



### Resilience Recurrent Monitoring Surveys: An Overview

Tim Frankenberger TANGO International

Bangkok, Thailand July 11-14, 2017



### Introduction and Overview

 Resilience is the ability to respond to adversity and change without compromising future well-being.

• Three components: shocks, capacities, and outcomes.

 These can be measured either retrospectively, by identifying households' reflections on previous shocks, or in real-time, as households are actually experiencing shock.

• Real-time approaches are optimal.

 To capture the dynamic nature of resilience, USAID and TANGO have partnered to develop the Resilience Recurrent Monitoring Survey (RMS).

### **RMS Introduction and Overview**

• RMS 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.

 RMSs can inform whether interventions are building resilience, and can illuminate optimal points for launching early action responses, crisis modifiers, and other shock responsive actions.

 RMS is not a substitute for baseline, interim, and end line designs; instead, RMS is a complement to this design.

### RMS Trigger Indicators

- RMS data collection activities are launched after "trigger indicators" being monitored from the outset of an evaluation reach shock thresholds.
- The data source for trigger indicators depends on the specific shocks or stresses that the RMS is being built around, should include both objective and subjective metrics.

# Data Sources for Trigger Indicators

Objective data sources for *climatic* shocks include:

- 1. FEWS NET Food Security Outlook publications,
- 2. Project early warning trigger indicator data,
- 3. Rainfall classifications provided by the government, and
- 4. Satellite remote sensing data from the African Flood and Drought Monitor (AFDM).

Useful sources of secondary data on *conflict* include:

- 1. Uppsala Conflict Data Program Georeferenced Event Dataset
- 2. Social Conflict in Africa Database.

# **Design and Data Collection**

- Once trigger indicators confirm the occurrence of a shock, RMS data collection should begin.
- The research design for RMS employs mixed methods: both quantitative data and community qualitative surveys.
- **Quantitative survey**: Panel subsample is drawn from the baseline sample to monitor a small number of households (~400-800) at regular intervals.
- Repeat, panel data collected over time captures real-time impacts and changes in how people cope after a shock, and rate of recovery.
- **Questionnaires** should be *short* (15-20 mins) and focus on questions about shocks exposure, resilience capacities, coping strategies, and well-being outcomes.
  - Important include *indicators* that are sensitive to *rapid change* (i.e., fast variables).
- **Qualitative data** include info gathered from sources (i.e. FGDs and KIIs) helps to contextualize quantitative indicators and illustrates local concepts of resilience.

### Sample Research Questions

#### Illustrative research questions 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?

### **Data Analysis**

#### Quantitative data analysis:

- Basic descriptive analysis includes trends over the survey rounds in shock exposure, the use of coping strategies, well-being outcomes, and resilience capacities.
- For *climate shock exposure*: Household GPS coordinates can be used to employ satellite data on rainfall, soil moisture and vegetation coverage deviations.
- **Descriptive statistics** (means and percentages) are reported by geographical area and for important population sub-groups of interest.
- **Positive-deviant analysis** can be used to find out which resilience capacities and coping strategies enabled households' success in managing shock.
- Advanced quantitative techniques (growth regressions) are employed to understand which resilience capacities assisted households to recover, which enabled positive coping strategies, and which prevented negative coping strategies.
  - **Dependent variable** is the change in food security over time.
  - Independent variables include shock exposure, initial well-being levels, and household and community characteristics.

### **Data Analysis**

#### Qualitative data analysis:

- Data collected from KIIs and FGDs are transferred into topicallystructured matrices and then analyzed to identify patterns in responses to better explain quantitative findings.
- Responses from participants from all survey rounds used to interpret and supplement findings from quantitative data analysis and identify differences in perceptions between groups, including gender, and over time.

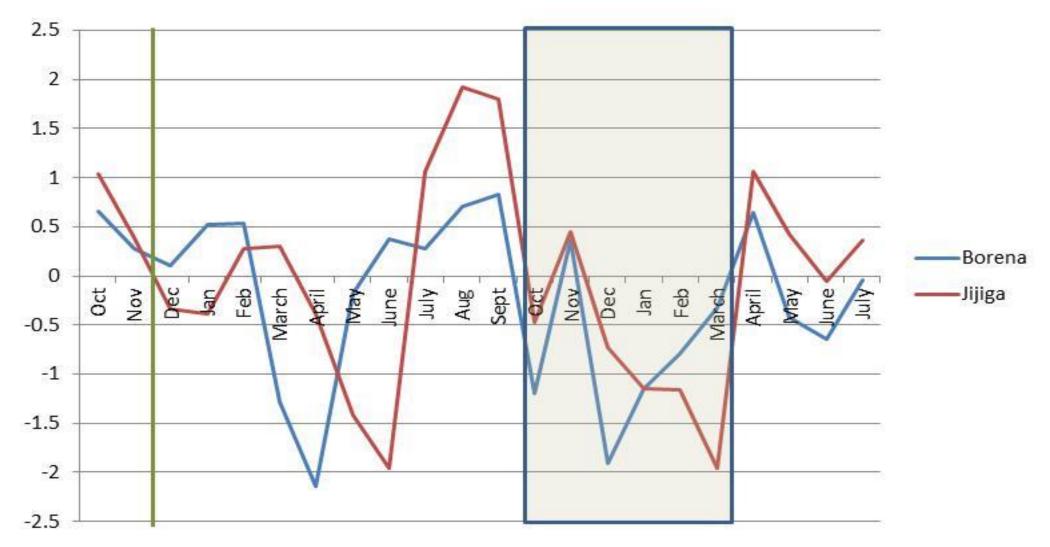
### Adaptive Management and Use of RMS Findings

 As resilience programming gains more prominence, empirical evidence will be needed for measuring how well households, communities, and systems manage shocks and stressors and how interventions and programs designed to strengthen resilience capacities, perform.

• M&E systems will become key in providing such information.

 RMS provides timely information to enable programmers to make adjustments in interventions to improve resilience program investments.

#### Rainfall deviation from norm in Borena and Jijiga Oct 2013-July 2015



The green vertical line represents the timing of baseline data collection. The shaded box represents the timing for the IMS. *Source:* African Flood and Drought Monitor, 2015.

Thank you!