



# MSH LMRP Outcome Harvesting Evaluation Report

09/29/2023

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## ACRONYMS

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CDC	U.S. Centers for Disease Control and Prevention
FETP	Field Epidemiology Training Program
IRB	Institutional Review Board
LDP+	Leadership and Development Program Plus
LMRP	Leading and Managing for Results in Pandemics
MOH	Ministry of Health
MSH	Management Sciences for Health
NPHI	National Public Health Institute

## EXECUTIVE SUMMARY

### Introduction

The global response to the coronavirus pandemic (COVID-19) was fragmented, inequitable, and politicized resulting in renewed attention to the outsized influence leadership has over reducing the impacts of public health threats and emergencies.<sup>1,2,3,4,5,6</sup> Decision-makers at all levels were overwhelmed and struggled to prioritize needs and make rapid decisions in the complex and evolving emergency environments (or prepare in advance and mitigate risks); communicate quickly and clearly; mobilize resources to meet changing needs; engage stakeholders across sectors to develop partnerships; access current data, use it, and transparently share it; navigate the politics of the response; and adapt as they progressed.

In response to these disparities, the Leading and Managing for Results in Pandemics (LMRP) program was developed and customized to accompany public health teams through a proven, data-driven improvement process where they exercise effective leadership and management practices to mobilize stakeholders and strengthen public health emergency preparedness, response, and recovery, using available local resources. The LMRP program was a 14-15 week blended learning program of digital and in-person learning and application for teams of health workers already working together as part of their country's health system response to COVID-19 and other related public health threats. Implementation of the LMRP program was active in six countries between February 2022 – April 2023: Kenya, Malawi, Nigeria, Peru, Rwanda, and Uganda.

### Objectives and Methods

The LMRP program was evaluated using the outcome harvesting methodology. The aim of the evaluation was to further understand the outputs and intermediate outcomes of participation in the LMRP program through a five-step iterative outcome harvesting process.<sup>7</sup> Evaluators also strived to understand the impact of participating in the LMRP program on participants' application of the eight leading and managing practices as well as readiness of participants and their teams to respond to pandemics. Data that informed the evaluation included pre- and post-program assessments and semi-structured in-depth interviews with LMRP program participants and supervisors. Evaluators analyzed data utilizing frequency and thematic analysis, drafted output and outcome statements, conducted outcome validation workshops, triangulated all evaluation data, and further refined the output and outcome statements to determine program outcomes and provide key recommendations.

<sup>1</sup> Ahern S, Loh E. Leadership during the COVID-19 pandemic: building and sustaining trust in times of uncertainty *BMJ Leader* 2021;5:266-269. <http://dx.doi.org/10.1136/leader-2020-000271>

<sup>2</sup> Al Saidi AMO, Nur FA, Al-Mandhari AS, El Rabbat M, Hafeez A, Abubakar A. Decisive leadership is a necessity in the COVID-19 response. *Lancet*. 2020 Aug 1;396(10247):295-298. doi: 10.1016/S0140-6736(20)31493-8. Epub 2020 Jul 3. PMID: 32628904; PMCID: PMC7333999.

<sup>3</sup> Vinopal, C. (2021, April 6). What we've learned about leadership from the COVID-19 pandemic. PBS News Hour.

<https://www.pbs.org/newshour/world/what-weve-learned-about-leadership-from-the-covid-19-pandemic>.

<sup>4</sup> UN WOMEN (2021) Effective, decisive, and inclusive: Women's leadership in COVID-19 response and recovery <https://www.unwomen.org/en/digital-library/publications/2021/10/effective-decisive-and-inclusive-womens-leadership-in-covid-19-response-and-recovery>

<sup>5</sup> Michaela J. Kerrissey and Amy C. Edmondson (2020) What Good Leadership Looks Like During This Pandemic <https://hbr.org/2020/04/what-good-leadership-looks-like-during-this-pandemic>

<sup>6</sup> Timon Forster & Mirko Heinzl (2021) Reacting, fast and slow: how world leaders shaped government responses to the COVID-19 pandemic, *Journal of European Public Policy*, 28:8, 1299-1320, DOI: [10.1080/13501763.2021.1942157](https://doi.org/10.1080/13501763.2021.1942157)

<sup>7</sup> Wilson-Grau, R., Peersman, G., and Herft, N. (2022, August). Outcome Harvesting.

[https://www.betterevaluation.org/en/plan/approach/outcome\\_harvesting](https://www.betterevaluation.org/en/plan/approach/outcome_harvesting).

## Results

Analysis of the pre/post behavioral assessment data found increased frequencies of scanning, focusing, implementing, inspiring, aligning and mobilizing, planning, and organizing leading and managing practices. Team assessment pre/post data found improvement in how participants view team members working together towards a common goal, and a general improved sense of morale and complementary skills among the team members following LMRP program participation. Program participants reflected on their work with their teams on action plan implementation and learnings from the program through the interviews. Cross-country themes in the qualitative data included improved teamwork, strengthened leadership skills, increased team collaboration and trust, improved communication, tools and skills gained to handle future pandemics, and improved management of current disease outbreaks. Utilizing the analyzed quantitative and qualitative results, the evaluation team drafted output (e.g., *improved ability to delegate responsibilities within a team as a result of program participation*) and outcome (e.g., *increased team cohesion and ability to accomplish goals as a result of LMRP program participation*) statements for each country in line with the common themes. All output and outcome statements were validated during the outcome validation workshops.

## Discussion

The evaluation found evidence that LMRP program participants gained knowledge, skills, and tools to be better team members, leaders, and public health practitioners preparing for future public health emergencies and managing disease outbreaks. The refined and validated outcomes of participating in the program are: (1) improved teamwork and ability of participants to work as a unified and cohesive team; (2) improved leadership skills and application and understanding of the key leading and managing practices; (3) improved pandemic readiness; and (4) improved interpersonal skills. Overall, the program brought about positive changes in the ways that participants approach their work and apply the leading and managing practices to work with team members toward a common goal.

## Recommendations

The LMRP program participants had the opportunity to apply and utilize the leading and managing practices directly through program modules, work on action plans, and work on disease outbreaks during the program and following the program implementation. It is recommended that future iterations of the program continue to have interactive learning components and teams-based activities similar to this approach. Furthermore, the overall multi-sectoral teams-based approach should be continued, as team members grew together, collaborated with, and learned from each other while completing the program. A third recommendation is to consider expanding LMRP program activities to include more detailed monitoring and evaluation and data analysis modules, or to link program participants with existing data analysis capacity strengthening platforms. Similar, alternate evaluation methodologies should continue to be utilized to further capture and contribute to the evidence in the subject area of team-based leadership development and pandemic preparedness.

## INTRODUCTION

An effective response to pandemics and other public health emergencies should be both comprehensive and integrated into society. Pandemic responses require that decision makers across sectors come together to identify social, economic, political, cultural, and environmental determinants which perpetuate the public health threat and those that motivate its resolution. Decision makers also must mobilize resources and coordinate consistently across institutions, with transparent oversight, governance, and reporting while communicating direction effectively to secure public trust and buy-in. Behind these actions are the skills and practices to organize, implement, adjust, and manage this whole-of-society response<sup>8</sup>. However, the recent global experience of COVID-19 and its public health emergency response was not cohesive and has largely been referred to as a cycle of panic and neglect<sup>9</sup>.

The global response to COVID-19 was a resounding demonstration of the lack of preparation shared between institutions, policy makers, and public health professionals in overseeing emergency preparedness and managing outbreak response. Policymakers and health leaders, at the initial stage of the pandemic, failed to anticipate the extent or duration of health service disruptions and in many cases, the absence of appropriate planning for non-COVID-19 service delivery. As a result, COVID-19 disruptions resulted in heightened mortality and morbidity<sup>10</sup>. Shortcomings have also been identified in the health workforce's ability to mobilize human, material, and financial resources<sup>11</sup>. These deficiencies are at odds with resilient leaders and institutions which can withstand disruptive public health events while also maintaining the delivery of routine health services. The Leading and Managing for Results in Pandemics (LMRP) program was developed to enhance the capacities of public health decision makers in combatting these limitations. The program leveraged connections with the existing Field Epidemiology Training Program (FETP) and National Public Health Institutes (NPHI).

There is growing consensus and evidence that the indicators of leadership and management are critical to understanding how to achieve health outcomes in the face of public health crises<sup>12</sup>. However, these indicators are often viewed and learned as individual attributes. Health system management training and capacity development programs that do include content on adaptive leadership, management, and governance, frequently lack content to develop skills in public health preparedness and response or prepare decision-makers to lead effectively during acute or protracted crises. The leadership in crisis courses that exist tend not to be tailored to the health workforce or low resource settings, and/or are classroom-based and designed for individual learners. There is a need for experiential, context-appropriate, and scalable ways of strengthening not only the adaptive leadership capabilities of individuals, but the collaborative leadership capabilities of groups, to enable the data-driven, agile, coordinated, and trustworthy action necessary to effectively respond to and recover from pandemics and other public health threats, and to prepare for, prevent, and/or mitigate their risks in advance. As such, there are no other programs like the LMRP, an experiential, team-based leadership development program delivered via blended learning in the context of pandemics or other public health emergencies. For this reason, the evaluation was essential in capturing and contributing evidence to the subject area of team-based

<sup>8</sup> Timon Forster & Mirko Heinzl (2021) Reacting, fast and slow: how world leaders shaped government responses to the COVID-19 pandemic, *Journal of European Public Policy*, 28:8, 1299-1320, DOI: [10.1080/13501763.2021.1942157](https://doi.org/10.1080/13501763.2021.1942157)

<sup>9</sup> Sands, Peter (2017). From panic and neglect to investing in health security: financing pandemic preparedness at a national level. World Bank. <https://documents1.worldbank.org/curated/en/979591495652724770/pdf/115271-REVISED-FINAL-IWG-Report-3-5-18.pdf>

<sup>10</sup> Mustafa, S., et al. COVID-19 Preparedness and Response Plans from 106 countries: a review from a health systems resilience perspective, *Health Policy and Planning*, Volume 37, Issue 2, February 2022, Pages 255–268, <https://doi.org/10.1093/heapol/czab089>.

<sup>11</sup> Peters, M.A., et al. Resilience of front-line facilities during COVID-19: evidence from cross-sectional rapid surveys in eight low- and middle-income countries, *Health Policy and Planning*, Volume 38, Issue 7, August 2023, Pages 789–798, <https://doi.org/10.1093/heapol/czab032>.

<sup>12</sup> Witter, S., et al. Health system resilience: a critical review and reconceptualization, *Global Health*, Volume 11, Issue 9, September 2023, Pages e1454-e1458, [https://doi.org/10.1016/S2214-109X\(23\)00279-6](https://doi.org/10.1016/S2214-109X(23)00279-6).

leadership development, practice for public health emergency prevention, preparedness, response, and recovery, and adding to the existence evidence around pandemic response and preparedness programs and institutions such as the FETP and NPHIs.

This evaluation report provides an overview of the experiential learning program including the involvement of key actors and the program's intended outcomes. The methodology implemented to evaluate the LMRP follows along with key qualitative and quantitative findings from the program. Cross-country outcomes and recommendations are provided as the final component of this report.

## PROGRAM DESCRIPTION

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The foundational premise of the LMRP program is that through applying effective leading and managing practices, teams can overcome obstacles and improve the way they respond to public health threats as well as prepare for future ones, and that overtime, better performing teams contribute to more resilient public health systems. Partnered with the U.S. Centers for Disease Control and Prevention (CDC) and funded through a multi-year cooperative agreement, MSH designed and delivered the LMRP as a team-based experiential learning program aimed at enhancing the leadership and management capacities of public health teams to support them to successfully take on urgent challenges emerging from the COVID-19 pandemic and contribute to effective national and local preparedness, response, and recovery efforts (Figure 1). Additionally, through increased leadership and management capacity, teams of public health practitioners will be equipped with strengthened skills to work together to: effectively manage the response at their levels, and enable better stewardship of scarce resources, more transparent decision-making, evidence-informed prioritization of urgent activities, improved coordination and collaboration, and greater resilience in the face of current and future public health threats.

## PROGRAM DESIGN

Based on the learnings and content developed for MSH's Leadership Development Program Plus, the LMRP was modified and designed as a 14–15-week blended learning program of digital and in-person learning and application (Figure 1). Key aspects of the LMRP program included:

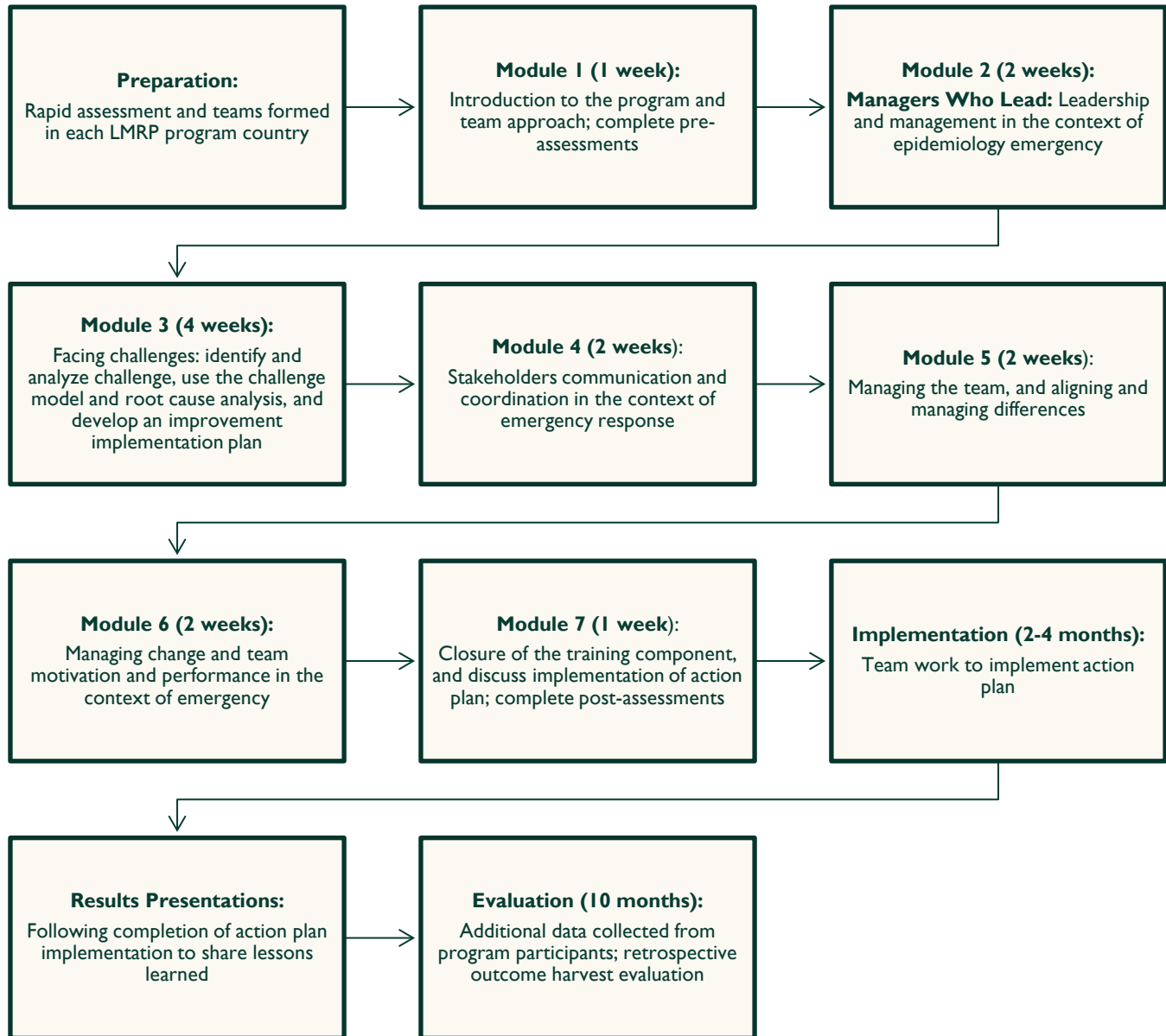
- Creating an inspiring shared vision for accomplishing a team's mandate.
- Applying leading and managing practices to improve teamwork and effectiveness.
- Identifying and addressing a key challenge related to COVID-19, achieving a measurable result, and enhancing capacities to prevent, mitigate, respond, and recover from future public health emergencies.
- Aligning and mobilizing stakeholders to join the team in tackling their challenges.



To accomplish this, participants engaged in seven online learning modules, participated in virtual forums to discuss common governance, leadership, and management challenges with their respective teams ([Table 1](#)), and discussed how they could address challenges in their contexts and work collaboratively on their LMRP projects.

Module learning was individual, though participants were encouraged to collaborate with other team members and ensure that all team members completed the module activities before moving on to the subsequent modules and holding their bi-weekly team meetings. The diagram below ([Figure 1](#)) outlines the program activities across the seven modules and implementation of the LMRP projects. Through the modules, participants learned about various tools such as the Challenge Model and Action Plan, which are included for reference in the annex.

<b>Table 1. LMRP Team Composition by Country</b>		
Country	Number of teams	Number of participants
<b>Uganda</b>	10	82
<b>Kenya</b>	9	74
<b>Rwanda</b>	9	55
<b>Malawi</b>	8	68
<b>Nigeria</b>	7	58
<b>Peru</b>	10	93
<b>TOTAL</b>	<b>53</b>	<b>430</b>

**Figure 1. LMRP Program Activities**

Following the completion of module learning, teams continued applying their learning through the implementation of their action plans, which were developed following Module 4. Teams designed their action plans to align with their existing team responsibilities and mandate. This implementation phase lasted an additional 2-4 months. Each country's LMRP concluded with teams presenting their results and exchanging their experience and learning. Participants completed pre-module and post-module assessments and other supplemental data was collected throughout LMRP program participation. Evaluation activities, which will be described in the next section, considered program data and additional data collected following the completion of the results presentations in each country.

## INTENDED BENEFICIARIES

Through a rapid needs assessment involving a desk review, semi-structured key informant interviews, and focus groups, MSH scoped the current context of each country's national health system and aligned the implementation of the LMRP program to each country's management of public health emergency response. The following guiding questions were posed for information gathering:

- In the pandemic response, where do the greatest challenges lie?
- Which institutions or departments are responsible for responding to public health emergencies? What level are these teams working at (national or sub-national)? What role do these teams play?
- What are the main challenges these teams face related to emergency response management and leadership?
- What are the main management and leadership competencies these teams need to develop to face these challenges?

These stakeholder alignment activities were conducted with local ministries of health (MOHs), NPHIs, and CDC field offices with the overall goal of informing the selection of LMRP teams. Participation in the program was comprised of public health workers at the national, district, and county levels associated with single institutions, coordinating bodies or networks. The selection of these teams was also informed by the participants already working together in a team or group as part of their country's health system response to COVID-19 and other related public health threats.

## EVALUATION BACKGROUND

### PURPOSE AND INTENDED USE

The aim of this evaluation was to conduct an outcome harvest assessment to further understand the outputs and intermediate outcomes of participation in the LMRP program across the six countries (Kenya, Malawi, Nigeria, Peru, Rwanda, and Uganda). Further, this evaluation aimed to evaluate and understand the impact of participating in the program on participants' application of the eight leading and managing practices (Table 2) to face challenges and achieve results (Figure 2), as well as readiness of participants and their teams to respond to pandemics. Through a mixed methods outcome harvesting approach, the evaluation collected ("harvested") evidence of what changed ("knowledge and behavioral outcomes") from those closest to the intervention, following participation in the LMRP. The evaluators then worked backwards to determine whether and how the LMRP program contributed to the change.

**Table 2. Eight Leading and Managing Practices**

<b>Scan</b> environment to identify critical challenges 	<b>Organize</b> teams to work together to face challenges and obtain results 
<b>Focus on</b> priorities in the context of emergency response 	Lead in way that keeps others on the team <b>inspired</b> , united and motivated 
<b>Align</b> stakeholders and <b>mobilize</b> human and material resources to contribute to  	<b>Implement</b> activities and use tools and/or data to achieve goals. 
Elaborate realistic and effective action <b>plans</b> to face critical challenges 	Use data to analyze challenges, define measurable targets, monitor results, and make evidence-based adaptations to improve performance ( <b>monitoring and evaluation</b> ) 

The intended use of the evaluation results was to understand the strengths and weaknesses of the LMRP program, inform future iterations of the LMRP program, and identify ways in which the program can be modified and strengthened. Additionally, the results are currently being utilized to communicate overall program findings with key stakeholders and program participants. The findings will soon also be shared more broadly through peer-reviewed publication so that key results and recommendations are shared with those in the field of global health and health systems strengthening.<sup>13</sup>

## EVALUATION SCOPE

During planning of the evaluation, the Kirkpatrick Evaluation Framework was considered to understand the different levels of change and how various evaluation methods can access changes in reactions (level 1), learning (level 2), behavior (level 3), and results (level 4).<sup>14</sup> The eight-tier Learning Transfer Evaluation Model was also consulted to differentiate between the learning tiers (1-6) and transfer of work and knowledge tiers (7-8).<sup>15</sup> To achieve the aim of better understanding the outputs and intermediate outcomes from the LMRP program, the evaluation team designed evaluation activities in line with the outcome harvesting methodology. The evaluation activities focused on collecting supplemental data across all six countries (Kenya, Malawi, Nigeria, Peru, Rwanda, and Uganda), which was done after each of the results presentations.

The evaluation team submitted a protocol with the evaluation data collection tools and informed consent forms to the Population Services International Institutional Review Board (IRB). Once IRB approval was received on October 11, 2022, the evaluation team hired and trained five external consultants and MSH Peru employees to conduct the interviews and outcome validation workshops. The evaluation team also trained MSH employees in quantitative and thematic qualitative analysis to assist with the analysis of the assessment and interview data, respectively.

## EVALUATION METHODS

### APPROACH

To achieve the objectives of the evaluation, the evaluation team utilized a participatory outcome harvesting approach. Outcome Harvesting collects (“harvests”) evidence of what has changed (“outcomes”) and then, working backwards, determines whether and how an intervention has contributed to these changes. The definition of outcomes and how change happened is refined and verified by informants (participants and supervisors) who were closest to the intervention. The aim of outcome harvesting is to gather evidence-based answers to the following questions: 1. what happened; 2. who did it (or contributed to it); 3. how do we know this and is there corroborating evidence; and 4. why

**Figure 2. Application of Leading and Managing Practices**



<sup>13</sup> Global Health Learning (2023). *Leading and Managing Framework*. <https://www.globalhealthlearning.org/sites/default/files/page-files/Leading%20and%20Managing%20Framework.pdf>.

<sup>14</sup> Kirkpatrick Partners. (2023). *What is the Kirkpatrick Model*. <https://www.kirkpatrickpartners.com/the-kirkpatrick-model/>.

<sup>15</sup> Thalheimer, W. (2018, December 28). The Learning-Transfer Evaluation Model (LTEM). *Work-learning Research*. <https://www.worklearning.com/2018/02/14/the-learning-transfer-evaluation-model-item/>.

is this important, and what do we do with what we have learned. Outcome harvesting involves nine key principles and six iterative, key steps that the evaluation team adapted to the implementation context of the LMRP (Table 3).<sup>16</sup>

**Table 3. LMRP Outcome Harvesting Steps and Outputs**

Step	Description	Outputs	Timeline
1	<b>Design the outcome harvest:</b> guiding questions developed based on the intended use of the harvest; and tools designed for collecting supplemental data and documenting outcomes	Harvest questions, plan for outcome harvesting steps 2-6, and any supplemental tools	1-2 months depending on IRB approval processes; happens at the same time as program implementation
2	<b>Gather data and draft outcome descriptions:</b> collect data by document review, interviews, and surveys; outcome descriptions are drafted keeping the guiding questions in mind and capturing both positive and negative, as well as intended and unintended outcomes	Draft outcome descriptions	3-4 months; collection of supplemental data and drafting outcomes happens immediately after completion of program (i.e., results presentations); all programmatic data gathered during program implementation
3	<b>Engage informants (program participants and supervisors) in formulating outcome descriptions:</b> provides a moment for informants to pause and reflect on the changes they are seeing in the immediate environment and the broader system, which are informed by the data gathered, and which they might otherwise not have a chance to do	Participants enhance the quality of the outcomes by adding additional information and discussing significance → Refined outcome descriptions	1 month; happens immediately after completion of draft outcomes
4	<b>Substantiate:</b> knowledgeable, independent individuals (outside of the intervention) review and validate outcome descriptions	Externally validated outcome descriptions	0.5 month; happens immediately after draft outcomes are revised following the validation workshops
5	<b>Analyze and interpret:</b> analyze the finalized and substantiated outcomes to provide evidence-based answers to harvesting questions	Refined outcome descriptions, contribution, and significance	2-3 months; happens alongside Steps 2-4
6	<b>Support use of findings:</b> ensure that the findings are linked to action and the	Use of findings and support of concrete	1-2 months; happens immediately after Step 5

<sup>16</sup> Wilson-Grau, R., Peersman, G., and Herft, N. (2022, August). Outcome Harvesting. [https://www.betterevaluation.org/en/plan/approach/outcome\\_harvesting](https://www.betterevaluation.org/en/plan/approach/outcome_harvesting).

	findings are utilized to inform decision-making	steps that can be taken in response	
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## EVALUATION QUESTIONS

During the first step of the outcome harvesting process (Table 3), the evaluation team determined the assessment questions.

### Outcome harvesting questions:

1. What are the positive and negative (intended and unintended) outcomes of the LMRP program?
2. What effect did the LMRP program participants' use of the eight leading and managing practices have on the observed outcomes? How and why did this happen?

### Overall evaluation questions:

1. How has the LMRP program impacted participants' and teams' leading and managing practices and ability to face challenges related to COVID-19?
2. How has the LMRP program contributed to trainees' ability to apply the eight leading and managing practices during completion of the LMRP action plans? (short-term)

## DATA SOURCES AND SAMPLE SIZE

The data sources for the evaluation included all quantitative and qualitative data collected during the program. LMRP participants took pre- and post-program behavioral self-assessments ("Leadership and Management Behavioral Self-Assessment Survey") and team effectiveness assessments ("Assessment: How Well Does Your Team Function?") (Figure 1).<sup>17</sup> Qualitative data was collected from semi-structured in-depth interviews with LMRP program participants and supervisors. Refer to the annex for pre/post assessment questionnaires and interview guides. Other data sources included LMRP module check-in data, meeting notes, and program documents. All notes and validated outcomes and outcome descriptions from the outcome validation workshops informed the findings of this evaluation.

**Table 4. Target Number of Interviews by Country**

Country	Target # of Participant	Target # of Supervisor	Total
Kenya	9	4	13
Malawi	8	4	12
Nigeria	7	4	11
Peru	10	4	14
Rwanda	5	4	9
Uganda	8	4	12
<b>Total</b>	<b>47</b>	<b>24</b>	<b>71</b>

The sample size for the qualitative data was 71 interviews (41 participant interviews and 24 supervisor interviews) (Table 4). These targets aimed to interview one participant per team per country and four supervisors per country. For the other existing programmatic data and assessment data, all available responses were considered for the analysis. For the outcome validation workshops, the target was to reach and involve as many participants and supervisors as possible

<sup>17</sup> Logan, J.M., Holladay, C.L., Schumacher, A., and Simmons, D. (Year, Month Day). Assessment: How Well Does Your Team Function. *Harvard Business Review*. <https://hbr.org/2019/02/assessment-how-well-does-your-team-function>.

per country who completed the LMRP program. For the step of substantiation, the target was to engage one to two stakeholders per country for external validation of the outcomes.

## DATA COLLECTION METHODS AND PROCEDURES

### DATA COLLECTION

#### *Outcome Harvesting Step #2 Data Collection*

Following the design of the outcome harvest (Step #1, Table 3), the evaluation team began supplemental data collection. In addition to quantitative programmatic data (team assessments and behavioral assessments), data collected for the evaluation included in-depth interviews with LMRP participants and supervisors. To collect data from one participant per team per country, the data collection team in each country put out an open call to all participants and any interested participants were interviewed. If any teams were not represented, the data collectors randomly selected participants by team. For the supervisor interviews, a similar approach was utilized, and the data collectors interviewed any interested supervisors.

All participant and supervisor interviews were conducted virtually using the Microsoft Teams or Zoom platform. Each interview took about one hour to complete. All interviews were recorded, and the data collectors utilized the transcription feature to capture the written transcripts from each of the interviews. In instances where the transcription feature did not work or the quality of the transcript was poor, Transkriptor software was utilized, or transcription was done manually. All transcripts were checked for quality following completion of the transcripts. Except for Peru, all interviews and transcripts were done in English. In Peru, all interviews were done in Spanish, transcripts were documented in Spanish, and then translated into English for analysis.

#### *Outcome Harvesting Step #3 Data Collection*

Data collectors collected data from the outcome validation step in a few different ways. The first strategy included compiling all notes from the Zoom Whiteboards utilized for the outcome validation workshops. The virtual Whiteboards allowed participants to rank outcomes, and add additional information, remove and/or supplement information across the outcome and output statements. The second strategy included any notes or comments participants added to the outcome tables shared with them via email or Google forms. Third, data collectors collected information through phone calls with participants and took notes during the calls, where they reviewed and validated the outcomes verbally with the participants.

#### *Outcome Harvesting Step #4 Data Collection Modification*

Through the process of collecting data for outcome harvesting step #2, the data collectors experienced numerous delays in reaching program informants for the interviews and in receiving contacts of external stakeholders for the substantiation step. Given the timeline to complete the evaluation, the evaluation team assessed the approach mid-way through the evaluation period and consulted with other evaluation experts at MSH. They decided to omit Step #4, which involves external substantiation (Table 3), to save time and they reevaluated the approach to ensure that the methods still maintained the nine core principles of outcome harvesting.<sup>18</sup> In order to maintain the rigor and in place of external validation, the evaluation team expanded the scope of the questions for the validation workshops, and some

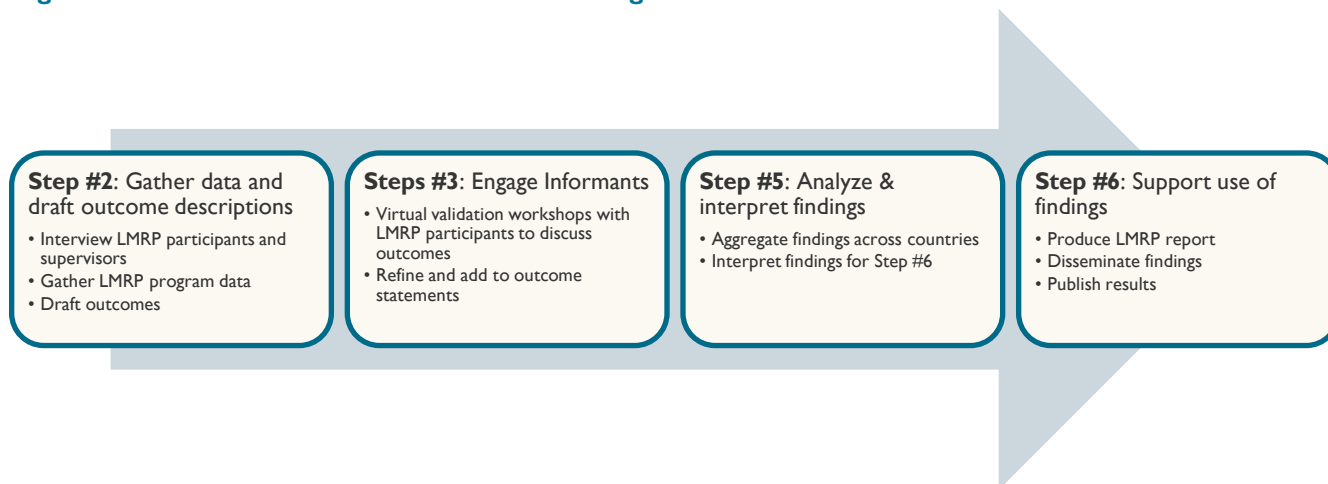
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<sup>18</sup> Patton, M.Q. (2019, March 25). Outcome Harvesting Week: Outcome Harvesting Principles. *American Evaluation Association*. <https://aea365.org/blog/outcome-harvesting-week-outcome-harvesting-principles-by-michael-quinn-patton/>.



supervisors, who had less of a participatory and more of a team oversight role in the LMRP program, attended the validation workshops. The updated data collection process that this evaluation followed is outlined in [Figure 3](#).

**Figure 3. Modified LMRP Outcome Harvesting Process**



## DATA MANAGEMENT

During the evaluation phase ([Figure 1](#)) and Step #2 in the outcome harvesting process ([Figure 3](#)), the evaluation team downloaded pre/post team and behavioral assessment datasets from the server, checked and cleaned the datasets for any duplicate or incomplete entries, and saved the datasets to the project's secure SharePoint site. The evaluators removed any identifying information (names, email addresses) from the datasets utilized for the analysis.

Following the review of all interview transcripts for quality, the data collectors uploaded the transcripts to the project's secure SharePoint site. All transcripts were saved by the participant identification numbers, and files linking participant names with the identification numbers were password protected. The evaluators reviewed all transcripts for identifiers (i.e., names of people, locations, team names) and removed all identifying information from the transcripts before uploading to Dedoose for analysis. Once the review of transcripts was complete, the evaluators destroyed all original recordings of the interviews. The evaluators also reviewed all notes and findings from the outcome validation workshops, removed identifying information, and saved the documents on the project's secure SharePoint site.

## DATA ANALYSIS

The evaluation team analyzed data for Steps #2 and #5 of the outcome harvesting process ([Figure 3](#)). The analysis of the quantitative program assessment data was done in Microsoft Excel. For the behavioral assessment data, the evaluation team analyzed the data by creating frequency categories. The categories included: (1) never; (2) at least once; and (3) monthly or more frequently comprised of "monthly", "bi-weekly", "weekly", and "daily" responses, or quarterly or more frequently comprised of "quarterly" and "monthly" responses (different categories depending on the answer options for the assessment; for more information refer to the behavioral assessment survey tool in the annex). The evaluation team then calculated percentages of participants that reported frequencies in each of the categories and created graphs to visually display the aggregate differences in pre and post frequencies.

For the team assessment data, the evaluation team calculated composite scores for each of the nine categories. The composite scores were calculated for each individual response by summing the numerical responses to each question in that category and dividing it by the maximum possible score for that category (i.e., if a respondent answered "5" to



all questions). The evaluation team then averaged the composite scores by country and created visuals to compare the data by country.

For the analysis of the qualitative data, the evaluation team started by creating codebooks for the participant and supervisor interviews based on the respective in-depth interview guides. Each codebook was programmed into Dedoose and tested on one participant interview transcript and one supervisor interview transcript. The five people conducting the qualitative analysis all coded each interview independently and revised the codebooks after discussing the findings. This process also ensured that coding was consistent across the different coders. For each country, a thematic analysis approach was utilized, and the coders developed qualitative matrices with emerging major and minor themes after completion of coding.<sup>19</sup> The analysis team developed the matrices by country, with one row per participant or supervisor interview, and one column per emerging major or minor theme. The team then compared the matrices by country to assess cross-country themes.

## DRAFTING OUTCOMES

To draft the outcomes (Step #2, Figure 3), the evaluation team adopted the methods outlined in the World Bank outcome-based learning field guide.<sup>20</sup> To ensure all data sources were considered, the evaluators assessed all quantitative, qualitative, and any additional program records for each country to begin to craft the outcomes. The evaluators utilized the template described in Table 5 to capture the components of outcomes around timing, what happened, why it matters, and who contributed.

**Table 5. Outcome Statement Template to Capture Essential Components of an Outcome Statement**

Outcome Theme				
Timing & location	Milestone	Significance	Contribution	Supporting Evidence
<i>When &amp; where?</i>  (1) When did the change happen? (2) Where did the change take place?	<i>What happened and who was involved?</i>  (1) Who are the actor(s)? (2) What changed in their behaviors, relationships, activities, actions, policies or practices?	<i>Why is the change relevant?</i>  (1) Relevance to the objective? (2) Relevance to address problem or need in context.	<i>How did the project contribute?</i>  (1) How did project activities/outputs support the change? (2) How did other partners support the change, if relevant?	<i>How is this supported by the data?</i>  Supporting quantitative data and illustrative quotes from the qualitative interviews?

While outcome harvesting typically focuses on outcomes, there were notable outputs from the LMRP program that the evaluation team observed in the data set, so they decided to include both outcomes and outputs by theme for each

<sup>19</sup> Delve. (2020, August 21). *How to Do Thematic Analysis*. Essential Guide to Coding Qualitative Data. <https://delvetool.com/blog/thematicanalysis>.

<sup>20</sup> The World Bank. (2014, June). *Outcome-Based Learning Field Guide*. <https://documents1.worldbank.org/curated/en/457811468167942364/pdf/901760WP0Box380Learning0Field0Guide.pdf>

country. The evaluators then utilized information in the table above (Table 5) to draft outcome and output statements by outcome theme, which focused on capturing “*who did what, when, and where*”. The outcome and output statements also included information on the contribution of the project, significance of the outcome/output to the development objective and for addressing the specific problem, and direct supporting evidence from the qualitative and quantitative data.

## OUTCOME VALIDATION

Following completion of the draft outcomes and outputs, the data collectors scheduled the outcome validation workshops to (Step #3, Figure 3):

1. Engage directly with the participants and supervisors (i.e., the change agenda) to review information extracted from the data collected.
2. Collect additional information on the outcomes and outputs, and the dimensions considered necessary for a complete description.
3. Support the participant’s review of the draft outcome and output statements with guiding questions.

The guiding questions for the workshop included questions for every outcome theme:

- Are you in agreement with this theme? If yes, why? If no, why not?
- What information would you add to make the theme more specific and/or detailed to your context?
- Do you have any suggestions for revision of this theme? If so, can you further elaborate on those suggestions?
- Would you frame this as a positive, negative, or unintended theme of the program?

There were also the following questions for every outcome/output statement:

- Do you agree with this statement? If yes, why? If no, why not? Would you frame it as positive, negative, or unintended outcome/output?
- What information would you add to make the outcome/output statement more specific and/or detailed to your context? Are any essential details/information in this outcome/output statement missing? If so, can you elaborate?
- Do you have any suggestions for revision of the content? If so, can you further elaborate on those suggestions?
- When did you first notice this output/outcome? What do you think were the contributing factors?
- Do you feel that this output/outcome is still relevant to your work today? If so, can you provide some examples of how you are currently applying this to your work? If not, can you explain why you may not be currently applying this to your work?

Following completion of the outcome validation workshops, the data collectors compiled all notes and findings and provided suggested updates and edits to each of the output and outcome statements.

## DATA TRIANGULATION AND INTERPRETATION

Once all data was received by country from the outcome validation workshops, the evaluation teams worked on triangulating the updated outcome and output statements with the analyzed quantitative, qualitative, and any additional program data (Step #5, Figure 3). The purpose of this step was to assess if all data sources are supporting the outcomes and outputs and make necessary adjustments to the outcomes and outputs as needed. The triangulation of the quantitative data with the qualitative data involved an assessment of the takeaways and of the ways in which the different

data sources complemented each other or not. This step of triangulation and interpretation focuses on understanding how the data supports or does not support the evaluation questions.

## LIMITATIONS

The evaluation team noted a few areas of limitations. The first area involved a limitation in data collection. Given the fact that fewer participants responded to the post-LMRP behavioral and team assessments, not all assessments could be matched at the individual level for pre- to post-assessment comparison. Therefore, the evaluation team shifted to aggregate pre/post assessment comparisons in the analysis. Additionally, the response rate for the Rwanda quantitative assessments was low despite numerous attempts to gather additional data. It is important to consider the sample size limitation in interpretation of all quantitative data presented below, as well as look at the overall aggregate values to understand any changes from pre to post in proportion to the sample sizes. Future analyses of both quantitative data sets will conduct loss to follow up analysis to better understand the effects of smaller post-assessment sample sizes.

For the qualitative data collection, the data collectors were not able to interview one member per team given that many participants had competing priorities and had moved on following the completion of the LMRP. This was especially apparent in Uganda and Rwanda. During qualitative data collection and analysis, it is important to consider social desirability bias through which participants may respond in a favorable way. The evaluation team attempted to mitigate this through working with external consultants as the qualitative interviewers.

Another area of limitation was in the analysis and validation of the outcomes. Some pre-to-post decreases could be due to respondents ranking themselves higher at baseline, and then once the concept was better understood through the program learning modules, ranking themselves lower at endline. The qualitative analysis was done across a team of five members. While all were trained by the lead evaluator on standard methods, there is some room for bias. Additionally, participation numbers at the validation workshops were mixed in some cases and ranged from 3 to 22 participants. The evaluation team in Rwanda could not engage any participants to validate the outcomes.

Lastly, the evaluation team noted a limitation in the outcome harvesting process. While other evaluators were consulted in skipping Step #4, which involves validation and substantiation by stakeholders not directly engaged in the program, some additional information and validity could have been missed. However, the evaluation team attempted to maintain the rigor by expanding the scope of the outcome validation workshops. Another important consideration is that the evaluation team aimed to apply this methodology to measure the outcomes of a capacity strengthening program, which is a newer approach and there are not many existing models from which the team could learn.<sup>21</sup>

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<sup>21</sup> Better Evaluation. (2022). *Evaluation capacity development*. Evaluation Methods and Approaches. <https://www.betterevaluation.org/methods-approaches/themes/evaluating-capacity-development>.

## EVALUATION RESULTS

### QUANTITATIVE FINDINGS

#### BEHAVIORAL ASSESSMENT

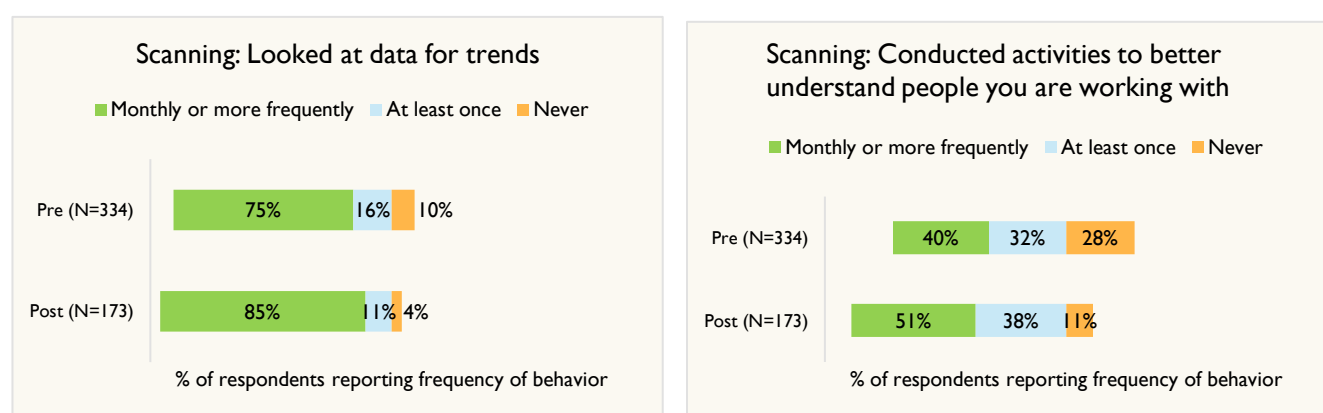
**Table 6. Number of Pre and Post Behavioral Assessments by Country**

Country	Number of Pre-LMRP Program Assessments	Number of Post-LMRP Program Assessments
Kenya	51	24
Malawi	63	29
Nigeria	51	26
Peru	95	52
Rwanda	4	9
Uganda	70	33
<b>Total</b>	<b>334</b>	<b>173</b>

\*12 pre-tests excluded based on incomplete or duplicate responses

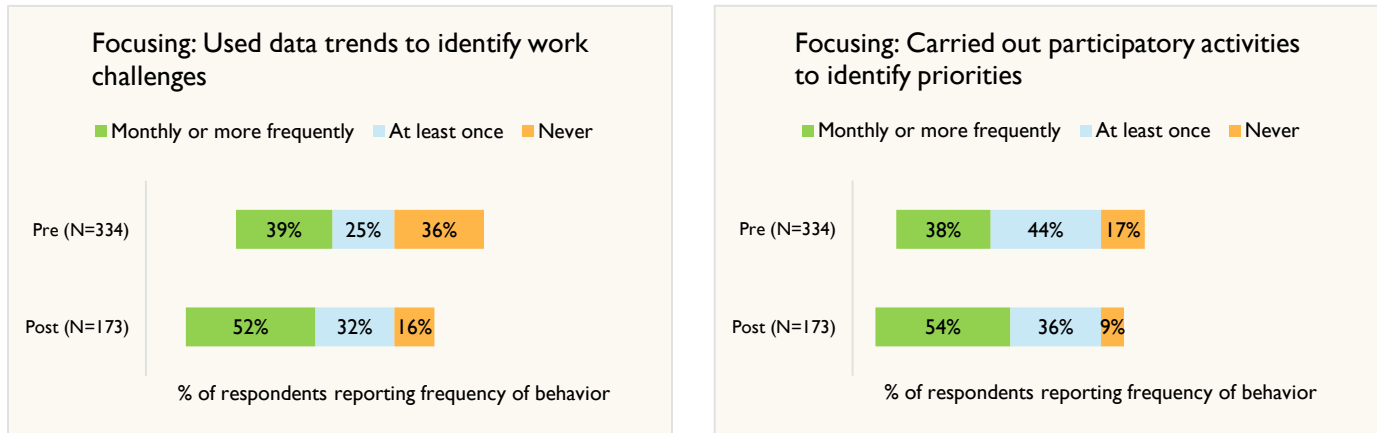
Table 6 highlights the number of pre-LMRP program and post-LMRP program behavioral assessments by country. As discussed above, one important point to note is the difference in the number of assessments between pre- and post. Looking at the average changes in frequencies of reported behaviors (proportional to the number of respondents) across all countries, increases are noted across most of the behaviors. The first area of interest is in **Scanning** behaviors. Figure 4 and Figure 5 illustrate increases in frequencies (decreases of “never” and increases in “monthly or more frequently”) of self-reported behaviors to better understand the context through conducting activities and using data. Some of the illustrative ways those behaviors were reported by participants included looking at epidemiological, performance, service delivery, and case and hospitalization data, as well as having participatory meetings and doing stakeholder mapping.

**Figure 4. (L) & Figure 5. (R) Pre/Post Comparison of Frequencies of Scanning Behaviors**



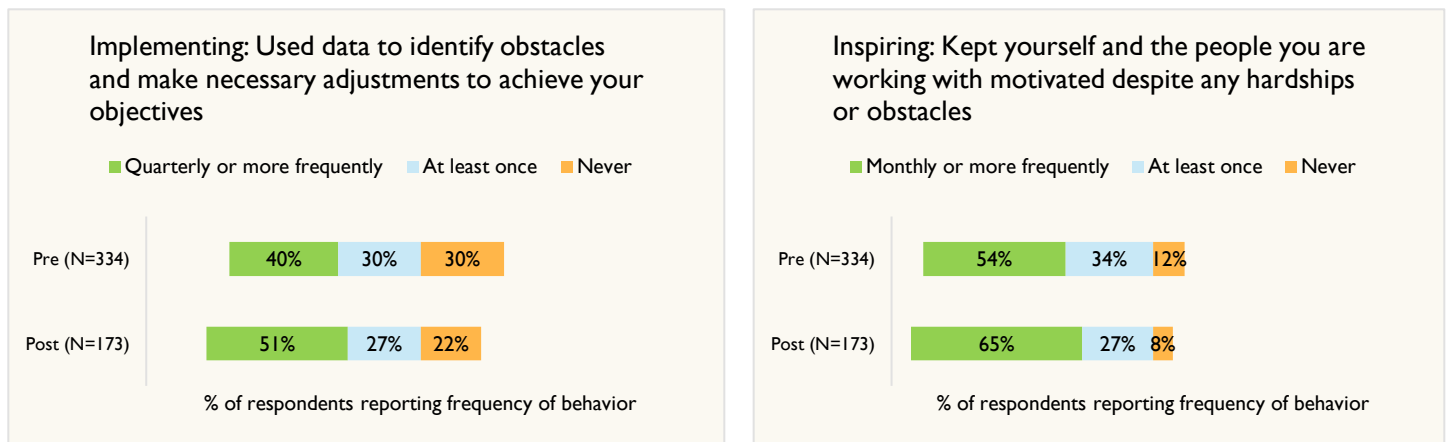
Similarly, increases are observed in **Focusing** behaviors (Figure 6 & Figure 7). Frequencies of carrying out participatory activities and using data increased from pre to post. Some of the examples of these behaviors included looking at epidemiological data to assess low vaccine coverage and looking at monthly data reports to analyze team priorities.

**Figure 6. (L) & Figure 7. (R) Pre/Post Comparison of Frequencies of Focusing Behaviors**



Pre- and post-assessment data also demonstrated increases in frequencies of **Implementing** (Figure 8) and **Inspiring** (Figure 9) behaviors. Examples in which participants practiced using data to identify obstacles and make necessary adjustments (implementing) included data discussions during quarterly meetings with stakeholders and county teams, and looking at COVID-19 data to identify and address areas of weaknesses, especially during waves of COVID-19. Examples of inspiring behaviors included open communication during meetings and message exchanges, and positive comments, encouragement, and acknowledgment at team meetings.

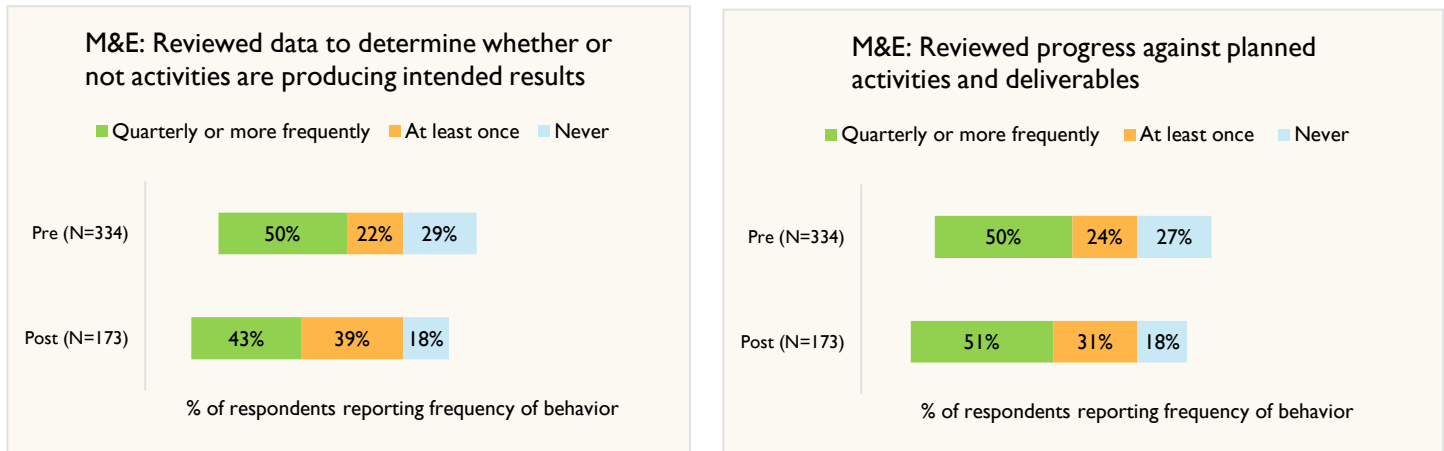
**Figure 8. (L) & Figure 9. (R) Pre/Post Comparison of Frequencies of Implementing and Inspiring Behaviors**



The one area where there was a decrease in percentage of participants reporting the behavior “quarterly or more frequently” from pre to post was in **Monitoring and Evaluation** (Figure 10). However, the proportion of

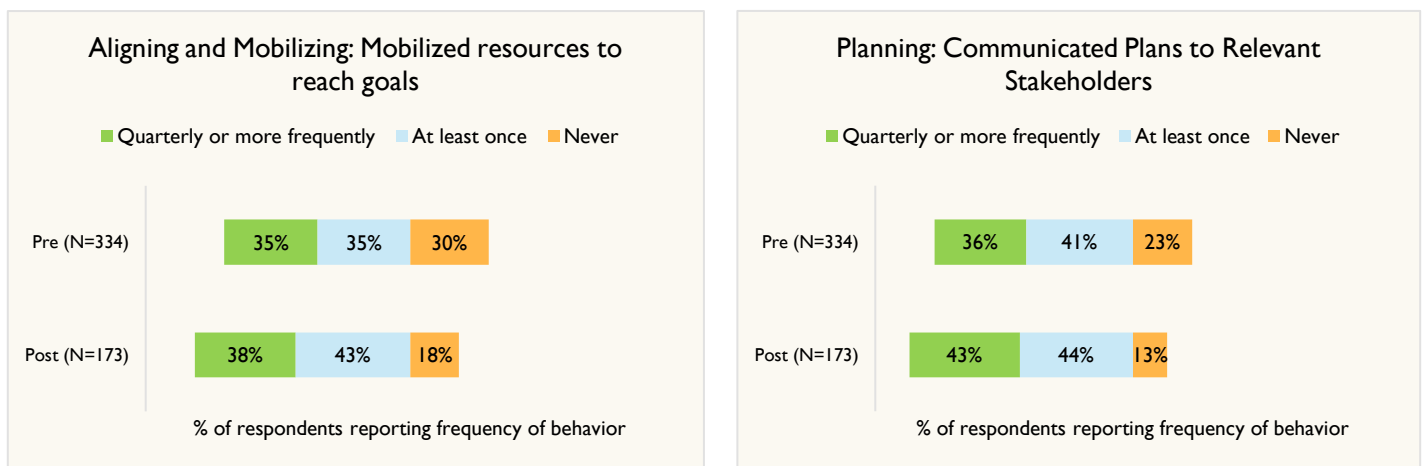
participants reporting frequencies of “never” decreased and “at least once” increased, so the overall practice of these behaviors is increasing. A similar trend is observed for the Monitoring and Evaluation behavior in [Figure 11](#). It is also important to note the difference in the pre/post denominators here and how that may contribute to the difference in results. Some of the illustrative examples of these behaviors include reviewing workplan activities and data against the targets, monthly/quarterly performance review meetings, and review of COVID-19 vaccination data.

**Figure 10. (L) & Figure 11. (R) Pre/Post Comparison of Frequencies of Monitoring and Evaluation Behaviors**



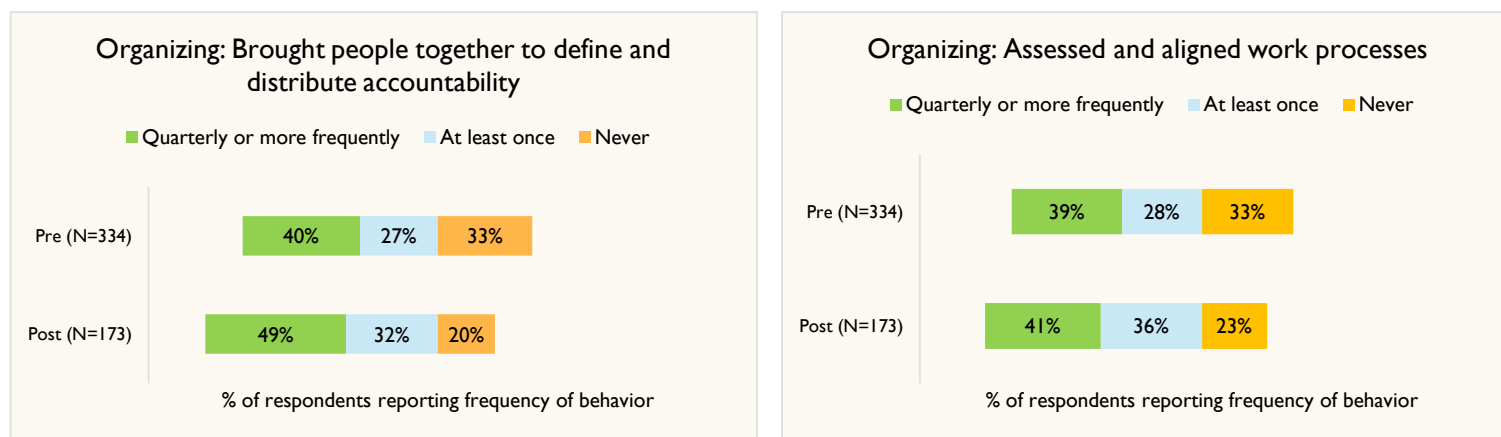
Other leading and managing practices, where the proportion of participants reporting frequencies of “quarterly or more” slightly increased between pre and post included **Aligning and Mobilizing, Planning, and Organizing** ([Figures 12-15](#)). It should be noted though that all proportions of participants reporting “never” between pre and post for [Figures 12-15](#) decreased. Some of the illustrative examples of aligning and mobilizing behaviors included monthly and quarterly review meetings to discuss shared responsibilities, and weekly planning and data review meetings. For planning, some of the examples included mobilizing money, time, human resources, and commitment of key stakeholders.

**Figure 12. (L) & Figure 13. (R) Pre/Post Comparison of Frequencies of Aligning and Mobilizing and Planning Behaviors**



Some of the illustrative examples of organizing behaviors (Figure 14 and Figure 15) included work planning with key stakeholders and holding regular meetings and conducting trainings with stakeholders as well as technical working groups.

**Figure 14. (L) & Figure 15. (R) Pre/Post Comparison of Frequencies of Organizing Behaviors**



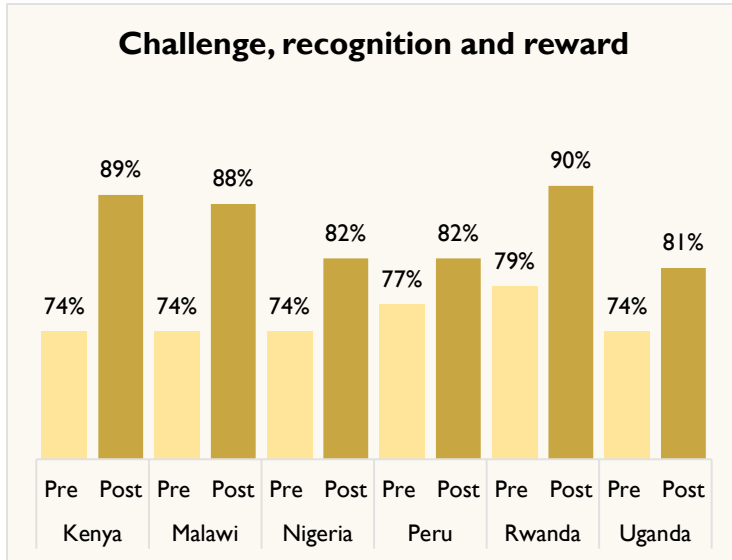
## TEAMS ASSESSMENT

**Table 7. Number of Pre/Post Teams Assessments by Country**

Country	Number of Pre-LMRP Program Assessments*	Number of Post-LMRP Program Assessments**
Kenya	45	24
Malawi	51	29
Nigeria	41	25
Peru	93	51
Rwanda	5	7
Uganda	35	28
<b>Total</b>	<b>270</b>	<b>164</b>

\*7 pre-tests excluded based on duplicate responses and 4 excluded based on teams that dropped out of the LMRP program; \*\*2 post-tests excluded based on duplicate responses

Table 7. highlights the number of pre-LMRP program and post-LMRP program teams assessments by country. One important point to note for the team assessment as well is the difference in the number of assessments between pre and post. When assessing the average composite scores across each country and across each topic area, notable increases are observed for all countries in the **challenge, recognition, and reward** (Figure 16) and **goals and accountability** (Figure 17), where participants ranked how team members work together on their goals and work through any challenges. Increases across all countries are also observed for the **leader coaching** category (Figure 18), where participants rank the effectiveness of their leader and how that leader supports the team in their professional growth and work. Note that below or beside each graph are the set of questions that make up each category's composite score.

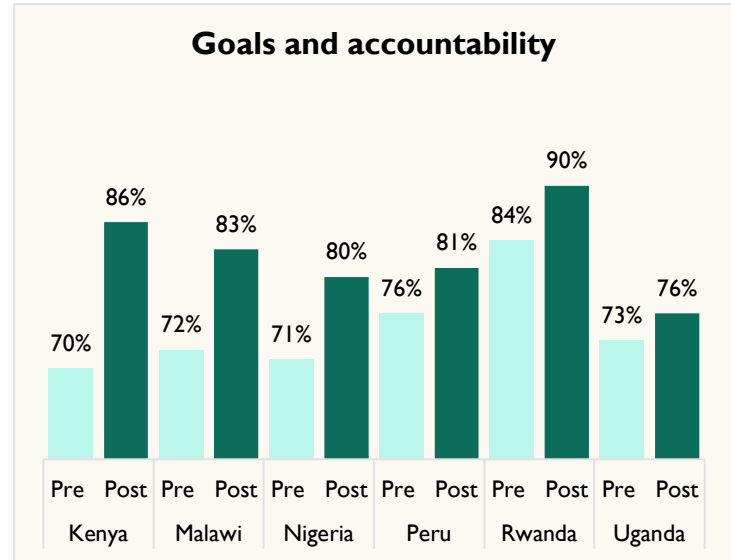
**Figure 16. (L) & Figure 17. (R) Pre/Post Comparison of Teams Assessment Composite Scores**

#### Challenge, recognition, and reward category questions (Figure 16)

*Our group regularly seeks out new information and challenges.*

*Each group member has a strong personal commitment to one another's growth and success.*

*Our group celebrates victories and rewards as a group.*

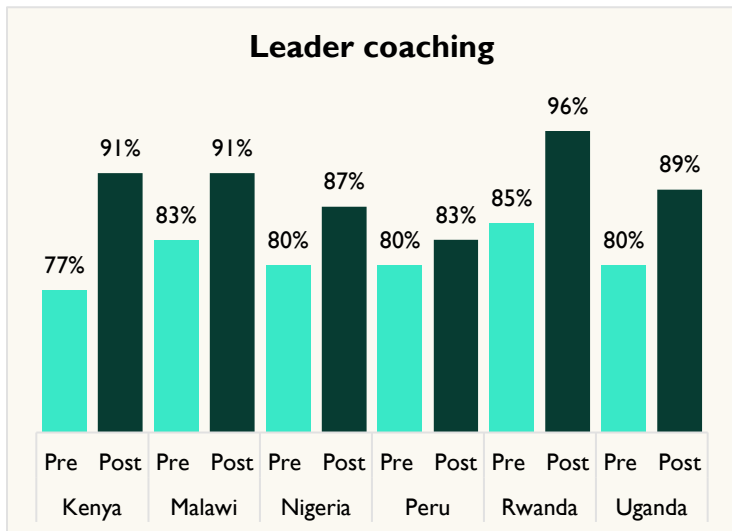


#### Goals and accountability category questions (Figure 17)

*Each group member clearly understands the group's performance expectations.*

*Each group member contributes equivalent amounts of high-quality work.*

*Each group member acknowledges when they have made a mistake.*

**Figure 18. Pre/Post Comparison of Teams Assessment Leader Coaching Composite Scores**

#### Leader coaching category questions (Figure 18)

*The leader engages and energizes the group to launch projects.*

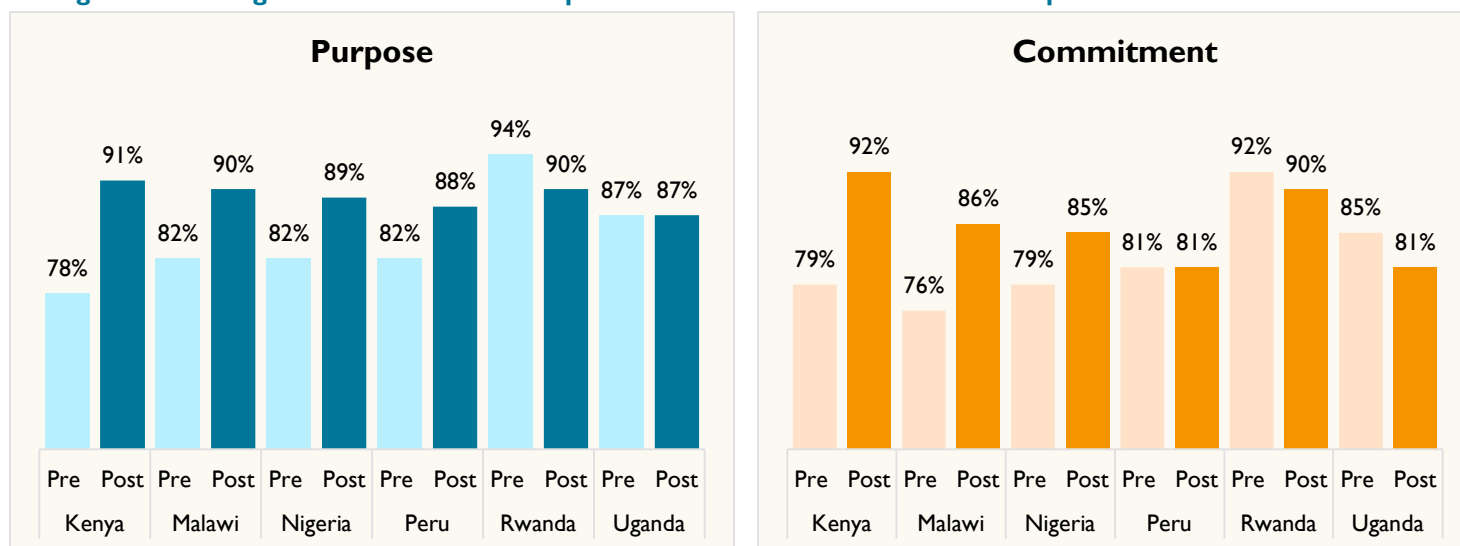
*The leader provides guidance and feedback at the right time to aid group progress.*

*The leader consults with team members to remove barriers to group performance.*



The findings are mixed for the **purpose** (Figure 19) and **commitment** (Figure 20) categories, where some countries have average composite score decreases (Rwanda) and composite scores that remained the same between pre- and post (Peru and Uganda). While there are some decreases across the purpose and commitment categories, the other half of the countries show increases between pre and post (Kenya, Malawi, and Nigeria).

**Figure 19. & Figure 20. Pre/Post Comparison of Teams Assessment Composite Scores**



#### Purpose category questions (Figure 19)

*Our group shares a clearly understood common purpose.*

*Our group has the sense that our work is important to the institution right now.*

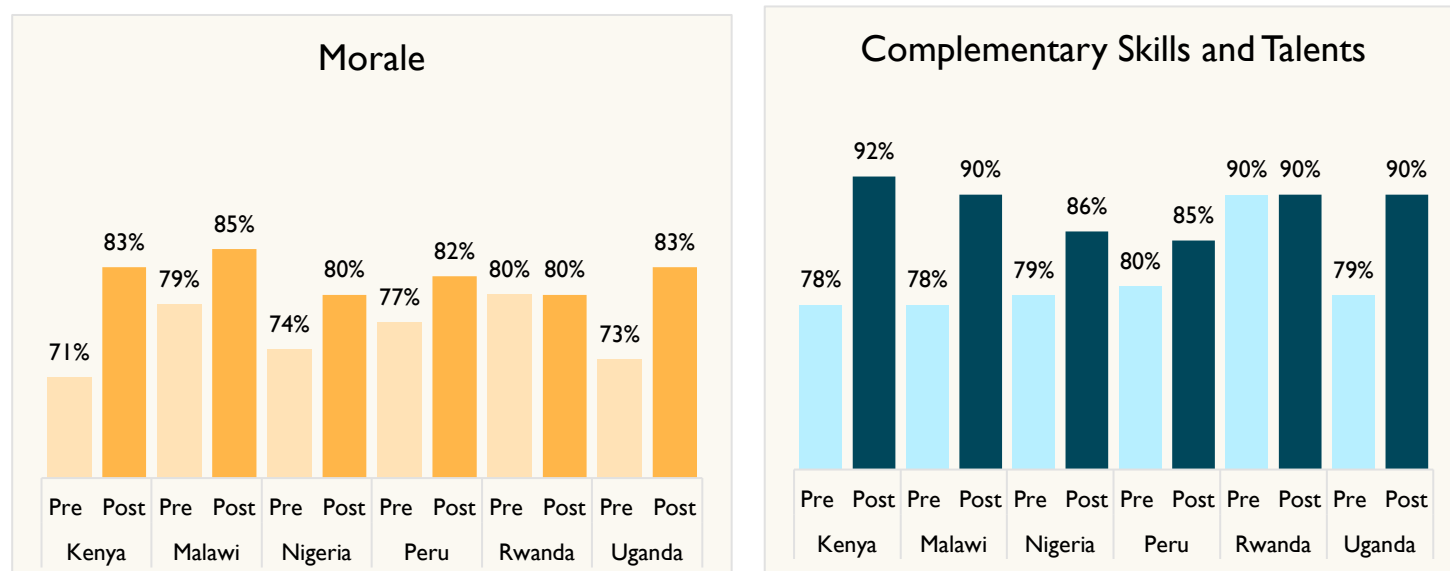
#### Commitment category questions (Figure 20)

*Each group member is equally committed to the group's success.*

*Each group member understands how individual contribution relates to group performance.*

Except for Rwanda, across **morale** (Figure 21) and **complementary skills and talents** (Figure 22) categories, all country average composite scores increased from pre to post.

**Figure 21. & Figure 22. Pre/Post Comparison of Teams Assessment Composite Scores**



#### Morale category questions (Figure 21)

*Non-group members can quickly see and feel the high level of enthusiasm among our group.*

*Our group is generally positive and motivated, even in difficult times.*

*Our group has open, constructive discussions about disagreements or problems.*

*Our group is vulnerable with one another and trusts that actions are from a place of good intent.*

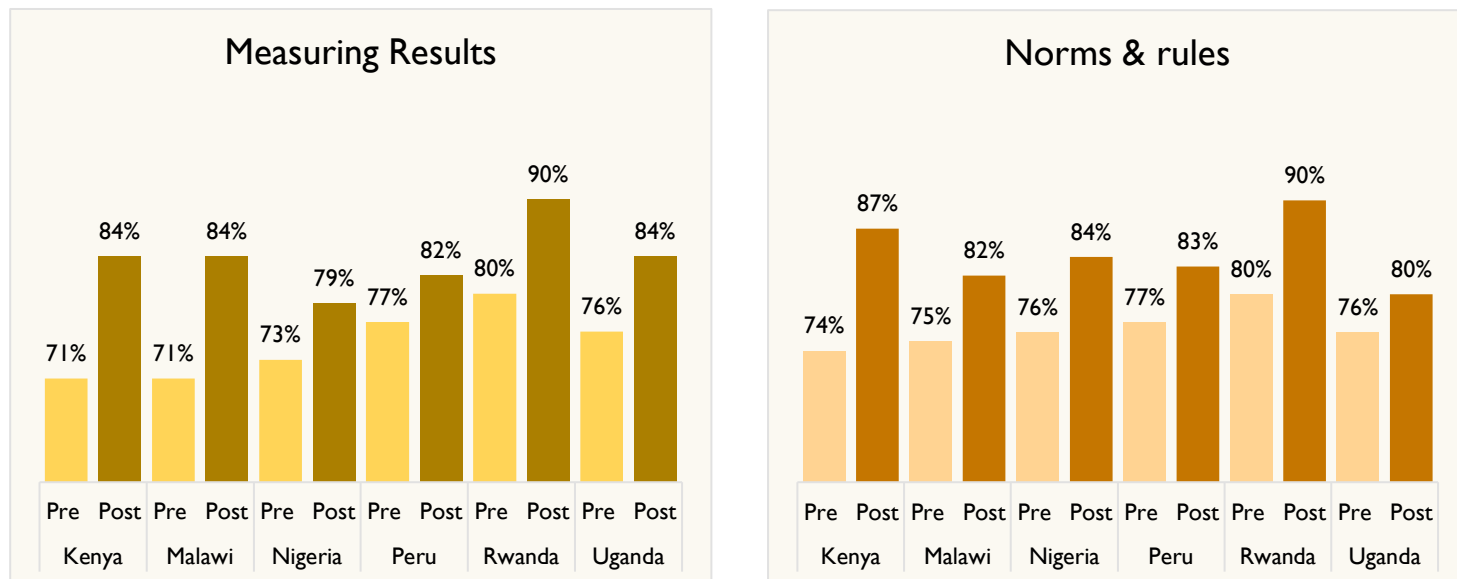
#### Complementary skills and talent category questions (Figure 22)

*Our members have a good blend of complementary skills and talents.*

*Group members tap into each other's skills when needed.*

Moreover, the **measuring results** (Figure 23) and **norms and rules** (Figure 24) categories show increases in average composite scores across all countries from pre to post.

**Figure 23. & Figure 24. Pre/Post Comparison of Teams Assessment Composite Scores**



#### Measuring results category questions (Figure 23)

*Our work approach allows for regular modification and improvement over time.*

*Our results tend to exceed clients' expectations of quantity, quality, and timeliness.*

#### Norms and rules category questions (Figure 24)

*Our group jointly takes ownership of how things get done.*

*Our group uses time-efficient processes to complete our work.*

## QUALITATIVE FINDINGS

The evaluation team coded and analyzed a total of 43 participant and 21 supervisor interviews. The breakdown by country is included in Table 8. In comparison to the target number of interviews (Table 4), data collection fell short of four participant and three supervisor interviews due to some interviewees being unresponsive or not available for the interviews following completion of the LMRP Program. Following the completion of the coding, the evaluation team first assessed the data on what respondents learned and gained through the program modules and action plan implementation. Participants and supervisors described their teams' work on developing the challenge model and implementing their action plans, and how that allowed them to directly apply their skills and tools they gained from the courses.

**Table 8. Number of Interviews Conducted by Type of Interview and by Country**

Country	Participant Interviews	Supervisor Interviews	Total
Kenya	8	4	12
Malawi	8	4	12
Nigeria	8	3	11
Peru	10	3	13
Rwanda	4	3	7
Uganda	5	4	9
<b>Total</b>	<b>43</b>	<b>21</b>	<b>64</b>

For instance, a participant in Rwanda reflected on how their team learned to **apply the tool of root cause analysis**, as introduced in the LMRP program, to complete their challenge model: *"after understanding the challenge, try to dig deep and come up with the root cause...But sometimes, depending on the nature of the challenge, it may be the challenge might start at section level, but if you dig deep and study the challenge, it may be even cross cutting challenge and need to sit as the unit and study, dig deep the challenge, design the way forward..."*. Similarly, a participant in Kenya described how their team conducted **root cause analysis** and applied the leading and managing practices of **scanning** and **focusing** prior to implementing any activities for their action plan (increasing vaccine coverage): *"But we realized, before that, we had to identify the possible root causes, why were we not achieving much. And we realized there were a number of challenges which we had to solve before embarking on the journey, and one of them was [addressing the] aspect of [vaccine] myths."*

While working on their team's action plan implementation, another participant in Kenya described the guidance received from the LMRP program to **plan, organize, and leverage team members' skills**: *"So we had to sit and agree, what is our roles in this project? And then how do we move? How do we go about the project? What strategies are we going to bring into place? Making sure that our cadres, and our expertise is considered, so that when we look at the priority actions and the activities, what are we supposed to do for each one of us for different contexts, so that they bring together our strengths, we are able now move together? Yeah, this is something that was not there before. But by having this kind of support from the CDC, and from our coach, we're able to identify our strengths and be able to bring them together and work together so that we can make sure that the project succeeds."*. A participant in Malawi reflected on the process of **systematically approaching work** on the action plan as a **team** and applying the **leading and managing practices (scanning, inspiring, and planning)**: *"First of all analyzing the situation, the current situation, setting a vision, setting the goals and everything. And then making some priorities those tasks we were doing to see what to start what are the challenges that we might face like that. So, we had to analyze our situation by then and see."*

Through reflection of what teams achieved, one participant in Peru described the success in action plan implementation (reducing anemia) due to **teamwork and communication** skills gained through the LMRP program: *"one has helped us to work as a team, another one has helped us to communicate and the other one has helped us to set ourselves the challenge. Our challenge is to reduce anemia by 50%...That is where teamwork can be seen, in saying yes, we do it, we look for solutions... we have managed to reduce anemia; of the 44 cases we have had, we have reduced it to 50%."*. Another participant in Kenya described the success (increasing COVID-19 vaccine coverage) when applying the **leading and managing practices**

**(focus and aligning and mobilizing)** gained through the LMRP program: “For COVID-19 [vaccines] in our County, working as a team, of course applying the leading and managing principles and practices, we were able to pull the county Department of Health and leadership into one focus and that is achieving our challenge model. We were able to raise COVID-19 [vaccine] full coverage from with an increase of 6.7 [percentage points].”

The evaluation team then utilized these findings and understanding of LMRP program participant reflections on what they gained from implementing the action plans to further understand the themes, commonalities, and differences between the qualitative findings across countries. As a result, the evaluation team developed the following heat table during the thematic analysis (Table 9). Green indicates a strong finding, yellow indicates an occasional finding, and orange indicates a minor finding throughout all interviews analyzed.

**Table 9. LMRP Evaluation Qualitative Themes Heat Table**

Findings from interviews	Kenya	Malawi	Nigeria	Peru	Rwanda	Uganda
Increased sense of team accomplishment and work towards a goal	Green	Green	Green	Green	Green	Green
Increased sense of readiness to manage future pandemics	Green	Green	Green	Green	Green	Green
Skills gained from program are applied to handle current disease outbreaks	Green	Green	Yellow	Green	Green	Green
Increased trust among team members	Green	Green	Green	Green	Green	Green
Team members feel more empowered to contribute & make decisions	Green	Yellow	Green	Green	Green	Green
Communication improved among team members	Green	Green	Green	Green	Green	Green
Overall team dynamics are improved (stronger sense of teamwork)	Green	Green	Green	Green	Green	Green
Increased planning and organizing behaviors	Green	Green	Green	Green	Green	Green
Increased scanning behaviors	Green	Green	Green	Green	Green	Green
Increased inspiring behaviors	Green	Green	Green	Green	Green	Green
Increased aligning and mobilizing behaviors	Green	Green	Green	Green	Green	Green
Increased monitoring and evaluation activities	Green	Orange	Orange	Yellow	Green	Orange
Increased overall leadership skills and abilities	Green	Green	Green	Green	Green	Green
Tools and skills from the program will be applied to work outside the program to make processes more efficient and systematic	Yellow	Green	Green	Green	Yellow	Green

The evaluation team analyzed and determined the cross-country emerging themes from the heat chart and illustrative quotes by country. The common themes across the six LMRP countries are highlighted below in Table 10 with an illustrative quote for each theme. Some of the major themes across all countries included: application of the leading and managing practices, pandemic readiness, and improved teamwork (communication and team dynamics). Some of the

less common included use of data and application of the monitoring and evaluation leading and managing behavior and change in work processes to be more efficient and systematic. When asked about program feedback, one participant suggested additional capacity strengthening activities related to monitoring and evaluation: *“However, if there will be any additions of any kind possibly it is the matters of data analysis so like that so that at least maybe we can have evidence-based issues in terms of interventions to the community or anything that can come out from friends, or I mean challenges that exist.”* Supplemental qualitative data for each theme by country is included in the annex in [Table 13](#).

**Table 10. Illustrative Quotes by Theme**

Theme	Illustrative Quote
<b>Improved teamwork</b>	<p>Increased understanding that teamwork is essential to achieve results.</p> <p><i>“It was a good program that actually brought us a new idea of actually working in a team. So, we realized that working as a team is the best way of achieving results. So, what they observed when we came together...it was a multidisciplinary team who were able to identify the problem that we were facing within our duties and responsibilities. So, we sat together as a team, and we identified the challenges and the opportunities...”</i> (Rwanda)</p>
<b>Leadership skills strengthened and gained</b>	<p>Improved understanding of “managers who lead” and what it means to be a leader and not just a manager, how to mobilize, organize, inspire, plan and delegate as a leader.</p> <p><i>“I am a better person in terms of leadership and in terms of management of resources, in terms of organizing resources, in terms of aligning issues, as compared to the person that I was at the start of the program.”</i> (Kenya)</p>
<b>Collaboration and trust</b>	<p>Understanding the importance of assessing strengths and weaknesses on a team and working to support each other.</p> <p><i>“Done differently is that now with my team we work closely because before we didn't understand our individual differences, we didn't know our strengths and our weaknesses of the team because there are some things that I expect my team members to know how to do...So with the LMRP, we're able to leverage on our strengths and weaknesses. So, we're able to work more closely as a team...”</i> (Nigeria)</p>
<b>Communication</b>	<p>Increased listening and respect among team members.</p> <p><i>“Because, initially, there was that gap in terms of respecting whatever someone was contributing. So now we are able to listen, to give a listening ear to everyone, because we know that everyone has got something that they can contribute. So, we are together working as a team respecting each other.”</i> (Malawi)</p>
<b>Tools and skilled gained to handle future pandemics</b>	<p>Participants feel more prepared to handle future pandemics with the tools and the training provided and believe that future responses would be more efficient.</p> <p><i>“This program has already trained us, has given us the roadmap, the tools, the methodology, and for us it is no longer a new situation, it is not like [when] we started in 2020 when the COVID-19</i></p>

	<i>pandemic began and there are many professionals who do not have these capabilities, We have acquired all this and we are convinced that to make a change in public health, we have to make use of methodologies, strategies, techniques because we must reach the population with a simple and practical language, respecting their culture, and that saves us time, money, resources..." (Peru)</i>
<b>Management of current disease outbreaks</b>	<p>Reflecting on the recent response to the COVID-19 pandemic, the response to cholera was more proactive. Other examples included systematic management of dengue fever and a more organized response to Ebola.</p> <p><i>"I think the changes were more reflected in the cholera pandemic rather than the COVID 19... But when it came to cholera epidemic, I think we were more organized. On COVID 19 I think we were more reactive but when it came to cholera epidemic, I think we focused on more on being proactive. I think we involved the stakeholders as well as I think there was also community involvement and I think that helped us in the fight against cholera epidemic..." (Malawi)</i></p>

## OUTCOMES & OUTCOME VALIDATION

Building on the emerging themes from the qualitative analysis for each country and from the behavioral and teams pre- and post-assessment analysis, the evaluation team drafted outcome and output statements. The outcomes across all countries fall into four main categories of (1) pandemic readiness; (2) improved teamwork; (3) improved leadership skills; and (4) stronger interpersonal skills. Under each category, there were about two output statements and one outcome statement. [Table 11](#) highlights output and outcome statements per each category, and the full list of validated output and outcome statements is included in the Annex ([Table 14](#)).

**Table 11. Example Output and Outcome Statements by Theme**

Theme	Example Output Statement	Example Outcome Statement
<b>Pandemic readiness</b>	Through participating in the LMRP program in Uganda in 2022, participants feel that they are now more prepared to respond to future pandemics in a more efficient way (in terms of time and resources).	Reflecting on what was learned during the LMRP program in Uganda in 2022, participants reported improved response and better management of recent disease outbreaks (e.g., Ebola, cholera, malaria, and Marburg).
<b>Improved teamwork</b>	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report understanding the significance of valuing diverse viewpoints and opinions to make decisions that are inclusive of each team member's input.	Following participation in the LMRP program in Rwanda from early-2022 to early-2023, participants can work as a unified and cohesive team.
<b>Improved leadership</b>	Through participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants reported a greater understanding of what it means to be a leader and not just a manager.	Following participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants reported directly applying the leading and managing skills (inspiring and planning) and understanding the importance of those skills to accomplish their work.

<b>Stronger interpersonal skills</b>	Following participation in the LMRP program, participants are now better able to navigate different viewpoints and opposing ideas within their team and have conversations to work through those differences.	Through participation in the LMRP program in 2022 in Peru, participants cited increased trust, openness, and empathy among their teams during group interactions and meetings.
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Following the methodology described above, the LMRP participants and supervisors attended the draft outcome validation workshops. Table 12 outlines the number of attendees per country at each of the validation workshops and some countries like Malawi, Kenya, and Uganda utilized a mixed approach of hosting a workshop as well as consulting with individuals over phone calls to validate the workshops. Despite numerous attempts to reach participants, the evaluation team could not validate any of the outcomes with informants in Rwanda. To attempt to mitigate this, the evaluation team shared the draft outcomes with the facilitators, who worked closely with the informants, to understand if they had any additional information to add to outcomes.

The overall findings from the validation workshops found that most participants agreed with the draft outcomes and provided supplemental information on ways to further refine the outcomes and outputs. Participants also commented on ways in which the draft outputs and outcomes are still relevant to their current work. For example, informants validated outcomes around teamwork and being better able to divide responsibilities among team members by providing examples in which work tasks are continuing to divide across different cadres to achieve results. Workshop informants also described the ways in which they are continuing to use and apply the skills and tools gained from the course to their work and to work with their colleagues towards accomplishing a goal. During the Peru validation workshop, one informant reflected on learning to work as a team with different people: “Well, this course has allowed us, first of all, to understand that we were a team, not necessarily always the same people, but we know that if we unite for a common cause, a common goal, then the whole group that we have integrated has understood that we are a team”.

While communication among team members has improved, informants in Malawi, Peru, and Uganda noted there are still some areas for improvement, and that improved communication and team dynamics are often linked with the approach of leaders and the willingness of team members to be open with one another. Comments around having to continue to “unlearn” learned behaviors in terms of communication also arose across the validation workshops. Informants in Peru also noted that there are some factors like the complex political system they are working within and that while team dynamics have improved, some factors and spheres of influence may be outside of their control.

Additionally, informants further validated their readiness to handle disease outbreaks by describing how they utilized the root cause analysis tools to handle the cholera epidemic in Malawi, identify the factors contributing to the outbreak and make a plan to decrease the number of those impacted by cholera. Outcome validation workshop informants in Peru also cited the example of how they were able to apply the skills and tools gained from the course to an outbreak of methanol poisoning. While it was different than COVID-19, they reflected on the importance of handling the outbreak

**Table 12. Number of Informants who participated in Outcome Validation by Country**

Country	Number of Informants Contributing to Outcome Validation
Kenya	14
Malawi	8
Nigeria	10
Peru	22
Rwanda	0
Uganda	10
<b>TOTAL</b>	<b>64</b>



in a systematic way and applying the methodologies gained to all public health matters. Other supplemental comments included how participants now utilize the leading and managing practices to do their work systematically by scanning the environment, planning, prioritizing, mobilizing resources, and developing collaborative plans for implementation. The evaluation team further refined the outcomes for each country following the validation workshops.

## DISCUSSION AND CONCLUSION

The results from the LMRP outcome harvesting evaluation demonstrate that participants and supervisors gained knowledge, skills, and tools to be better team members, leaders, and public health practitioners preparing for future public health emergencies and managing disease outbreaks. Through team work on the modules, developing the challenge models, and implementing the action plans, LMRP program participants directly applied and practiced what they learned and skills they gained. The quantitative and qualitative data presented above complement each other and inform the final list of validated outcomes by country (Table 14), as well as the overall outcomes of the LMRP program across the six countries. In response to the harvesting and evaluation questions, the four outcomes are further elaborated below.

**Outcome #1 Improved Teamwork:** participants can work as a unified and cohesive team.

The quantitative team assessment data presented above, and in the annex, illustrates ways that participants' sense of teamwork, valuing other team members, and valuing their inputs and skills increased as a result of completing the LMRP program. Team members reported having an increased sense of everyone on their respective teams working together towards a common goal, and each team member having a role to play (Figures 17, 21, and 22). This finding is supported by the qualitative data (Table 10 and Table 13), where the themes around teamwork came out strongly in all countries. Informants described increased practices of involving all team members in the work and in decision-making and leveraging team members' different strengths. Overall, the value of teamwork and positive team dynamics were strengthened through the learning modules and LMRP program activities such as working as a team on the action plan. LMRP participants gained the skills and awareness of the leading and managing practices, which allowed them to better plan, organize, and work together as a team towards a common goal. Beyond this program, program informants in Peru described during the validation workshops how these skills can also be carried over to further strengthen team dynamics and work together as a team as team members may shift.

**Outcome #2 Improved Leadership Skills:** directly applying the leading and managing skills and understanding the importance of those skills to accomplish their work.

The quantitative behavioral assessment data presented (above and in the annex) demonstrates areas in which LMRP participants increased the frequencies in which they applied the leading and managing practices. A few behaviors to note were scanning, focusing, inspiring, organizing, planning, and aligning and mobilizing, which emerged as behaviors practiced more frequently following participation in the LMRP through both the quantitative and qualitative data (Table 10, Table 13, and Figures 4, 5, 6, 7, 9, and 12-15). The practices allowed supervisors and participants to better lead team members through the LMRP activities and action plan implementation. Numerous interviews also noted the understanding of what it means to be a leader and not just a manager, and how the LMRP helped them to realize and understand that difference. For example, participants reported a "paradigm shift" in how they lead teams, and how they ensure that there is a plan in place before doing the work, delegate responsibilities across the team rather than trying to do the work themselves, and inspire and motivate team members to do their best even if the work is challenging. Additionally, informants described how the leading and managing practices allowed them to understand how to lead and organize dynamic, diverse, and multisectoral teams working towards a common goal and during their work on the action plans.

**Outcome #3 Improved Pandemic Readiness:** improved response and better management of recent disease outbreaks.

This outcome emerged most strongly in the qualitative data ([Table 10](#) and [Table 13](#)) as well as from the outcome validation workshops. Through participation in the LMRP program, participants described the tools, skills, and methods they learned and applied to handle disease outbreaks and future pandemics. They reflected on their preparedness for the COVID-19 pandemic and how the LMRP provided them with the skills to be more prepared to manage future pandemics and disease outbreaks. In some instances, participants had the opportunity to directly apply the skills they gained to handle outbreaks of dengue fever, Ebola, and cholera among other disease outbreaks as well as second or third waves of COVID-19. Participants described the responses as more proactive, organized, and systematic compared to before going through the LMRP program. The leading and managing practices of scanning, focusing, planning, and organizing were apparent through all the descriptions in how participants are handling current health outbreaks, hypothetical descriptions of handling future pandemics, and pandemic-related work on the action plans.

**Outcome #4 Improved Interpersonal Skills:** increased trust, openness, and empathy among teams during group interactions and meetings.

Improved interpersonal skills is also an outcome that emerged most strongly through the qualitative data and the outcome validation workshops. The behavioral assessment quantitative finding of increased frequencies and practices of inspiring ([Figure 9](#)) behaviors also complements this finding. Participants recorded increased practices of giving other team members praise and acknowledgement following participation in the LMRP. Other behaviors included open communication and praise shared in the teams WhatsApp groups. Qualitative findings ([Table 10](#) and [Table 13](#)) also support this outcome in reports of increased collaboration, trust, and communication among team members following participation in the LMRP program. LMRP participants noted the importance of communication and working together to ensure that they achieve their goals and complete their work on the action plan effectively together.

One ongoing area for further exploration is around monitoring and evaluation and use of data practices. The monitoring and evaluation practices were especially apparent in the evaluation data for Kenya and Rwanda and were more minor themes across Malawi, Nigeria, Peru, and Uganda datasets. Future iterations of this program may continue to explore how the information was delivered and other potential reasons that contributed to bringing about those improvements in monitoring and evaluation behaviors in Kenya and Rwanda. Some potential components to consider could include the composition of the program teams and whether there was a monitoring and evaluation-focused person on that team, or if the data and reporting systems were already strong and the program provided participants with skills and space to work on furthered strengthening those systems. In general, across the different outcomes and across the data sources, the evaluation did not find any evidence of negative or unintended outcomes of the LMRP program.

In conclusion, it is evident that the LMRP program brought about positive changes in the ways that participants approach their work and apply the leading and managing practices to work together towards a common goal. In many cases, participants had to apply the leading and managing practices and other skills gained from the program outside their work on their action plans to outbreaks of dengue, Ebola, and cholera. Based on the self-reported interview data, responses to those outbreaks were notably better and more coordinated and organized compared to the COVID-19 responses. While this report highlights the outputs and intermediate outcomes of the LMRP program, the results are encouraging in illustrating a person-centered approach to strengthening emergency preparedness and response.

## RECOMMENDATIONS

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This section highlights recommendations coming out of the evaluation and from the program activities, which were compiled through direct feedback, modular feedback, and supervisor and participant interviews.

### PROGRAM RECOMMENDATIONS

Throughout the implementation of the LMRP program, MSH provided various opportunities for facilitators and participants alike to voice their feedback and recommendations on all aspects of the LMRP program. Responses received during program implementation helped strengthen the LMRP in real-time. For example, later implementations of the LMRP program in Malawi and Nigeria benefitted from feedback provided by the first LMRP program teams in Uganda. As a result of their feedback, there was a workshop where the Malawi and Nigeria teams gathered in person to collectively review and comment on each other's challenge models and action plans. This adjustment was a direct result of responding to prior feedback provided by the LMRP program teams in Uganda who expressed that peer review could strengthen teams' desired measurable results and action plans. It is recommended that future iterations of this program also follow a similar approach to course correct and improvement throughout the implementation cycle. A summary of additional LMRP program improvement recommendations in terms of logistics and activities are provided in the annex.

### EVALUATION RECOMMENDATIONS

The findings from the evaluation indicate positive outputs and intermediate outcomes from participating in the LMRP program. The evaluation found strong evidence, which was further validated by program participants, that public health leaders and teams are more prepared, ready, and equipped with the knowledge and skills to serve as leaders and handle current disease outbreaks and future pandemics. While increases in leading and managing practices such as implementing and monitoring and evaluation were not as apparent in the evaluation data across all countries, the evaluation findings illustrate that through LMRP program modules, team work on the action plans, and management of real-time disease outbreaks, program participants utilized and familiarized themselves with the key leading and managing practices. It was evident that program participants learned how to apply and utilize the scanning, focusing, aligning and mobilizing, and planning practices through the modules, action plan implementation, and work on disease outbreaks during the program and following the program implementation. One key recommendation is that future iterations of this program continue to have the interactive learning components as well as team-based activities. This approach allows participants to learn the key leading and managing practices as well as to apply them directly to a project tied with their work.

This recommendation is further supported by the evaluation finding that the LMRP program helped to strengthen team dynamics and understanding of what it means to delegate tasks, listen to and communicate with team members, and work together towards a goal. Through program work on root cause analysis, developing challenge plans, and implementing action plans, multisectoral teams came together and leveraged the skills they gained from the LMRP program. Working in teams to accomplish their goals allowed program participants to simulate actual team-based approaches to handling disease outbreaks and challenges in the work setting. Another key recommendation for future implementation of this program is that the multi-disciplinary teams approach continues, as team members can support and learn from each other while completing the program.

The evaluation also found consensus among program participants that they were satisfied with facilitation of the program and the quality and relevance of program activities. One component that participants noted as a slight limitation to program participation was the time to complete the program modules and meet with their teams on top of their other

work responsibilities. Additionally, a few participants suggested some additional capacity strengthening activities be built into the program such as a data analysis. While factors around busy schedules may be outside of the scope and control of the program, one additional recommendation for future iterations of this program is to consider incorporating additional data-focused modules and/or activities to help further progress on the monitoring and evaluating leading and managing practices. Additionally, this program can consider ways to link participants with any existing data analysis capacity strengthening platforms.

In terms of the evaluation methodology, while the outcome harvesting approach is time intensive, it is comprehensive and dynamic. The evaluation team was able to understand and evaluate how participants felt about their ability to handle and manage current disease outbreaks and future pandemics, through collection of the supplemental qualitative evaluation data and through validating the outputs and outcomes directly with program participants. Additionally, data on application and use of the leading and managing practices was complimented by the rich descriptions in the qualitative data. Lastly, involving those closest to the program in the validation of the outcomes strengthened the validity of these findings.

This evaluation was essential in capturing and contributing evidence to the subject area of team-based leadership development and practice for public health emergency prevention, preparedness, response, and recovery. This evaluation report provides quantitative and qualitative data as well as validated outcome statements that directly provide supporting evidence and illustrate the strengths in the team-based approach. The recommendations that came out of this evaluation provide suggestions on components of the LMRP program to continue in future iterations as well as areas to explore during future expansion of the program.

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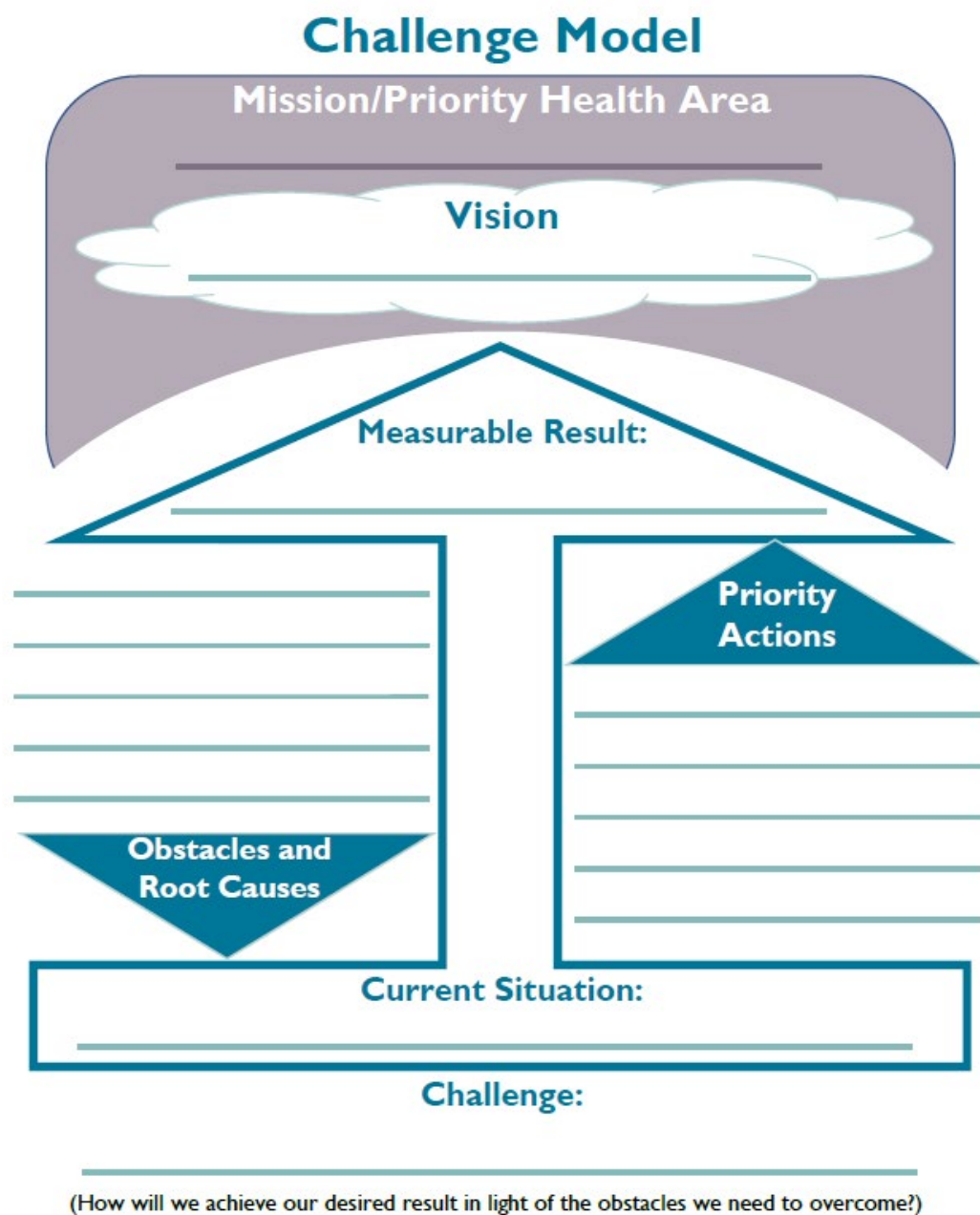
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## APPENDICES

### CHALLENGE MODEL





## Challenge Model Steps:

### STEP 1 Review your organizational mission and strategic priorities

- With your team, agree on a common understanding of your organization's strategic priorities. This understanding will help shape your vision within the context of your organization's priorities.

### STEP 2 Create a shared vision of the future

- With your team, imagine what you and others will see when your team has made its contribution to improvements in your organization's strategic priorities. This shared vision will inspire the team to face each new challenge.

### STEP 3 Assess the current situation

- With your team, scan your internal and external environments within the context of your organization's priorities. Consider such factors as the prevalence of the health problem, government policies, and current interventions. Describe what is rather than why the problem is. This will help you identify the challenges and select your measurable result.

### STEP 4 Agree on one measurable result

- Based on your organization priorities and your current situation, define a measurable result that can be achieved within the time frame of this LMRP.
- This desired measurable result is what will drive your work together and allow you to monitor and evaluate your progress toward achieving it. Your team will most likely need to adjust the result as you gain more information about the current situation and the obstacles you need to overcome.

### STEP 5 Identify the obstacles and their root causes

- Make a list of obstacles that you and your team will have to overcome to reach your stated result. Consider four broad categories into which most obstacles fall: policies and procedures; providers; equipment, infrastructure, and supplies; clients and communities. Use a root cause analysis tool to understand why the current situation isn't better and what factors maintain the status quo so you can address the causes and not just the symptoms.

### STEP 6 Define your key challenge

- State what your team plans to achieve (your measurable result) in light of the root causes of the obstacles you have identified. It helps to begin your challenge statement with: "How will we (your measurable result) given that (your main obstacles)?"

### STEP 7 Select priority actions

- Select key interventions that can address the root causes of each of the main obstacles identified. Be creative and avoid proposing interventions that have been already implemented without results. The process is not linear; one intervention may contribute to address two or more obstacles.

### STEP 8 Develop an Action Plan



- Develop an Action Plan that details activities needed for each priority actions to meet your challenge. Include estimates of the human, material, and financial resources needed and the time line for implementing your actions.

### ACTION PLAN TEMPLATE

Challenge	Current Situation	Measurable Result/Indicators
Root-Causes		Priority Actions
1. ..		1. ..
2. ...		2. --
3. ...		3. ..

Priority Action/Activities	Person responsible	Start date	End date	Resources (Staff, supplies, money, etc.)
1. (Priority Action)				
2 (Priority Action)				
3 (Priority Action)				

## BEHAVIORAL ASSESSMENT SURVEY

#	Question	Specific Examples
<b>In the past 6 months, have you....</b> <i>(Choose the option that best represents your behavior)</i>		
1 LS	<b>Looked at any data for trends?</b>  Never; At least once; Monthly; Bi-Weekly; Weekly; Daily; N/A	<i>Please list the types of data you looked at (check all that apply):</i> <input type="checkbox"/> Epidemiological data <input type="checkbox"/> Financial data <input type="checkbox"/> Performance data <input type="checkbox"/> Service delivery data <input type="checkbox"/> Case and hospitalization data <input type="checkbox"/> Impact of lockdowns on the economy <input type="checkbox"/> Data on the varying policies used by schools that open <input type="checkbox"/> Data on vaccine hesitancy and efficacy Other: _____ _____
2 LS	<b>Conducted any activity to better understand the people and actors you are working with and their capacities in response to public health emergencies?</b>  Never; At least once; Monthly; Bi-Weekly; Weekly; Daily; N/A	<i>Please list the types of activities conducted (check all that apply):</i> <input type="checkbox"/> Participatory Meetings (virtual or in-person) <input type="checkbox"/> Questionnaires <input type="checkbox"/> Stakeholder Mapping <input type="checkbox"/> Other: _____ _____
3 LS	<b>Conducted any activity to look for examples of opportunities or best practices that could be applied to your context?</b>  Never; At least once; Monthly; Bi-Weekly; Weekly; Daily; N/A	<i>Please list the types of activities conducted (check all that apply):</i> <input type="checkbox"/> Conducting online research of published studies <input type="checkbox"/> Assessing other similar organization's activities/strategies <input type="checkbox"/> Identifying other donor/funding sources <input type="checkbox"/> Identifying best practices in other regions/countries <input type="checkbox"/> Other: _____ _____
4 LF	<b>Carried out a participatory activity to identify priorities?</b>  Never; At least once; Monthly; Bi-Weekly; Weekly; Daily; N/A	<i>Please list the strategies used (check all that apply):</i> <input type="checkbox"/> Analyzing with your team priorities based on monthly data reports <input type="checkbox"/> Analyzing with your team priorities identified by the institution or senior leaders <input type="checkbox"/> Identifying priorities based of After Action Reviews <input type="checkbox"/> Other: _____ _____

5 LF	<p><b>Used data and trends to identify critical work challenges that could prevent you from achieving your objectives?</b></p> <p>Never; At least once; Monthly; Bi-Weekly; Weekly; Daily; N/A</p>	<p><i>If yes, please give an example of the challenge and how it was identified:</i></p>
6 LI	<p><b>Kept yourself and the people you are working with motivated despite any hardships or obstacles that may get in the way of achieving your goals?</b></p> <p>Never; At least once; Monthly; Bi-Weekly; Weekly; Daily; N/A</p>	<p><i>If yes, please give an example:</i></p>
7 LI	<p><b>Publicly praised or acknowledged others for their work?</b></p> <p>Never; At least once; Monthly; Bi-Weekly; Weekly; Daily; N/A</p>	<p><i>If yes, please give an example:</i></p>
8 LI	<p><b>Discussed challenges with the people you are working with and gave them a voice in finding the solution?</b></p> <p>Never; At least once; Monthly; Bi-Weekly; Weekly; Daily; N/A</p>	<p><i>If yes, please give an example:</i></p>
9 LA M	<p><b>Been able to mobilize additional resources to carry out plans and reach goals?</b></p> <p>Never; At least once; Quarterly; Monthly; N/A</p>	<p><i>If yes, please list the types of resources mobilized:</i></p> <p><input type="checkbox"/> Money  <input type="checkbox"/> Time  <input type="checkbox"/> Commitment  <input type="checkbox"/> Other resources: _____</p>
10 LA M	<p><b>Brought together multiple stakeholders to discuss or address a shared challenge?</b></p> <p>Never; At least once; Quarterly; Monthly; N/A</p>	<p><i>If yes, please explain who the stakeholders were:</i></p>

11 MP	<b>Met with others to develop a joint plan that defines activities, timeline, and responsibilities?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>If yes, please give an example:</i>
12 MP	<b>Communicated plans to relevant stakeholders?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>If yes, please give an example:</i>
13 MO	<b>Brought people you are working with together to define and distribute accountability for achieving your objectives?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>If yes, please give an example:</i>
14 MO	<b>Assessed and aligned work processes and procedures to carry out planned activities?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>If yes, please give an example:</i>
15 MI	<b>Met regularly and used data for decision-making during implementation?</b>  Never; At least once; Quarterly; Monthly; N/A	Please list what kind of data used: <input type="checkbox"/> Epidemiological data <input type="checkbox"/> Financial data <input type="checkbox"/> Performance data <input type="checkbox"/> Service delivery data <input type="checkbox"/> Case and hospitalization data <input type="checkbox"/> Impact of lockdowns on the economy <input type="checkbox"/> Data on the varying policies used by schools that open <input type="checkbox"/> Data on vaccine hesitancy and efficacy <input type="checkbox"/> Other:
		Please provide an example of how the data was used:
16 MI	<b>Used data to identify obstacles and make necessary adjustments to activities or resource allocations to achieve your objectives?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>If yes, please provide examples:</i>

17 MI	<b>Coordinated with other programs or delegated responsibilities as necessary to help you achieve your objectives?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>If yes, please give an example:</i>
18 MM E	<b>Tracked and recorded data documenting your activities?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>Please list the type of data tracked and recorded:</i> <input type="checkbox"/> Epidemiological data <input type="checkbox"/> Financial data <input type="checkbox"/> Program monitoring data <input type="checkbox"/> Service delivery statistics <input type="checkbox"/> Case and hospitalization data <input type="checkbox"/> Impact of lockdowns on the economy <input type="checkbox"/> Data on the varying policies used by schools that open <input type="checkbox"/> Data on vaccine hesitancy and efficacy <input type="checkbox"/> Other: <hr/> <hr/> <hr/>
19 MM E	<b>Reviewed progress against planned activities and deliverables?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>If yes, please give an example:</i>
20 MM E	<b>Reviewed data to determine whether or not activities are producing the intended results?</b>  Never; At least once; Quarterly; Monthly; N/A	<i>If yes, please give an example:</i>

## TEAMS ASSESSMENT SURVEY

To what extent does the statement describe your team:

- 1 = Not at all, this is almost never true for the majority of the team members
- 2 = This is occasionally true for the majority of the team members
- 3 = Moderately well, this is true about half of the time for the majority of the team members
- 4 = This is usually true for the majority of the team members
- 5 = Extremely well, this is true almost all of the time for all of the team members

I. PURPOSE: Purpose is the core reason the team exists.

	1	2	3	4	5
--	---	---	---	---	---

a) Our group shares a clearly understood common purpose. ☐ ☐ ☐ ☐ ☐

b) Our group has the sense that our work is important to the institution right now. ☐ ☐ ☐ ☐ ☐

2. **COMMITMENT:** Commitment is evident when each member cooperates, learning and doing what is needed to succeed.

	1	2	3	4	5
--	---	---	---	---	---

a) Each group member is equally committed to the group's success. ☐ ☐ ☐ ☐ ☐

b) Each group member understands how individual contribution relates to group performance. ☐ ☐ ☐ ☐ ☐

3. **COMPLEMENTARY SKILLS AND TALENTS:** Teams need a mix of technical skills, functional skills, people skills, and problem-solving skills. When teams hit roadblocks, complementary skills and talents offer a diversity of viewpoints to help drive breakthroughs.

	1	2	3	4	5
--	---	---	---	---	---

a) Our members have a good blend of complementary skills and talents. ☐ ☐ ☐ ☐ ☐

b) Group members tap into each other's skills when needed. ☐ ☐ ☐ ☐ ☐

4. **NORMS AND RULES:** Teams need a set of guidelines for expected behaviors and work standards, both of which define the performance level of a team.

	1	2	3	4	5
--	---	---	---	---	---

a) Our group jointly takes ownership of how things get done. ☐ ☐ ☐ ☐ ☐

b) Our group uses time-efficient processes to complete our work.

5. **GOALS AND ACCOUNTABILITY:** Team members need a clear map of what the team is trying to accomplish. Accountability for those goals is everyone's job -- team members share mutual responsibility for achievements, and members are not afraid to acknowledge missteps and get back on track.

	1	2	3	4	5
--	---	---	---	---	---

a) Each group member clearly understands the group's performance expectations.

b) Each group member contributes equivalent amounts of high-quality work.

c) Each group member acknowledges when they have made a mistake.

6. **MORALE:** Team morale captures the enthusiasm, trust, and openness among members and their efforts. High morale can improve productivity, promote collaboration, and decrease turnover and absenteeism, allowing a team to perform at their very best.

	1	2	3	4	5
--	---	---	---	---	---

a) Non-group members can quickly see and feel the high level of enthusiasm among our group.

b) Our group is generally positive and motivated, even in difficult times.

c) Our group has open, constructive discussions about disagreements or problems.

d) Our group is vulnerable with one another and trusts that

actions are from a place of good intent.

7. **CHALLENGE, RECOGNITION, AND REWARD:** High-performing teams consistently question what they know and stretch themselves with new projects. Team members acknowledge and appreciate outstanding efforts and outcomes, reinforcing how they want the team to operate.

	1	2	3	4	5
a) Our group regularly seeks out new information and challenges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Each group member has a strong personal commitment to one another's growth and success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Our group celebrates victories and rewards as a group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. **MEASURING RESULTS:** Teams need processes to regularly monitor ongoing methods and results, with an eye toward continuous improvement.

	1	2	3	4	5
a) Our work approach allows for regular modification and improvement over time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Our results tend to exceed clients' expectations of quantity, quality, and timeliness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. **LEADER COACHING:** Team leaders have to exhibit behaviors that coach and support the team, so that it can function at its highest potential.

	1	2	3	4	5
a) The leader engages and energizes the group to successfully launch projects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



b) The leader provides guidance and feedback at the right time to aid group progress.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) The leader consults with team members to remove barriers to group performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## INTERVIEW GUIDES

### Interview Questions (participants)

Please reflect on your time participating in the LMRP program. Think about the content presented in the modules and the work that your team did to apply that content.

1. (Capacity question) Can you tell us what the LMRP program was about? What were the main takeaways from the course? (Probe: what did you learn from the course? What did the different modules cover?)
2. (Behavior change) What have you done differently after participating in the LMRP program? Can you provide an example?
  - a. Who was involved?
  - b. What influenced this?
3. (If there was a difference described in question #2) Why do you think this difference occurred?
  - a. What made it possible?
4. Did any of your team members contribute to this difference? If so, how did they contribute?
  - a. Why did it work?
5. Can you tell us a bit more about your experience of participating in this program as a team? (Probe: what did you like or dislike about the experience? Why? Can you provide us with more details?)
6. Can you tell us more about the work on your team's Challenge Model and the action plan?
7. Please describe the team's dynamics over the course of the implementation of the action plan. Did you observe any changes among team dynamics in the implementation of the action plan? (Probe: what did you note about the dynamics of the team during the implementation of the action plan? Can you provide a specific example of this?)
8. In your opinion, what is the most significant change that occurred as a result of your participation in the LMRP program?
  - a. Have you used any of the leading and managing practices in the course of your work? If so, can you describe which practices you utilized? (Probe: provide example of one of the practices)
  - b. Probe: how do you think would respond to COVID-19 challenges and other pandemics in the future?? (Probe: Can you provide more details? Why do you think this?)
9. Is there anything else that you would like to share with us today that was not previously covered?

Thank you very much for time. This concludes today's interview.

### **Interview Questions (supervisors)**

Please reflect on your time as a supervisor of teams participating in the LMRP program. Think about what you observed as a supervisor and the work that your team did to apply the course content.

1. (Capacity question) Can you tell us what the LMRP program was about? Can you describe to us about your involvement as supervisor?
2. (Behavior change) What has your team done differently after participating in the LMRP program? Have you observed any changes in your team since they participated in the LMRP program? If so, can you provide an example?
3. Why do you think this difference in your team (and/or yourself as a supervisor) occurred?
  - a. What made it possible? How did different team members contribute? How did you contribute as the team leader?
  - b. Why did it work?
4. Can you tell us more about your role as a supervisor of your team through their work on the LMRP course modules and action plan?
5. What happened following the development of the action plan? Can you provide a specific example of how your team worked on this?
6. Can you tell us a bit more about the experience of observing your team go through this course? (Probe: did they tend to like the experience? Did they tend to dislike the experience? Can you provide us with any additional details?)
  - a. Probe: in your opinion, how do you think your team would respond to COVID-19 challenges and other pandemics in the future? (Probe: Can you provide more information? Why do you think this?)
7. Is there anything else that you would like to share with us today that was not previously covered?

Thank you very much for time. This concludes today's interview.

## QUALITATIVE MATRIX

Table 13. Full Qualitative Matrix by Country and by Theme

Theme	Illustrative Quote					
	Kenya	Malawi	Nigeria	Peru	Rwanda	Uganda
<b>Improved teamwork</b>	"So after participating in the program, I can tell you're like our work, environment is now clear, everyone comes to work....So if I can, I can confirm that since this training, the members who trained they reduce the work politics and are able to work in harmony. Yeah, actually, the course has impacted positively to our condition."	"This course introduced us to an experience that as a person you cannot work alone. So you need team members who are able to contribute to the goal"	"Done differently is that now with my team we work closely because before we didn't understand our individual differences, we didn't know our strengths and our weaknesses of the team because there are some things that I expect my team members to know how to do. But I didn't really throw it up to them to see what they can do and not what they can't do. So with the LMRP, we're able to leverage on our strengths and weaknesses."	"Well, in general, what I liked about this experience is that it has taught us to be more participative, to be more horizontal"	"the take home message Umm during the last few months of the course, One was to bring together the team to plan as a team, to work as a team to deliver as a team and to achieve as a team."	"I think what I did differently was appreciating that everyone of us has a role, whether you are lower or your higher or you are the same level, you all have a role to play. So that we make the institution grow together"
<b>Application of leading and managing practices</b>	"This is I was also able to gain skills for mobilizing of resources. And I am able to mobilize resources, the program also looked so deeply in how we're able to mobilize resources, that is as clear cut have been able to gain on mobilizing resources to use during pandemics and also proper utilization of the mobilized resources. There are some things that I enjoyed in the program. Like those skills of being able to mobilize resources, or you can be able to talk to people get resources, now you've been	"And also another thing I learnt is another areas of my influence. Yeah, which areas am I able to influence and which ones should I leave to others"  "Yeah, because we plan together. Now that step also to ensure that nobody is left behind. So since planning together was another very crucial part of the course there has really been that very, very big difference	"So that was why we were able to put all those, put the project together or conceptualize it together, and they we're able to, the leadership was able to align with us based on what they were able to see, the issues actually around it. So through the training, the training actually taught us to be able to look, see problems and then scan or even scan for problem in the current situation. And then see what we can do to improve it"	"This program helped me to easily face the problem, we elaborated plans, we planned, organized and executed, as well as monitoring and constantly evaluating, they have been very useful tools"	"I can say that the discussion of the scanning of the environment knowing our target, we learn to give more importance on evidence-based intervention, this is very important. When you know your target group, when you know stakeholders, when you know where your partners there, you can align and mobilize them. And you can develop key messages according to the knowledge, attitude and practice of your	"Yeah, there are some things like doing a very thorough root cause analysis to find out what is the actual problem to why something has not been achieved. So, you find out that something has not been getting achieved because maybe a key stakeholder has not been getting engaged and then having an informal conversation with this person. And reaching a consensus on what each of you would want to see."

	able to explain your issues are relating to pandemics so that organizations can be able to give you resources."	that we have ever encountered as a team."			target group. You can plan activities according to schedule stakeholders, according to your partners..."	
<b>Leadership skills strengthened and gained</b>	"I have had a wonderful experience with the LMRP program. Because I have had a paradigm shift in my way of doing things at the management level, the way of planning, the way of organizing, thinking different, seeing things in a different perspective, and of course being able to align resources."	"And also we had also, another important thing is about how to be the leader. On this issue, we could see the difference between being a leader and a manager. And this point that's why I can say now there a lot of changes within that. And we have those skills now on how we can manage the team and how we can see and monitor our progress in due course of the activities as of now."	"Yeah, for me personally, I think it's cheerful. More of my leadership skill. and now as a supervisor you know, the onus is on me. If there is success in the group. Everything lies on my head and if there is failure, everything lies on my head. So I am leaning to delegate more of my responsibility to the people that we work together."	This program is extremely important, because it allows us to recognize ourselves, to develop our potential, the directors, from my point of view, are the ones who participate, facilitated, there is a whole block of analysis, organizational climate, among others, with a more horizontal and democratic leadership, which allows us to achieve things"	"Uh, First of all, the program was to put us in context of leading, in the context of how to manage the pandemic in terms of making views together, making decisions together, making us a team. In brief, it was a like to learn us team spirits. Yeah and how to manage a situation that is hard for us In terms of leading in term of how to manage together not only one by one, but to make the efforts together?"	"you would realize that a leader should have some attributes and a good leaders should not give up easily. You should be a motivator. So how can you be a good leader yet you yourself cannot complete a small task. "
<b>Collaboration and trust</b>	"I would summarize it in the four points; I would say that one would, one would be more coordinated, the two, we would more sensitive to the issues of logistics, three, we would really look more at the community, working with the community, and we would bring in the issue of multi sectoral collaboration would be key to us."	"This course introduced us to an experience that as a person you cannot work alone. So you need team members who are able to contribute to the goal"	"My group has been able to create a friendly environment whereby I can suggest I can make some suggestions and in such suggestions will be followed in order to help us achieve our goal as a team... Yes, and LMRP has improved my confidence in that aspect. Yes, it has improved my confidence, so I can now make suggestions with the thought that might my opinion matters..."	"there have been several changes and particularly the way of leading the team, all that has been modified. In what I have to give more emphasis to the participation of everyone and the decision making is better having a consensual decision of the whole team"	First of all, once I meet a challenge, I bring on the table the team we discuss, I get views, different views and perception of the challenge then we as a team we sit and design a way forward to overcome the challenge.	"when it comes to public health emergencies, it is never a one-man team really, never at all, there are different aspects to public health emergency response. How do you work with the coordination pillar? How'd you bring on board to the logistics? How does surveillance work with the laboratory? So that aspect of coordination stood out to ensure we achieve a common goal"
<b>Communication</b>	"And then we have to have our allocation of targets as	"I have so many experiences about the	" So having that rapport do you understand, having	"And this diploma course has made us	So everyone has contributed for the	"we have not been listening to each other well because I

	Key in monitoring and improving performance, we have to have a good strategy that is sustainable for the project, even after the project, then the other thing is that we have to create channels for communication, very important."	program. As of now I am able to maintain good dialogue and prevent conflicts when I am amongst the team. I have learnt good practices, good practicing and communication skills. I am able to listen and provide feedback nicely as I was before. "	someone do you understand that can listen...You can come and vent do you understand and then you actually have people that are willing to listen to you. And then we were all in the same team.	openly express other work expectations and logically this diploma course has shown us that there is no other way of working if it is not using leadership and also participation and management that must be done during any work that is carried out. Communication has made it much easier for us to communicate with each other and this has logically had an impact on the work goals"	success and need to needed .To coordinate all those activities and as you know, communication is a very, very key in leadership and everyone	thought I am bigger than that one, I should be the one commanding, but we realized that actually if you do things together, allow for somebody to express the skill and knowledge which they have,"
<b>Tools and skilled gained to handle future pandemics</b>	"it will be different, would have a different approach, of course will embrace multidisciplinary approach. Multi sectoral approach because we realized we cannot operate as a silo. We needed other departments, we needed other key players into the team. So would have a multi disciplinary approach. The, key was fast to scan. What is it that we ask? What is it that we don't ask? What is it that is within us and that is near us and we are not seeing we can utilize?"	"now we are able to plan systematically our activities and also assign resources, we are able to organize which offices should handle this activity as indicated earlier on, and also during the implementation to get the job done. We are able to involve different stakeholders starting from the senior managers, middle level up to the ground.	"So that was why we were able to put all those, put the project together or conceptualize it together, and they we're able to, the leadership was able to align with us based on what they were able to see, the issues actually around it. So through the training, the training actually taught us to be able to look, see problems and then scan or even scan for problem in the current situation. And then see what we can do to improve it"	"We already have a learned methodology, analyze the problem, define the challenge and go to the action plan and then make a check of all the advanced, I believe that this methodology will help us to solve other problems such as non-communicable diseases and other problems as a region"	" You know, normally the team from the training we did and we have even some was writing somewhere else Yeah, we know how to, to communicate In the case of an outbreak, we know how to select the team him, uh, depending of the capacity for each one and also how to work as a team in emergency problem, how to organize, How to strategize and also how to screen, How to investigate."	"we responded to Ebola in the much better way, much more organized way using some of the skill sets that we actually got from LMRP and the rest because it was known and we know how fast it can know we have all the background info and we are certain. We know, so we will do a much better job. With a certain outbreak, the uncertain one, like I said we have to clear uncertainty before you can now start saying we are moving."
<b>Management of current disease outbreaks</b>	Recently we had cholera outbreak in, in some of our prisons, we were able, we	So I can say that maybe we acted differently because I think when we	"OK let me know be straightforward in dealing with COVID-19 or any of any	"And we are applying this in practice, because now we have	"I think we would be able to respond as quick as possible and	"If there is another pandemic and my team is there, I want to say that it

	<p>were able to really handle the situation more effectively as compared to the earlier pandemic that we had or disease outbreak that we had of COVID-19.</p>	<p>were fighting the COVID 19 pandemic we were not organized. We were just, yeah, we were not organized. But when it came to cholera epidemic I think we were more organized. On the COVID 19 I think we were more reactive but when it came to cholera epidemic I think we focused on more on being proactive. I think we involved the stakeholders as well as I think there was also community involvement and I think that helped us in the fight against cholera epidemic rather than COVID 19. "</p>	<p>epidemics or pandemics that may happen in future I need to umm, umm be strategic. We need to really put things in place. We really, I really need to perhaps be more active, active in the sense that uh works as a team, as a unit in the research unit, we really need to put head in place to see that we just more you know."</p>	<p>an outbreak of dengue fever in this basin, ... everything that is ... advancing very quickly to other scenarios. ... We see that ... there is no one to lead the activity, there are no clear and precise objectives. ... there was no schedule of meetings, so that is what we have tried to apply all the reality in the course to practice....we started to organize ourselves, we started to generate that leadership, because not all of us can be leaders, not all of us can be, but there have to be team leaders and a general manager"</p>	<p>baby efficient as possible because we have got experience now cause after KOvideo also got Ebola... So you can see. Uh hope people are responding even beyond our borders over."</p>	<p>will not cost the country to waste because the people are there who have the skills and knowledge in handling it faster than before you remember how long it took us to handle the case of Covid 19 as compared to Ebola that took us 1-2 months, so I will say that the pandemic would take a short time best of the fast action."</p>
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## FULL LIST OF OUTCOME AND OUTPUT BY COUNTRY

Table 14. All validated outcome and output statements by country and by theme

Country	Statement
Kenya	<b>Outcome Area 1: Team members are better equipped as leaders to apply leading and managing practices to their daily work</b>
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants report that they are more frequently employing the practices of scanning and aligning and mobilizing human and material resources to achieve a goal ( <b>output</b> )
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants report that their leadership skills improved ( <b>output</b> )
	Following participation in the LMRP program in Kenya from mid-2022 to early-2023, participants have grown as leaders and are more knowledgeable in their understanding and application of leadership and management practices. ( <b>outcome</b> )
	<b>Outcome Area 2: The implementation of monitoring and evaluation practices are more prevalent in a project life cycle</b>
	Following participation in the LMRP program in Kenya from mid-2022 to early-2023, participants are implementing monitoring and evaluation activities to support project implementation ( <b>outcome</b> )
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants reported developing measurable targets and routinely assessing performance to stay on track to achieve their desired outcome ( <b>output</b> )
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants reported having increased ownership over the collection and management of data ( <b>output</b> )
	<b>Outcome Area 3: Effective identification and application of leadership and management skills to respond to public health emergencies</b>
	Following participation in the LMRP program in Kenya from mid-2022 to early-2023, participants reported increased capacity to respond to public health emergencies due to the leading and managing skills learned ( <b>outcome</b> )

	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants reported being better organized <b>(output)</b>
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants reported recognizing the necessity of scanning to understand what resources are needed to achieve a goal <b>(output)</b>
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants reported frequently collecting, disseminating and reflecting on data <b>(output)</b>
	<b>Outcome Area 4: The ability to work as a team has been fortified and participation among member more equitable</b>
	Following participation in the LMRP program in Kenya from mid-2022 to early-2023, participants reported strengthened team dynamics, which has supported equitable contributions and management among all team members <b>(outcome)</b>
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants report identifying unique skill sets and leveraging these strengths to work as a team <b>(output)</b>
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants report creating a sense of community where all team members are cognizant of their value and feel their contributions can be shared and are respected <b>(output)</b>
	Through participation in the LMRP program in Kenya from mid-2022 through mid-2023, participants report decentralizing decision making and distributing responsibilities among all team members <b>(output)</b>
Malawi	<b>Outcome Area 1: Teamwork and team dynamics are strengthened</b>
	Through participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants now better understand what it means to work as a team. <b>(output)</b>
	Following participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants are better able to divide responsibilities among team members and build on the skills of each team member, which better allows them to handle and manage problems and achieve results. <b>(output)</b>
	Following participation in the LMRP program in Malawi from mid-2022 through mid-2023, most participants have increased communication skills and respect within their teams and are now better to navigate differences as a team. <b>(outcome)</b>



	<b>Outcome Area 2: Increased readiness to deal with future pandemics and current disease outbreaks and challenges</b>
	Through participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants feel that they are now more equipped with the skills and tools to deal with future pandemics, especially with the practices of scanning and planning. <b>(output)</b>
	Through participation in the LMRP program in Malawi from mid-2022 through mid-2023 and reflecting on the experience with managing the COVID-19 pandemic, participants believe the response would be more efficient, especially in terms of teamwork, planning and mobilizing resources. <b>(output)</b>
	Following participation in the LMRP program in Malawi from mid-2022 to mid-2023, participants are better able to handle disease outbreaks, which is evident through their team's proactive work on the cholera response in Malawi. <b>(outcome)</b>
	<b>Outcome Area 3: Improved and stronger leadership skills</b>
	Through participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants gained a better understanding of the importance of leadership and coordination of team members while working on pandemic responses and generally while working as a team. <b>(output)</b>
	Through participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants reported a greater understanding of what it means to be a leader and not just a manager. <b>(output)</b>
	Following participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants reported directly applying the leading and managing skills (inspiring and planning) and understanding the importance of those skills to accomplish their work. <b>(outcome)</b>
	<b>Outcome Area 4: Stronger and improved processes in how they approach and do their work</b>
	Through participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants feel that while they previously had skills to address challenges, they were not the most effective or efficient. They feel that now their skills and approaches (e.g., use of challenge model) are improved to better do their jobs. <b>(output)</b>
	Through participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants are better able to utilize tools such as the root cause analysis and challenge model to approach challenges and get their work done. <b>(output)</b>
	Following participation in the LMRP program in Malawi from mid-2022 through mid-2023, participants now more systematically approach their work based on the tools and skills gained from the program. <b>(outcome)</b>
Nigeria	<b>Outcome Area 1: Team members are empowered and there is positive management of teams</b>

	Following participation in the LMRP program in Nigeria from mid-2022 to mid-2023, participants are more empowered which results in increased team management. <b>(outcome)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants report that they are better able to reflect on individual skillsets and leverage this knowledge and behavior to accomplish a team goal. <b>(output)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants report that there is more intentional creation of a collaborative environment which promotes inclusive decision making and open dialogue. <b>(output)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants report that they are better able to hold team members accountable to complete group work. <b>(output)</b>
	<b>Outcome Area 2: Capacity and leadership skills are gained and enhanced</b>
	Following participation in the LMRP program in Nigeria from mid-2022 to mid-2023, participants understand the importance of leadership are more able to use leadership skills to build capacity of other team members. <b>(outcome)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants reported feeling more comfortable delegating tasks to other team members. <b>(output)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants report feeling more motivated to work and inspire fellow team members. <b>(output)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants systemically approach their work based on the tools and skills gained from the program. <b>(output)</b>
	<b>Outcome Area 3: Effective identification and application of leadership and management skills to respond to public health emergencies</b>
	Following participation in the LMRP program in Nigeria from mid-2022 to mid-2023, participants are more empowered which results in increased team management <b>(outcome)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants report using leading and managing skills such as scanning, focusing, and aligning and mobilizing. <b>(output)</b>
	<b>Outcome Area 4: Stronger partnerships in teamwork and mature team development</b>

	Following participation in the LMRP program in Nigeria from mid-2022 to mid-2023, participants are more empowered which results in increased team management <b>(outcome)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants report the value of face-to-face meetings to cooperate, discuss, and problem solve collectively <b>(output)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants report employing active listening skills more intentionally. <b>(output)</b>
	Through participation in the LMRP program in Nigeria from mid-2022 through mid-2023, participants recognize the added value of a team that is comprised of different specialty areas. <b>(output)</b>
Peru	<b>Outcome area 1: Readiness to manage future pandemics, disease outbreaks, and natural disasters</b>
	Following participation in the LMRP program in Peru from mid-2022 through mid-2023, participants believe that they have increased skills, tools, and knowledge of how to lead a team, work towards solving real-life problems and deal with future pandemics. <b>(output)</b>
	Reflecting on readiness to manage the COVID-19 pandemic and the health training they received, after participating in the LMRP program, participants are more equipped with the tools and methods to manage future pandemics and challenges. <b>(output)</b>
	Through participating in the LMRP program in Peru from mid-2002 through mid-2023, participants are now able to better manage current outbreaks and coordinate response efforts in their regions (evident in their current work in response to the dengue outbreak and other disease outbreaks). <b>(outcome)</b>
	<b>Outcome Area 2: Increase in Interpersonal Skills (Communication and Trust)</b>
	Through participation in the LMRP program and working with the team members on the challenge model and action plan, individual and group-level communication improved. <b>(output)</b>
	Following participation in the LMRP program, participants are now better able to navigate different viewpoints and opposing ideas within their team and have conversations to work through those differences. <b>(output)</b>
	Through participation in the LMRP program, participants cited increased trust, openness and empathy among their teams during group interactions and meetings. <b>(outcome)</b>
	<b>Outcome Area 3: Improvements in Teamwork and Leadership</b>
	Through participation in the LMRP program, leaders and team members are better able to clearly divide tasks among the team. <b>(output)</b>

	During participation in the LMRP program, participants supported each other and further understood the meaning of working as a cohesive team. <b>(output)</b>
	Through LMRP program participation and work on the action plan, the leader learned how to ensure that team members are empowered to participate and contribute to decision making. <b>(output)</b>
	Through LMRP program participation, participants cite that their work is more collaborative and less top down. <b>(outcome)</b>
Rwanda	<b>Outcome Area 1: There is greater cohesion and partnership among teams which has increased their ability to respond to challenges.</b>
	Following participation in the LMRP program in Rwanda from early-2022 to early-2023, participants are able to work as a unified and cohesive team. <b>(outcome)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report understanding the significance of valuing diverse view points and opinions to make decisions that are inclusive of each team member's input. <b>(output)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report the value in mobilizing a multi-disciplinary team to collectively evaluate, understand, and respond to a challenge. <b>(output)</b>
	<b>Outcome Area 2: Individuals have the knowledge of leading and managing practices and can effectively identify when to employ these skills to achieve a goal.</b>
	Following participation in the LMRP program in Rwanda from early-2022 to early-2023, participants feel they are better able to determine when to apply leading and managing practices to respond to a challenge. <b>(outcome)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report aligning human resources to discuss a challenge and then collectively developing a plan to mobilize resources for the response. <b>(output)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report more frequently scanning an environment to deliberate on root causes and gaps. <b>(output)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report using data as a guiding force to understand the current situation, develop reasonable targets, and guide action along program implementation. <b>(output)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report utilizing the skill of inspiring others to create a sense of value and shared purpose among team members. <b>(output)</b>
	<b>Outcome Area 3: Conscious team management and mobilization have reinforced emergency response</b>

	Following participation in the LMRP program in Rwanda from early-2022 to early-2023, participants are exercising conscious team management which has reinforced a stronger emergency response. <b>(outcome)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report an increase in accountability in responding to challenges which has led to stronger group effort in combating health emergencies. <b>(output)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report a greater desire to inspire and mobilize human resources to continue fostering team work and the development of leadership skills <b>(output)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report greater mentorship among team members to leverage talent and provide training to develop new skills <b>(output)</b>
	<b>Outcome Area 4: Participants are better equipped to respond to public health emergencies</b>
	Following participation in the LMRP program in Rwanda from early-2022 to early-2023, participants feel better prepared to respond to public health emergencies. <b>(outcome)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report gaining transferrable skills that can be applied to other health emergencies outside of COVID-19 <b>(output)</b>
	Through participation in the LMRP program in Rwanda from early-2022 through early-2023, participants report decision making has become more inclusive <b>(output)</b>
Uganda	<b>Outcome area #1: Teamwork is strengthened and there is increased understanding of what it means to work as a team.</b>
	Following participation in the LMRP program in Uganda in 2022, participants report increased understanding of how to work as a team towards a common goal and how each team member has a role to play. <b>(output)</b>
	Through participating in the LMRP program in Uganda in 2022, participants report increased team cohesion in their work <b>(output)</b>
	Through participating in the LMRP program in Uganda in 2022, participants describe an increased understanding of how to leverage skills, divide tasks, and work together as a team to get work done. <b>(outcome)</b>
	<b>Outcome Area 2: Leading and managing practices are applied to current work and participants are better equipped with tools and knowledge as leaders.</b>
	Through participating in the LMRP program in Uganda in 2022, participants report increased frequencies of behaviors around inspiring and listening to their colleagues and team members. <b>(output)</b>

	Through participating in the LMRP program in Uganda in 2022, participants note that they are better able to align and mobilize resources and work with relevant stakeholders to get their work done. <b>(output)</b>
	Reflecting on the learnings from participating in the LMRP program in Uganda in 2022, participants report that the tools and methodologies learned and utilized in this program allow them to approach their work in a more systematic way. <b>(outcome)</b>
	<b>Outcome Area 3: Readiness to handle future pandemics and manage current disease outbreaks</b>
	Through participating in the LMRP program in Uganda in 2022, participants have an increased awareness of the need to align and mobilize and work with relevant stakeholders to better handle disease outbreaks and future pandemics. <b>(output)</b>
	Through participating in the LMRP program in Uganda in 2022, participants feel that they are now more prepared to respond to future pandemics in a more efficient way (in terms of time and resources). <b>(output)</b>
	Reflecting on what was learned during the LMRP program in Uganda in 2022, participants reported improved response and better management of recent disease outbreaks (Ebola, cholera, malaria, and Marburg). <b>(outcome)</b>

## ADDITIONAL PROGRAM RECOMMENDATIONS

### *Leadernet Platform*

#### *What works:*

- Comprehensible module content and learning resources and easy to understand and complete module assignments.
- Responsiveness of Leadernet team and their effective ability to troubleshoot challenges.
- Providing airtime/date bundles to support internet connectivity for module completion and

#### *What can be improved:*

- There is no function for participants to save progress on a module.
- Capturing participant module completion accurately.
- Not being able to identify what team a participant belongs to when they comment on the forum.
- Reviewing navigation of the e-learning platform ahead of time with participants. There was often times insufficient tech literacy.

### *Team engagement*

#### *What works:*

- Using WhatsApp to follow up with groups and individuals, publish module completion, screenshots of assignments, clarify expectations, share progress. Teams mentioned this follow up was motivating.
- Orientation of teams at launch of program provided a great opportunity for teams to get to know each other, connect with their facilitator and align their expectations with the program.
- Flexibility among team members to decide when to hold team meetings.
  - Hold team meetings after hours or on weekends.
  - A combination of physical and virtual meetings.

#### *What can be improved:*

- Including more aspects of face-to-face learning and team discussion.
- Ensuring commitment on behalf of all team members to participate in the LMRP program. Some team members were not committed to participate, which often resulted in limited participation and in some cases, dropping from the program entirely.
- Developing an application to participate in the LMRP or vetting participants to ensure commitment. Some participants did not choose to participate and instead were assigned participation. This eroded LMRP buy-in from the inception.
- Limited program funding did not allow for greater in-person participant collaboration with other teams.

## LMRP ACTIVITIES

#### *What works:*

- Assigning team coordinators to help manage team participation and support facilitator in reaching teams.
- Case studies within modules were helpful and relatable.

- Hosting an all-coaches meeting to discuss facilitation successes and challenges mid-way through the LMRP implementation to experience share and troubleshoot challenges collectively.

*What can be improved:*

- Increase module completion time. Two to three weeks was often not enough time to finish the modules given the competing responsibilities teams often faced in the field.
- Teams faced difficulties in mobilizing funding to execute action plan.
- Including a 1-2 day session with all teams in-person concentrating on challenge model and action plan development.