

# RECURRENT MONITORING SURVEY (RMS)

Capturing Resilience in Real Time

## An Overview of the Recurrent Monitoring Survey (RMS)



**USAID**  
FROM THE AMERICAN PEOPLE



# RECURRENT MONITORING SURVEY (RMS)

## Introduction and Overview

Resilience is the ability to respond to adversity and change without compromising future well-being<sup>1</sup>. From a measurement perspective, capturing changes in resilience over time requires one to simultaneously track resilience *capacities* (sources of re-silience), shocks and stresses, and well-being outcomes<sup>2</sup>. These three components—shocks, capacities, and outcomes—can either be measured retrospectively, by identifying households' re-reflections on the experiences of previous shocks, or in real-time, as households are *actually* experiencing the shock. The latter—real-time approaches—are often optimal, as they are less susceptible to recall biases, and enable adaptive management of resilience activities. To respond to the push for more real-time data, and to capture the dynamic nature of resilience in the face of shocks and stresses, USAID and TANGO have partnered to develop the Resilience Recurrent Monitoring Survey (RMS).

The RMS<sup>3</sup>, typically embedded in the design of an impact evaluation<sup>4</sup>, is characterized by three main features: a) real-time data collection following a predetermined shock trigger, b) high-frequency, panel data collections of short durations, and c) small sample sizes. Together, RMSs capture different household trajectories in the face of shocks, and because data are collected and analyzed quickly, RMSs can inform whether project interventions are building resilience, and can illuminate optimal points for launching early action responses, crisis modifiers, and other shock responsive actions. A RMS is not a substitute for baseline, interim and end line designs; instead, a RMS is a complement to this design that both elucidates what happens between these spaced data collections and in the face of shock events.

1. USAID defines resilience as “the ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.

2. Resilience capacities mediate the effect of shocks and stresses on well-being outcomes.

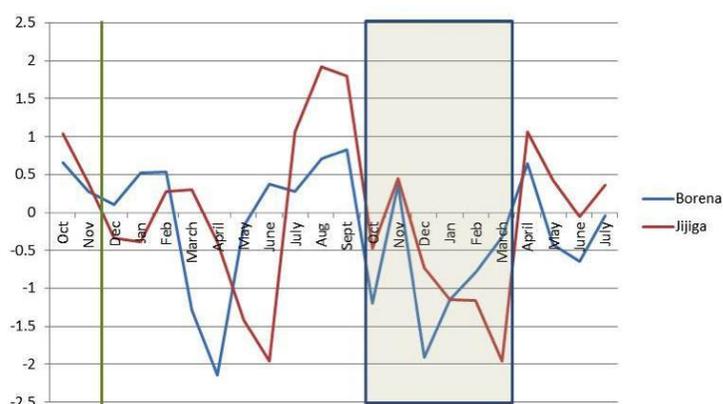
3. For an example, see: Frankenberger, Timothy and Lisa C. Smith. Ethiopia Pastoralist Areas Resilience Improvement and Market Expansion (PRIME) Project Impact Evaluation Report of the Interim Monitoring Survey 2014-2015. November 2015. Prepared for the Feed the Future FEEDBACK project of the United States Agency for International Development.

4. RMS data collection need not be tied to an impact evaluation.

## RMS Trigger Indicators

RMS data collection activities are launched after “trigger indicators” being monitored from the outset of an evaluation reach shock thresholds established during the evaluation’s design phase. Examples of such shocks could include droughts, floods, and conflict. The data source for trigger indicators depends on the specific shocks or stresses the RMS is being built around, and ideally would include both objective and subjective metrics. Objective data sources for climatic shocks for instance, include FEWS NET Food Security Outlook publications, project early warning trigger indicator data, rainfall classifications provided by the government, and satellite remote sensing data from the African Flood and Drought Monitor (AFDM). Useful sources of secondary data on conflict include the Uppsala Conflict Data Program Georeferenced Event Dataset and the Social Conflict in Africa Databases. Subjective shock and stresses data can be collected from project beneficiary households themselves as a part of regular project monitoring.

**Rainfall deviation from norm in Borena and Jijiga, October 2013-July 2015**



The green vertical line represents the timing of baseline data collection. The shaded box represents the timing for the RMS.

Source: African Flood and Drought Monitor, 2015.

5. See: <https://www.strausscenter.org/scad.html>

This publication was produced for review by the United States Agency for International Development, Center for Resilience. It was prepared by Tim Frankenberger and Lisa Smith, TANGO International with contributions from Tiffany Griffin, USAID Center for Resilience, for the Resilience Evaluation, Analysis and Learning (REAL) Project. REAL is a consortium-led effort to synthesize evidence on the impact of USAID-funded resilience programming, strengthen the capacity of Monitoring and Evaluation practitioners to engage in context-specific resilience analysis, and share relevant learning with USAID Missions, host governments, implementing partners and other key stakeholders. The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or of the United States Government.

# RECURRENT MONITORING SURVEY (RMS)

## Design, Data Collection, and Sample Research

### Questions

Once trigger indicators confirm the occurrence of a shock, RMS data collection should begin promptly. The research design for the RMS employs mixed methods, using quantitative data and community qualitative surveys. For the quantitative survey, ideally a *panel* subsample is drawn from the baseline sample to monitor a small number of households<sup>1</sup> at regular intervals (for instance, every two months for a year, producing 6 rounds of data)<sup>2</sup>. Repeat, panel data collected over time captures real-time impacts and changes in how people are coping at different points after a shock, as well as their rate of recovery. The questionnaire should be short (15-20 minutes) and should focus on a limited set of questions pertaining to shocks exposure, resilience capacities, coping strategies, and well-being outcomes (i.e., food security, economic well-being, etc.)<sup>3</sup>. Of note, it is important to include indicators that are sensitive to rapid change. Qualitative data include information gathered from sources such as focus group discussions and key informants interviews. These data help to contextualize quantitative indicators, provide an understanding of local concepts and definitions of resilience, and illustrate individuals' mental models around the circumstances they are managing.

### Data Analysis

#### Quantitative Data Analysis:

The specific techniques employed for analysis of quantitative data depend on the research questions posed. In all cases, basic descriptive analysis includes trends over the survey rounds in shock exposure, the use of coping strategies, well-being outcomes, and resilience capacities (if data are collected on the latter). In the case of climate shock exposure, household GPS coordinates can be used to download and employ satellite data on such variables as rainfall, soil moisture and vegetation coverage deviations from the norm. Descriptive statistics, such as

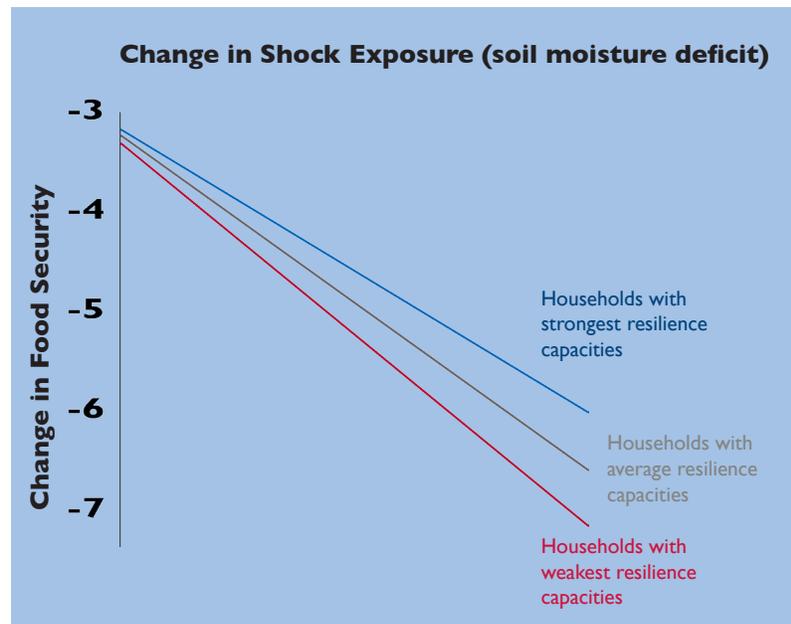
1. Typically the sample size is chosen based on available resources, with an ideal size being as close as possible to N=1,000 or more and no less than

400. The choice of sample households should be based on a stratified random sampling design, with the strata reflecting the geographic breakdown of the baseline strata, and sampling weights calculated to reflect the population of baseline households.

2. Note that an RMS can still be conducted if it is not planned at baseline as long as households that will be included in the RMS sample can be located. This requires that GPS coordinates of each household be collected at baseline. It is also important to test and, if necessary, account for any attrition bias, for example due to migration.

3. To maximize the number/types of dynamics one can explore, you can design the RMS to include certain measures at certain time points, but not all time points.

means and percentages, are reported by geographical area and for important population sub-groups of interest (e.g., livelihood groups and by socio-economic status). Positive-deviant analysis, whereby groups of households faring particularly well over the course of a shock are identified and compared to the other households, can be used to find out which resilience capacities and coping strategies enabled households' success in managing the shock. More advanced quantitative techniques, such as growth regressions, are employed to understand which resilience capacities assisted households to recover (that is, which foster greater resilience), which capacities enabled the use of positive coping strategies, and which prevented the use of negative coping strategies. In such analyses, the dependent variable is the change in well-being outcomes of interest (i.e., food security) over time and, in addition to indicators of resilience capacities, independent variables include shock exposure, initial well-being levels, and household and community characteristics.



#### Qualitative Data Analysis:

The data collected during Key Informant Interviews and Focus Group Discussions are transferred into topically-structured matrices and then analyzed to identify patterns in responses and contextual information to better understand and help explain the quantitative findings. Responses from participants from all survey rounds can be used to interpret and supplement findings from quantitative data analysis and to identify differences in perceptions between groups, including gender, as well as over time.

# RECURRENT MONITORING SURVEY (RMS)

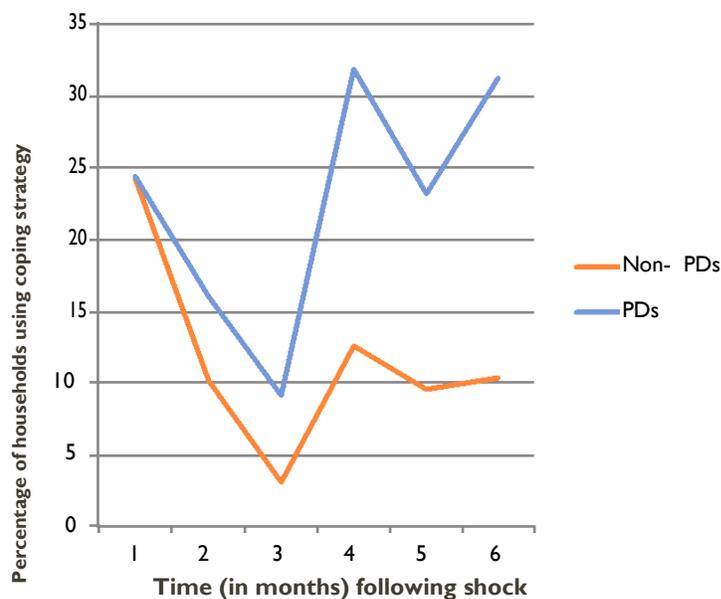
## Adaptive Management and Use of RMS Findings

As resilience programming gains more and more prominence as an approach for addressing chronic vulnerability, approaches like the RMS can provide timely information that enables implementing partners, donors, host governments, and other stakeholders to make important adjustments in interventions to improve resilience program investments.

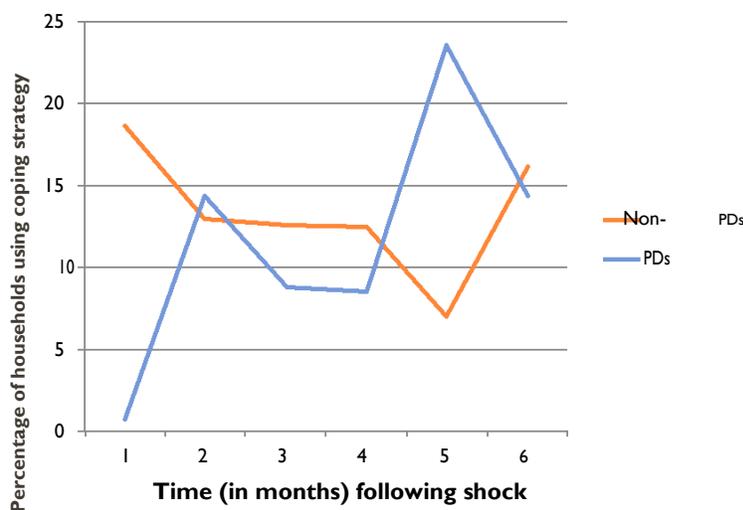
### Illustrative research questions that can be explored in a RMS include:

1. What downstream impacts of the shock did households experience and how did the impact of multiple complex risks evolve over the RMS period?
2. What coping strategies did households employ to deal with the shock(s) and how is this related to resilience capacities?
3. How did households' food security change over the shock period? What distinguishes households that were able to maintain their food security in the face of the shock (characteristics, sources of resilience) versus those that were not able to, i.e., which were more resilient to its impacts?
4. How did the severity of exposure to the shock affect households' ability to recover from it?
5. Do households' and communities' resilience capacities help protect them from its negative impacts?
6. How do the amounts of, and effectiveness of, different capacities change over time following a shock?

### Receive Food Aid



### Draw Down on Savings



The Technical and Operational Performance Support (TOPS) Program is the USAID/Food for Peace-funded learning mechanism that generates, captures, disseminates, and applies the highest quality information, knowledge, and promising practices in development food assistance programming to ensure that more communities and households benefit from the U.S. Government's investment in fighting global hunger. Through technical capacity building; a small grants program to fund research, documentation, and innovation; and an in-person and online community of practice, the Food Security and Nutrition (FSN) Network, TOPS empowers food security implementers and the donor community to foster lasting impact for millions of the world's most vulnerable people.