2023 CLA CASE COMPETITION

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Case Title:

MIRA:A Context Monitoring and Resilience Analysis Tool for Adaptation

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Organization:

CRS Ethiopia

Summary:

In 2021, Ethiopia's RFSA started implementation while the country grappled with multiple natural and anthropogenic shocks. Following reflections from the preceding activity which highlighted the need for frequent context monitoring and learnings from other CRS Country Programs, CRS Ethiopia implemented the Monthly Interval Resilience Analysis (MIRA). MIRA is a high frequency resilience monitoring approach used to measure household response to shocks and stressors to better inform food security and resilience programming. MIRA uses community embedded enumerators to collect monthly data on shocks experienced by a household and subsequent coping mechanisms. As a tool for continuous context monitoring and adaptive management, MIRA allows CRS Ethiopia to gather and analyze granular data on a monthly basis as well as pause and reflect as a project to inform activity adaptations. In less than a year of implementation, MIRA data has led RFSA to have a clearer understanding of shocks and guided activity adaptations in drought impacted communities and revealed the need for stronger internal sectoral collaboration during implementation. It is also serving as a tool to engage key government stakeholders and influence decision making. In addition, MIRA's potential for predicting future shocks and stressors with continued data collection is an advantage as it allows ample time for RFSA to reach target households prior to experiencing such events.

1. **WHAT: What is the general context in which the case takes place? What organizational or development challenge(s) or opportunities prompted you to collaborate, learn, and/or adapt?**

Ethiopia experiences recurrent and severe shocks. At the onset of the Resilience Food Security Activity (RFSA) in 2021/22, the country was dealing with war, high inflation, drought, and locust invasion. In RFSA operational areas, communities were in the third year of the worst drought in 40 years leading to increased food insecurity, malnutrition, crop and livestock loss, water shortage, and internal displacement.
While RFSA's theory of change hypothesized these shocks, the Activity lacked an effective mechanism for monitoring its impact on the lives of target clients. As a follow-on activity, RFSA inherited systems from a prior project such as resiliency monitoring. However, there were limitations as it only focused on baseline and endline survey and did not allow the project to determine household resiliency. As such, the previous system missed tracking and understanding participants' conditions and coping mechanisms during the project's lifetime that would inform activity adaptations.
While a government Early Warning System (EWS) existed at community, sub-district, and zonal levels, gaps persisted, including variations in quality and timeliness, lack of granularity (i.e., no household level data) as well as weak feedback based on data.
CRS' experience in monitoring resilience in Malawi and Madagascar offered an opportunity to address these challenges. In CRS Malawi, the Monthly Interval Resilience Analysis (MIRA) was implemented to measure and predict resilience among households prone to food insecurity. Over a seven-year period, monthly data collection across thousands of households provided a real-time record of shocks and allowed forecasting of the following month's food insecurity incidence to ensure targeted interventions. For CRS Ethiopia, this was an opportunity to adopt a tested approach while tweaking it to focus beyond resilience analysis and include context monitoring.

2. **What two CLA Sub-Components are most clearly reflected in your case?**

Adaptive Management

M&E for Learning

3. **HOW: What steps did you take to apply CLA approaches to address the challenge or opportunity described above?**

CRS reflections following the end of Development Food Security Activity (a preceding resilience Activity) revealed the need for context specific and high frequency monitoring during a project's implementation period to inform short and long-term adaptive management.
As an initial step, CRS Ethiopia held several consultative sessions with key stakeholders including the Government of Ethiopia's Disaster Risk Reduction (DRR) offices at the Zonal and District level and CRS Malawi. CRS' meeting with the government was an opportunity to understand the current EWS capabilities including the data flow, feedback mechanism as well as gaps at each reporting level. Stakeholders reflected on the system's strengths and weaknesses, revealing the lack of quality data for timely use as a prominent issue. Following this, CRS Ethiopia engaged counterparts in Malawi to understand the processes, tools, and resources associated with MIRA and how it can address RFSA's needs. Learning from Malawi showed the importance of staffing to support implementation, data collection tools utilized as well as CRS Malawi's influence strategy leading to government adoption. CRS then developed the MIRA protocol which consisted of seven key elements, including digital data collection, capacity building, automation, responsiveness, quality assurance, community engagement, and data use. MIRA combines a baseline, end line, and 15-minute monthly household survey to collect information on context, shocks, food security and coping strategies. The information is collected using smartphones and a mobile application with enumerators hired from participating communities and trained to collect household information. As a capacity building measure, using community-embedded enumerators helps reduce attrition, minimizes potential gaps in data collection, and facilitates community engagement. Surveys are then uploaded to a cloud server monthly, allowing for remote data monitoring. Following protocol development, a baseline was conducted in 880 households, followed by monthly data collection of the same households. With support from Cornell and CRS MEAL staff, the monthly data was then reflected on a dashboard, accessible by USAID, partners, and peer RFSAs, for ease of analysis and visualization. As part of community and stakeholder engagement, the CRS team presented MIRA results at the government's Zonal DRR monthly stakeholder coordination meeting for awareness and development of mitigation plan. Upon request, the dashboard was also shared with OCHA (co-chair of the Zonal DRR coordination meeting) and will continue to be made available for partners and peer organizations. For the community level, CRS developed an engagement strategy to work with the existing sub-district EWS committees (part of other RFSA activities) for information sharing and to inform decision making. In addition, households that have opted for SMS EW updates have also been identified and will receive information on upcoming shocks and positive coping mechanisms to ensure the data is packaged for the community's appropriate use. MIRA's real-time data is also used during monthly situation updates to internal RFSA sectors. As a routine monitoring and learning effort, the development and use of MIRA has been an iterative process for CRS Ethiopia with ongoing tweaks and changes. Following the initial trend analysis, the CRS MEAL team presented the dashboard to internal sector teams for a pause and reflect opportunity (a standing agenda for all quarterly sector meetings to inform discussions, interpret the data, and identify implications). A key decision following these meetings was the addition of data points for better understanding of the data in different contexts. These included looking at the data by different agro-ecological zones (highland, lowland, and midland), household types (male no female or vice versa) and specification on food types households consumed, key considerations when contextualizing data for adaptive management. Finally, following gaps identified in the monthly quantitative survey, the team decided to include a semi-annual qualitative survey. Results from this will inform updates to the monthly quantitative survey.

4. RESULTS: Choose one of the following questions to answer.

We know you may have answers in mind for both questions; However please choose one to highlight as part of this case story

A. DEVELOPM ENT RESULTS

MIRA allows CRS and partners to repackage interventions based on the specific community and/or sub-district need. In particular, the prevalence of water scarcity across many months in one RFSA district provided the evidence base to propose FY24 activity changes. RFSA now plans to adapt its water development activity to rehabilitate and expand boreholes in Midega Tola district (previously unplanned) to ensure safe water access for communities most affected.

The CRS team's understanding of the effect of drought vis-à-vis agro-ecology zones also greatly broadened following MIRA, specifically the severity of drought in lowland areas compared to highland zones. As such, recommendations from the MIRA team included the need for interventions, in particular, seed distribution to focus on lowland districts/sub-districts. Furthermore, while RFSA already promotes the consumption of nutritionally dense foods such as meat, vegetables, milk, and pulses, the triangulation of data through MIRA allowed CRS to align the nutrition promotional activities with sub-districts targeted for specific livelihood interventions. As such, the integration and layering of agriculture and nutrition activities are critical. In addition, monthly data collection revealed the presence of a disease impacting household well-being. As the quantitative survey limited the ability to pinpoint further information, the team decided to employ a qualitative survey to further understand, the results of which are currently being analyzed to inform programmatic decisions.

The CRS team's presence at the monthly Zonal DRR meetings is also an opportunity to influence key government stakeholders and ensure reprogramming decisions are evidence based. Finally, MIRA's predictive analytics is an opportunity for RFSA to go beyond resilience analysis and context monitoring. As the volume of data gathered increases, MIRA's predictive analytics will allow CRS to proactively target vulnerable households and ensure proper adaptive mechanisms and preparedness both by the Activity and government bodies

5. **ENABLING CONDITIONS: How have enabling conditions - resources (time/money/staff), organizational culture, or business/work processes - influenced your results? How would you advise others to navigate any challenges you may have faced?**

MIRA is operating in a well-resourced environment, with RFSA staff specifically assigned to support the implementation. This includes the activity's consortium partner, Cornell University, which is the technical lead for the initiative. Furthermore, MIRA evolved from a series of reflections on the strengths and weakness of the previous resilience activity (DFSA) as well as learnings from other CRS Country Programs, namely, Malawi. This highlighted a culture of continuous learning, improvement, and collaboration both across CRS Country Programs and within the RFSA team.

While the enabling environment allowed MIRA to initially proceed, the team needed to persuade key stakeholders, particularly its donor, BHA, on the importance of collecting high-frequency data. While MIRA was part of RFSA's design, questions arose prior to implementation on the use of the high frequency data and overall management requirements. To better engage BHA, RFSA leadership, joined by CRS Malawi and Cornell University counterparts presented to BHA's RFSA decision makers with a practical demonstration of Malawi's experience and Ethiopia's potential. The presentation enabled RFSA to engage in an open conversation with the donor to understand their perspective, particularly their questions about the initiative. The team approached the discussion as an opportunity to search for alternatives together if consensus was not reached. The presentation allowed RFSA to show evidence of the success of MIRA elsewhere and the rich potential for replicability in Ethiopia.