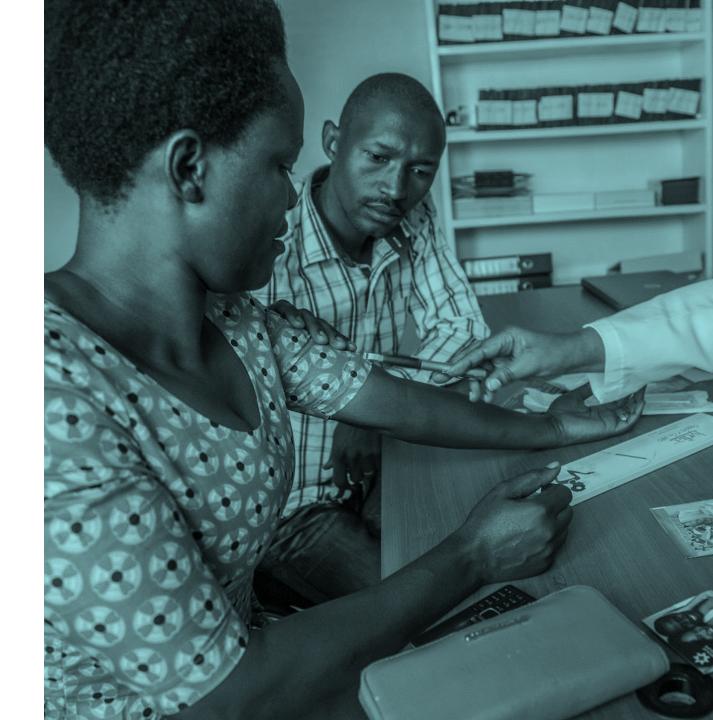


- Stakeholders are brought together to discuss what occurred as a result of the intervention. The output of the session(s) is a ripple effect map.
- **GREAT FOR** social change and community-based interventions, advocacy and scaleup, as well as quality strengthening in hospitals and health systems.

Contribution Analysis

- Establishes the role or contribution of the intervention in leading to an observed outcome. Recognizes that many factors likely contributed towards the outcome.
- As it builds from the intervention's causal framework, requires a strong, evidence-based causal framework, with evidence gaps and assumptions identified.
- GREAT FOR when the relationship between the intervention and the intended outcome is not clear, such as when there are multiple actors working together towards related changes. Also great for thinking about how to replicate and scale interventions.

How do you choose among the CAM approaches?



What questions do we need to answer?

		CAM APPROACH										
		Social Network Analysis	Causal Link Monitor.	Outcome Mapping	Sentinel Indicators	Pause & Reflect	Outcome Harvest.	Most Sig. Change	Ripple Effect Mapping	Contrib. Analysis		
	What outcomes might we be missing?					•	•	•	•			
	What outcomes might yet emerge?		•	•	•				•			
	How do stakeholders perceive the intervention?	•		•		•		•	•			
	What factors contributed to the observed outcome(s)?	•	•	•	•		•	•	•	•		
	What is happening in the wider context?	•	•		•	•						

When in the project life cycle do you need the answers?

		CAM Approach									
	Social Network Analysis	Causal Link Monitor.	Outcome Mapping	Sentinel Indicators	Pause & Reflect	Outcome Harvest.	Most Sig. Change	Ripple Effect Mapping	Contrib. Analysis		
Design & Planning/Formative Assessments	•	•	•	•							
Implementation/ Ongoing Monitoring		•	•	•	•	•	•	•			
Evaluation/ Interim or Final Evaluations	•	•	•	•	•	•	•	•	•		

What resources do you have and/or need to implement?

		CAM Approach									
		Social Network Analysis	Causal Link Monitor.	Outcome Mapping	Sentinel Indicators	Pause & Reflect	Outcome Harvest.	Most Sig. Change	Ripple Effect Mapping	Contribut. Analysis	
Data	Qualitative	•	•	•	•	•	•	•	•	•	
Туре	Quantitative	•	•	•	•					•	
Ease	Skills & resources required	1-3	2, 3	2, 3	2	1	2	1, 2	2, 3	2	
of Use	Intensity/Level of effort	1, 2	1	2	1	1	2, 3	2, 3	2	2, 3	
	Type of engagement	1	1, 2	1, 2	3	2	3	1, 2	1	2, 3	

* 1 = Can be implemented by community level entity; 2 = Can be implemented by MOMENTUM project staff; 3 = Outside assistance likely needed.

** **1** = Able to integrate within existing staff workload and/or short-term engagement of external assistance; **2** = Moderate dedicated staff time needed and/or medium-term engagement and/or; **3** = Dedicated staff needed and/or longer-term external engagement

[†]**1** = Best as in-person engagement with group or in community setting; **2** = Easily adapted for virtual engagement with videoconferencing and related technologies; **3** = Able to complete remotely via desk reviews, email, phone calls, online surveys, etc.

Mix and Match!

- Approaches have similarities and differences, their functions may overlap and work well together.
- Some approaches intentionally build upon or match up with others.
- Using several allows you to experiment to understand which approaches work best in your context (and to adapt them as appropriate).



Break

5 minutes to:



- stretch
- refill your coffee
- get a snack
- pet your cat/dog

- meditate
- visit the facilities
- drink some water
- gaze out the window

3 Integrating CAM with M&E and Adaptive Learning

Types of Monitoring

PERFORMANCE

"ongoing and systematic" collection of performance indicator data and other quantitative or qualitative information to reveal whether implementation is on track and whether expected results are being achieved"*

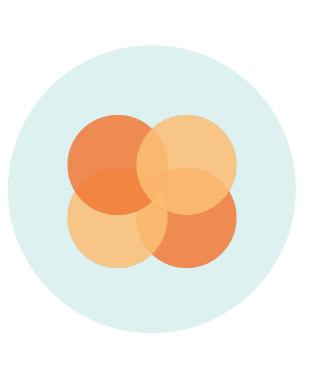
CONTEXT

"systematic collection of information about conditions and external factors relevant to the implementation and performance"*

COMPLEMENTARY

supplement performance and context monitoring, especially when changes are difficult to predict and/or interpret

Why integrate CAM approaches?



- Build on project's causal framework
 - Help convey underlying assumptions (ex. Causal link monitoring)
 - Assist in defining roles of stakeholders (ex. Social network analysis)
 - Help to better understand the larger context (ex. Sentinel indicators)
- Provide a balance between rigor and timely, practical information
- Helps to synthesize learning across complex projects (like MOMENTUM)

Integration with Adaptive Learning

- Adaptive Learning (AL) creates an enabling environment for CAM approaches.
- CAM approaches integrate well in AL contexts.
 - Built-in feedback mechanisms (i.e. pause and reflect, most significant change, etc.)
 - Allow for flexibility.
 - Participatory in nature, contributing to uptake.
- <u>MOMENTUM's AL Guide</u> can help establish the enabling environment to implement CAM approaches.

4 Ripple Effect Mapping:

Overview of the Method and Lessons Learned from Botswana & Tanzania

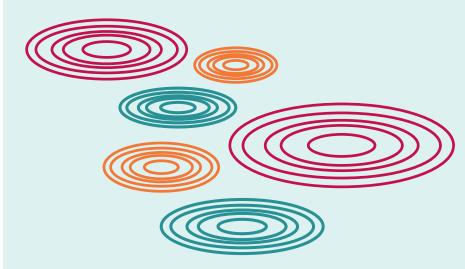


What is ripple effect mapping (REM) method?

- Ripples are tiny waves generated when someone drops a stone into water
- REM is a participatory method to understand the effects (or ripples) that a complex program has on a community or beneficiary
- REM engages program stakeholders to discuss and visually map these ripples

Why use REM in evaluations?

- Is well suited for complex evaluations
- Used as part of a larger evaluation toolkit
- Can engage participants and stakeholders at different levels, and create positive energy for further action
- Can help to ground-truth [parts of] a program's theory of change
- Can uncover unanticipated consequences



What skills does REM take?

Facilitation

- Engaging in meaningful discussion RIPPLE
- Creating open communication
- Organizing time

Evaluation

EFFECT

MAPPING

- Group interviewing
- Rapid qualitative data analysis
- Developing thematic categories
- Identifying causal pathways

How do you conduct REM?

Appreciative inquiry interviews

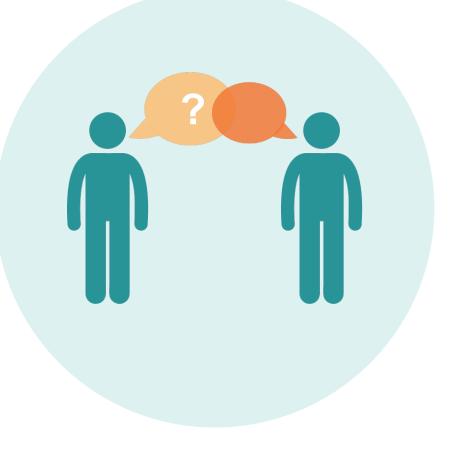




What is involved with the appreciative inquiry interviews?

Peer-to-peer interviews

- Participants divide into pairs for peer-to-peer interviews and ask a set of standard questions
- Facilitator ensures that participants:
 - Use the standard set of questions developed by the evaluation team to elicit program outcomes
 - E.g., "Tell me a story about how you have used the information received through the project.";
 - "Tell me a story of how the project has improved your physical health."
 - Ask follow-up questions for clarification
 - Use active listening skills
 - Take notes

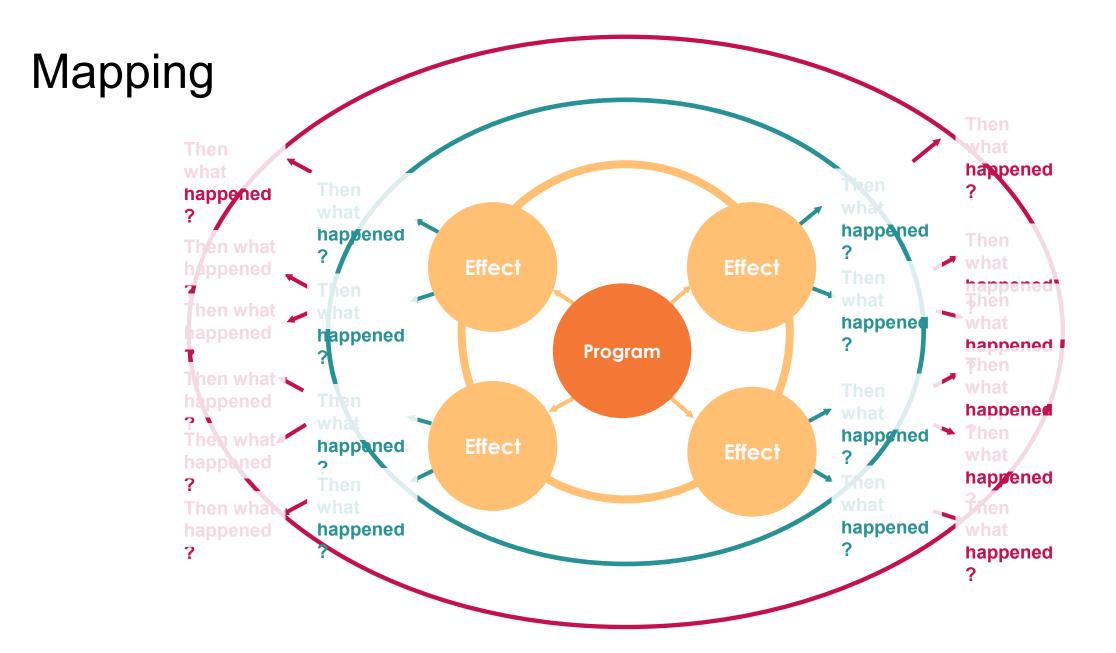


What is the process of the group reflection and mapping?



Group reflection

- Facilitator should ask each pair to offer one story
- Facilitator should probe participants:
 - Then what happened?
 - Who was involved?
 - What skill, approach, or tool was involved?
 - What are the people doing differently now?
 - How have relationships changed as a result?



What is the process of the group reflection and mapping?

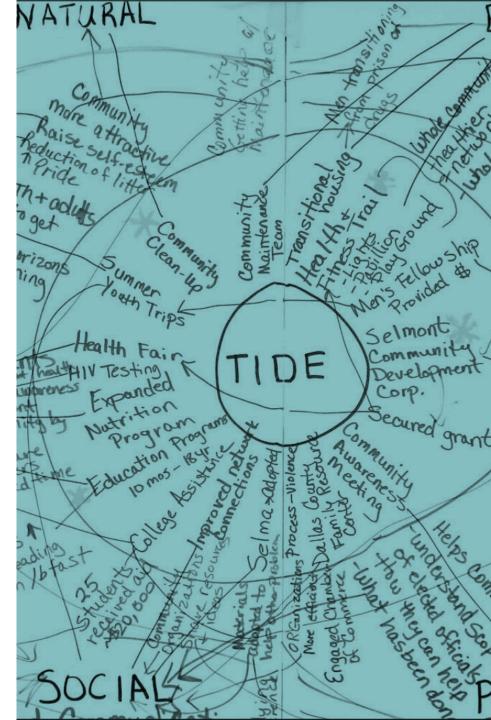


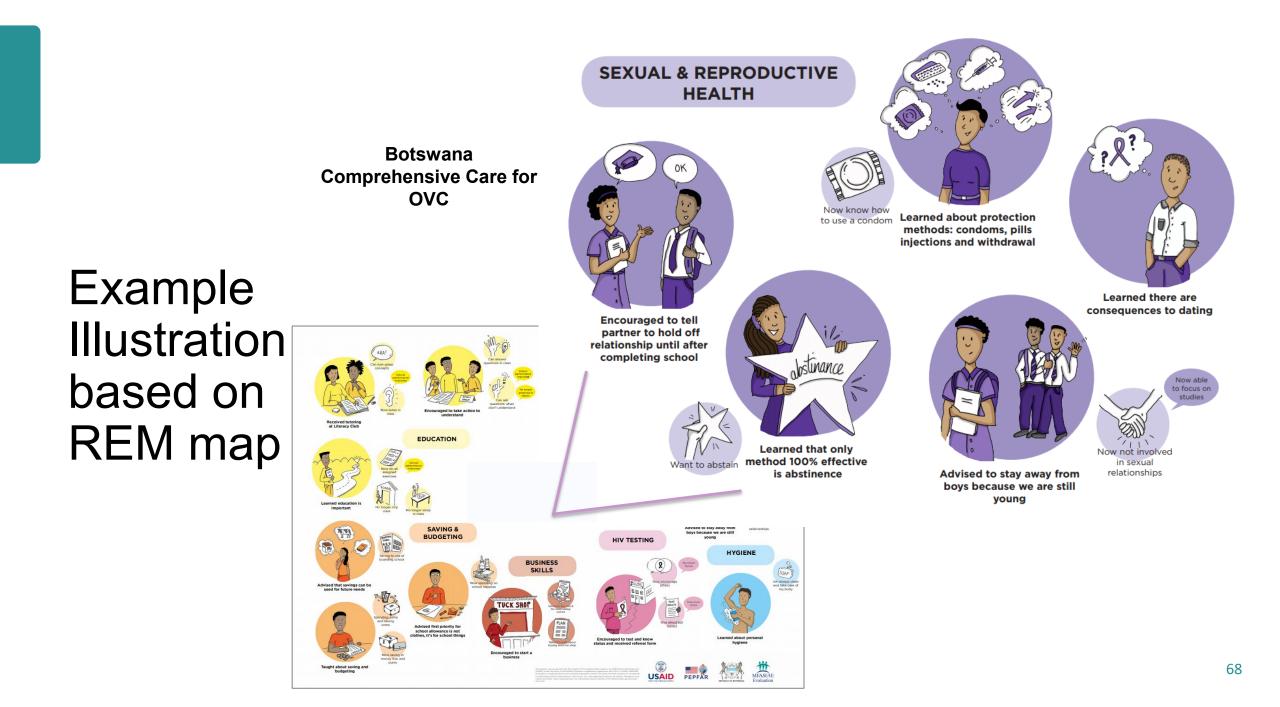
Post-mapping group reflection

- Ask the group to reflect on the map as a whole
- Open participatory discussion

How do you analyze REM data?

- Analysis starts during the mapping session
- For maps:
 - Multiple software programs available (MindJet, Xmind, etc.) – some free
 - Can use to redraw the maps, or add layer of analysis by coding
 - Session transcripts and notes can be coded in qualitative software





Incorporating REM as part of a program evaluation in Botswana



Botswana

- Evaluation of a multi-sectoral program for orphans and vulnerable children (OVC) focused on their transition to adulthood
- Qualitative objective: Examined how factors at the personal, family, school, community and service delivery levels influenced the education, economic and health trajectories and related outcomes of OVC
- Conducted REM groups with 16-18 year old adolescents

Incorporating REM as part of a program evaluation in Tanzania

Tanzania

- Evaluation of a public sector systems strengthening program focused on health governance
- Qualitative objective: Examined the perceptions of program implementers, community members and other stakeholders on performance and influence of the program on uptake of health services, finance and human resource, and community engagement and governance.
- Conducted REM groups with local government counselors



What are some lessons learned from using REM in Botswana & Tanzania?



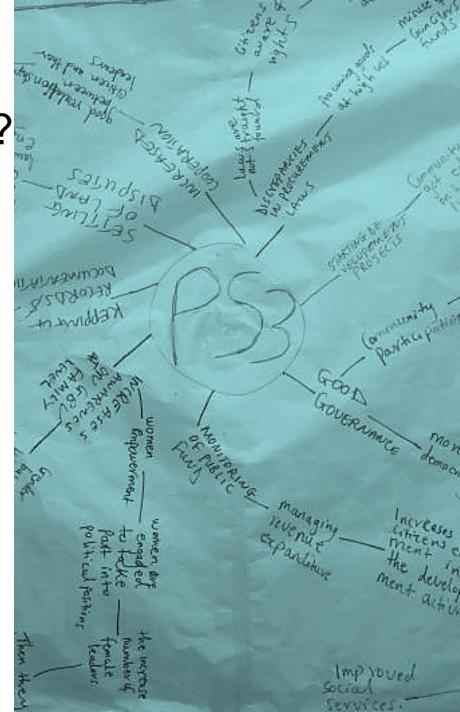
Training of evaluation/facilitation staff

- Clarify relationship between facilitator, mapper, and notetaker
 - E.g., facilitator checks if mapper is capturing outcomes, notetaker is documenting key quotes
- Have interviewers do a practice session as if they are REM participants in a real, common experience they share (e.g., bachelor's degree program); trainer(s) lead the facilitation and mapping
- Then ask interviewers to do a mock session of your specific topic, thinking about the role they will play (farmer, business woman) in the appreciative inquiry interviews beforehand

What are some lessons learned from using REM in Botswana and Tanzania?

Tailoring

- How will the population see the concept mapping?
- Adults versus youth
 - May need to ask questions differently
 - Youth may not understand some concepts the same way adults do
- Sensitive topics decide ahead of time if/how to map
- Multi-pronged programs may need to be broken down and discussed by topic



What are some lessons learned from using REM in Botswana and Tanzania?

Implementation

- Clarify with participants that you want as many details as possible
 - Request "ripples", i.e. outcomes, further out than outputs on the causal chain
 - Probe for concrete examples
- Use audio recorders

Participant: *We learned how to manage finances.*

Facilitator: Okay, so then what?

Participant: *I* developed a budget and needed less guidance than I normally do.

5 Break-out Discussion

Break-out Questions

- Briefly introduce yourselves!
- Who has worked on CAM before?
- What stood out as most interesting from the presentations?
- How could CAM be applied to your project's learning agenda?

6 Wrap-Up

Today's Main Takeaways

Complexity is common in most situations under MOMENTUM awards.

- CAM can help answer questions not easily addressed by traditional M&E.
- CAM approaches can be mixed and matched together, and also integrated with traditional performance M&E.
- Adaptive learning and CAM approaches are complementary.
- Ripple effect mapping is one useful CAM approach. It can identify unanticipated outcomes and factors contributing to outcomes.

In the next session: Wednesday, June 23rd

- How to prepare for implementing CAM approaches
 - Facilitation skills, systems thinking, strategy, qualitative inquiry
- Strengthening your theories of change
- Adapting CAM approaches and developing a plan to implement CAM
- More examples of CAM in practice
- Don't forget to register: <u>Session 2 Registration</u>

Pause and Reflect (After-action review)



QUESTIONS:

- What did you expect?
- What actually happened?
- What went well?
- What did not go well?
- What should we do next time?



PROCESS:

- 1-minute of silent reflection
- Using RiseUp Pad, answer the questions
- Discussion

THANK YOU

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