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# Insights into Implementing Recurrent Monitoring Surveys in USAID-funded Activities

February 24, 2021

USAID Resilience Measurement Practical Guidance Note 6

# Moderators

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**Jill Scantlan**

Global Resilience Monitoring, Evaluation, Research  
& Learning (MERL) Adviser  
Mercy Corps

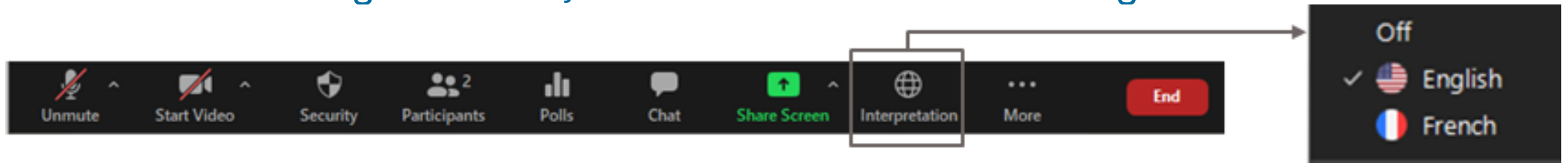


**Maja Persson**

Communications & Knowledge Management Advisor  
Save the Children

# Welcome & Important Instructions

- Select English or French: Everyone must select a language!
- Sélectionnez anglais ou français : Chacun doit choisir une langue !



- Fill out the poll on your screen
- Remplissez le sondage sur votre écran
- Introduce yourself in the chat
- Présentez-vous dans le chat

## Remember:

- Mute yourself when not speaking
- Reach out to Zubaida or Maja in the chat for any tech support

# REAL and the Practical Guidance Note Series



# Guidance Note 6 Overview

# What Does the Guidance Note Cover?

- What an RMS is and how it is different from a typical program monitoring
- Determining whether to deploy an RMS
- Recurrent monitoring models and examples
- Methodological considerations for designing an RMS
- Planning and budgeting for an RMS

## And what **GN6** didn't cover

- Step-by-step process or protocol for conducting an RMS
- RMS analysis



# What are *recurrent monitoring surveys* and how is it different than regular monitoring?

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- Occurs around shocks and stresses
- Triggered by shock or given at certain times of year
- Follows same households over time (i.e., panel data)
- Focused on how individuals and households respond to the shock/stress and how this affects their wellbeing before, during and/or after the shock has occurred

# Model I: Shock/Stress-triggered RMS

**RMS rounds are triggered** when a pre-specified threshold is reached

- Shocks identified in advance
- Shocks and stresses are routinely monitored through context monitoring
- Use national and local context monitoring data

## **Application**

- Crisis modifier



Photo: Sean Sheridan for Mercy Corps



# Model 2: RMS for seasonal and/or idiosyncratic shocks

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## RMS rounds are

- Deployed at regular intervals around **seasonal** shocks and stresses
- Example
  - Rainy and dry seasons
  - Post-harvest and lean seasons
- Capture **idiosyncratic** circumstances of households



## Application

- Embed RMS into annual surveys



Photo: Sean Sheridan for Mercy Corps

# Example of Different Shock Contexts

<b>Rapid Onset (Acute)</b>   <b>Slow Onset (Chronic)</b>	The 2015 <b>earthquake</b> in Nepal that killed over 9,000 people, destroyed or badly damaging more than 800,000 homes and displaced approximately 2.8 million people.	Severe <b>flooding</b> , affecting approximately 14% of the population.
	Protracted period of <b>drought</b> in Ethiopia affecting 90% of households in the target area.	Households responding to <b>multiple shocks and stresses</b> in Northern Bangladesh throughout the year.
	<b>Large Covariate</b> ←	→ <b>Idiosyncratic</b>

# Case Studies

# Presenters

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**Tim Frankenberger**  
President  
TANGO International



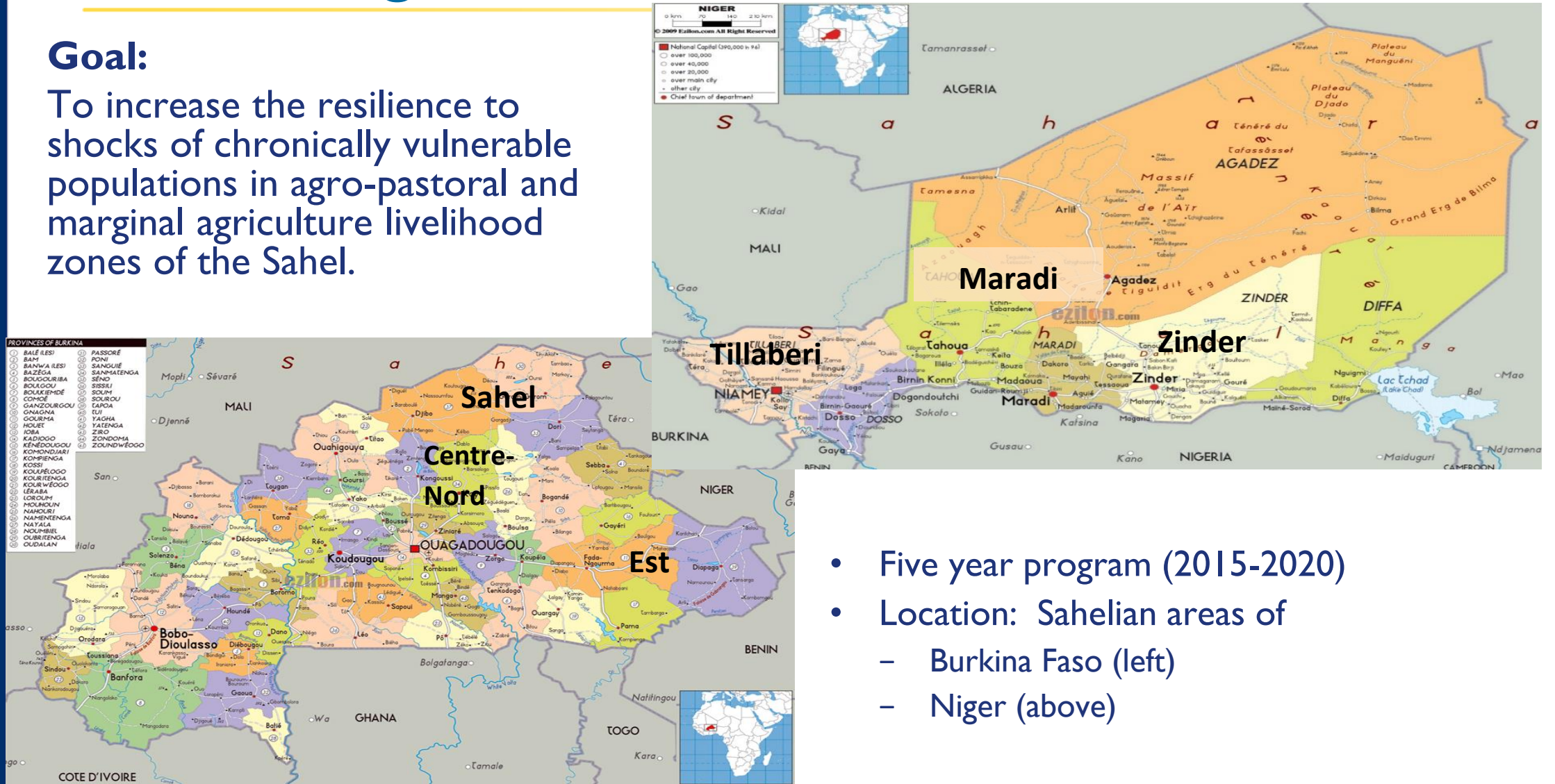
**Arno Bratz**  
MEL Director, Apolou  
Mercy Corps

Case Study I: Implementing  
an RMS in the Resilience in  
the Sahel Enhanced (RISE)  
initiative in Niger and Burkina  
Faso

# RISE Program

## Goal:

To increase the resilience to shocks of chronically vulnerable populations in agro-pastoral and marginal agriculture livelihood zones of the Sahel.



- Five year program (2015-2020)
- Location: Sahelian areas of
  - Burkina Faso (left)
  - Niger (above)

# RISE Program: Activity Areas

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- Improved technologies and management practices
    - Agricultural production
    - Animal rearing
  - Access to markets and business development
  - Access to financial resources
  - Disaster Risk Reduction (DRR)
  - Conflict mitigation
  - Health and nutrition
- ➔ Strengthen households' resilience capacities

# RMS 2018 - 2019 Data Collection

## Quantitative data

- Collected August 2018 – April 2019 (9 months)
- Representative, panel sample
- 828 households
- 5 rounds 2 months apart
- Survey cost 220,000

## Qualitative data

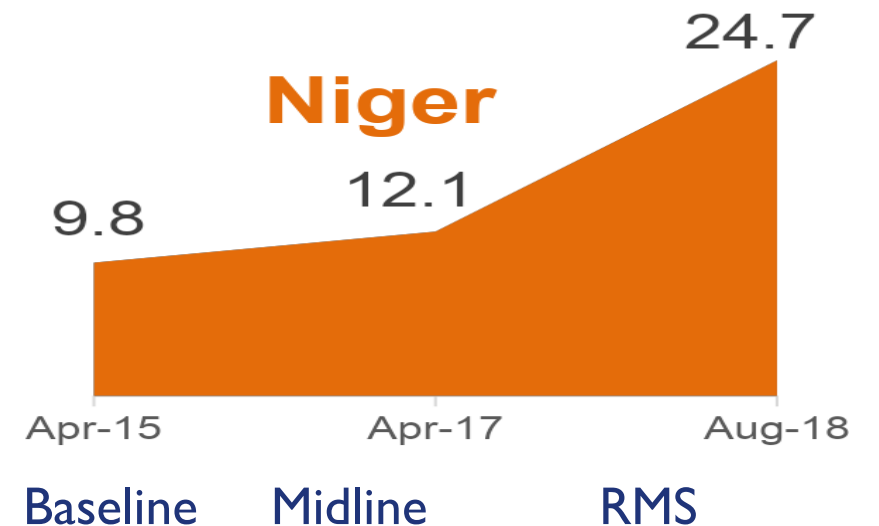
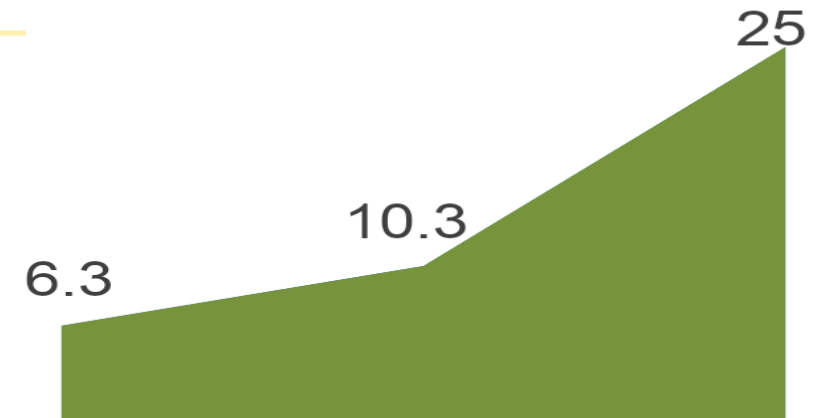
- FGDs, KIIs
- Concurrently collected in each round





# Shock Exposure

- Measured shock exposure with index taking into account household reports of the incidence and severity of 26 shocks, including:
  - Environmental
  - Economic
  - Conflict shocks
- Shock exposure progressively increased over the course of the RISE program's implementation in both program areas



# Shock Exposure During the RMS Period

Four major “exogenous” shocks:

- Multiple climate shocks
- Army worm infestations
- Influx of violent extremism
- Food price increases

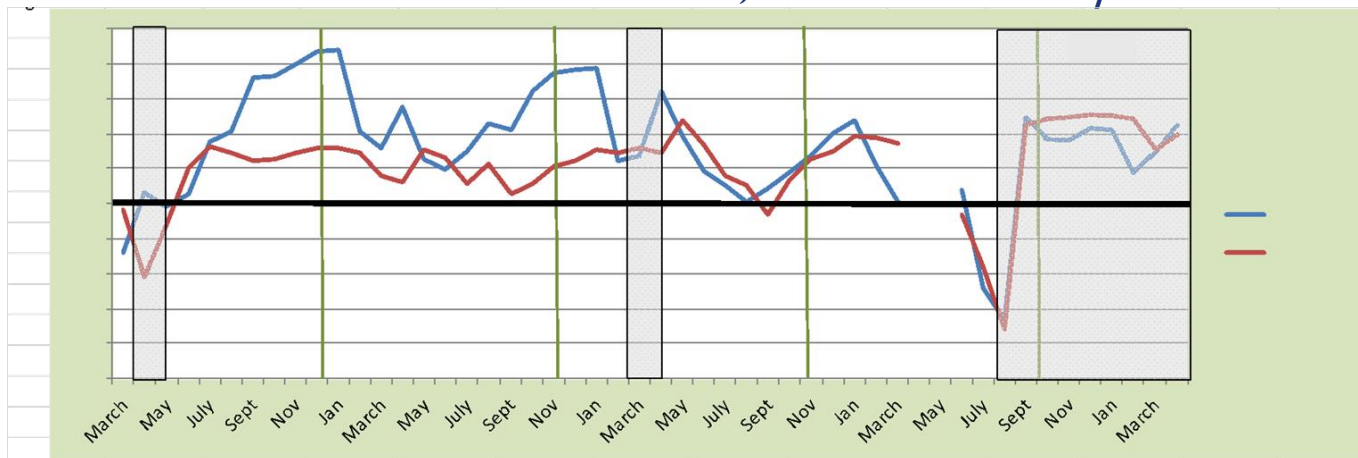
Drought

Excessive rains, flooding

Lack of rain at critical times

High winds leading to crop lodging

*Streamflow deviation from norm, March 2015 to April 2019*



# Shock exposure during the RMS period: violent extremism

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**“People were becoming more desperate and living in constant fear of being attacked”.**

- Conflict shock rose during the RMS period: escalating violent extremism (Burkina Faso and Tillabery in Niger)
- Starting in RMS Round 3, militant groups attacked villages leading to large-scale displacement
- Downstream impacts:
  - Market disruptions, school closures
  - Disruption of livelihoods: agriculture and livestock rearing, gold panning, petty trade
  - Hampered ability to receive humanitarian assistance

**“They could no longer go about their daily business without being scared.”**

**“Everyone had become careful where they go and who they associate with. They felt they had lost their peace.”**

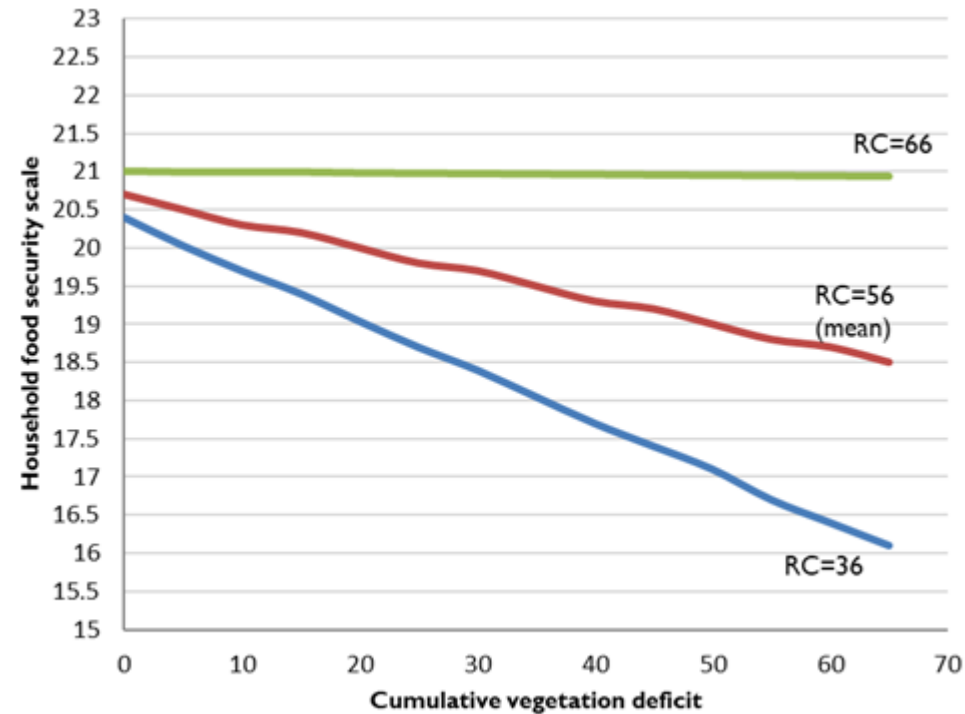
# Lessons learned

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- RMS indicated that Programs have to adapt to changing risk environment
- Many interventions in the initial design may no longer be viable
- Importance of Shock Responsive Safety nets

# Shock recovery: The role of resilience capacities

*Estimated recovery trajectory with increasing vegetation deficit at differing levels of resilience capacity (Burkina Faso program area)*

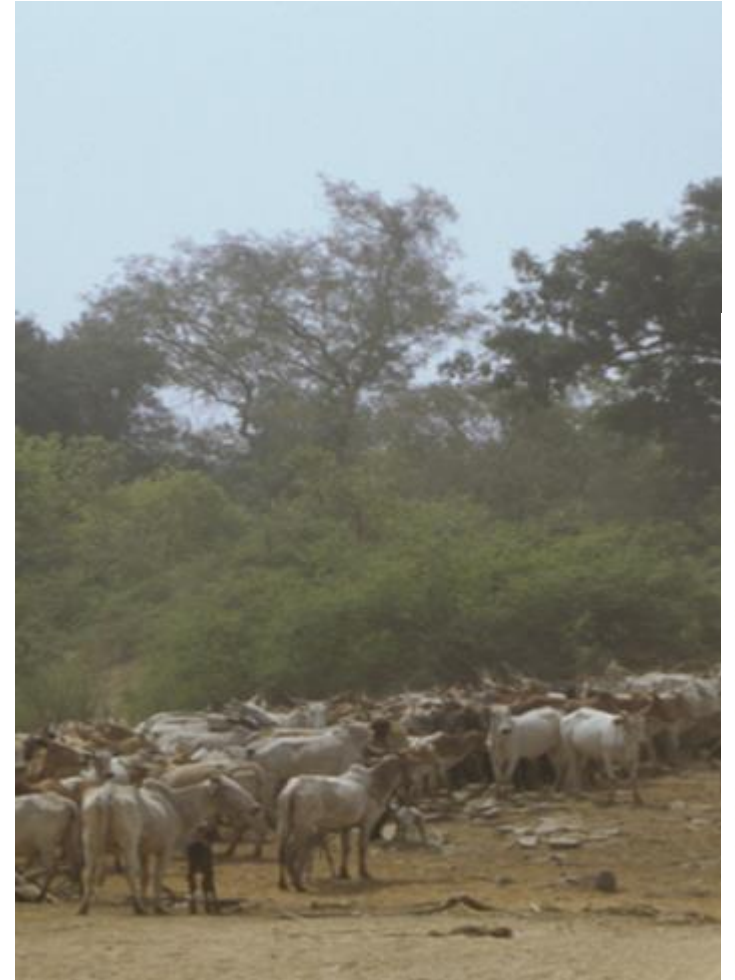


# Main Takeaways from 2018 - 2019 Analysis

- High, increasing shock exposure during RISE
- Four main shocks in RMS period itself: Climate events (drought, flooding), army worms, violent extremism, food price increases
- 55-60% of households were resilient
- What helped them recover?
  - Their own resilience capacities:

Social capital, assets, savings, informal safety nets, human capital, exposure to information, access to financial resources, markets, services and infrastructure.

- RISE interventions (suggestive evidence)



# Shock recovery: The role of RISE

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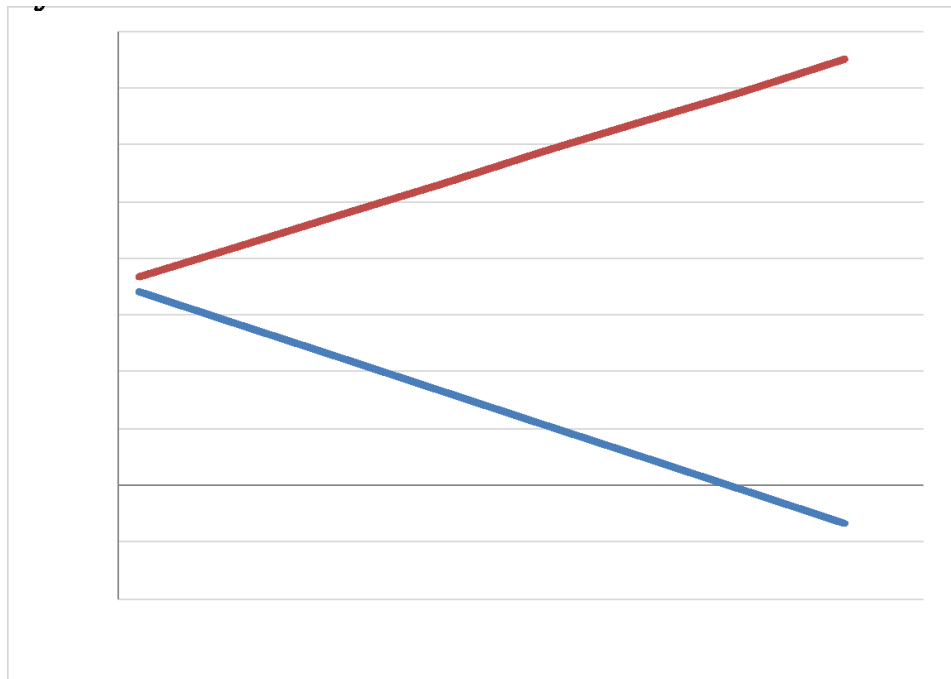
## Findings (suggestive evidence)

### Rise interventions

- Have had a positive impact on households' ability to recover from the shocks faced over the RMS period
- Helped Niger households maintain stability in their food security in the face of drought
- Reduced the negative impact of drought on Niger households' ability to maintain their food security
- Reduced the negative impact of flooding on Burkina Faso households' food security

# Shock recovery: The role of RISE

*Estimated recovery trajectory as the cumulative rainfall deficit over the RMS period increases for low- and high-exposure households Niger)*



## Note:

Positive impacts are due to program's efforts to strengthen households' resilience capacities. Endline Impact Evaluation will pinpoint which.



# Implications for programming

## Recommendations

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- Redesign and expand shock responsive safety nets
- Expand the focus of Disaster Risk Reduction activities beyond droughts to include floods
- To deal with rising violent extremism, implement interventions that focus on conflict mitigation
- Continue to invest in savings groups to build social capital



# Lessons Learned


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- Trigger Indicators
  - Localized information vs National-level data
  - Early warning indicators for conflict-household size increase
- Budgeting for Trigger RMS in your program-frequency of surveys
- Management decision challenges
  - Following households overtime when they are internally displaced
  - Access during COVID pandemic
  - Staff turnover

# Lessons learned from other RMSs

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- COVID 19 has led to many of the RMSs being implemented to be done virtually (Ethiopia, Kenya)
- Need for Implementing partners to review and reflect on results to determine what adaptive management needs to be done and what to explore further in follow up rounds
- Mixed strategy of in person interviews and virtual where conflict has become more widespread (Tigray)



# Case Study 2: Embedding RMS into the South Kivu Food Security Project's Seasonal Surveys

# South Kivu Food Security Project

- Mercy Corps-lead BHA-funded resilience-focused DFSA in Eastern DRC, 2016-2021.
- Goal: To improved food and nutrition security and economic well-being of 210,000 vulnerable households in South Kivu.
- Working on Agriculture, Health, Nutrition, WASH, Governance, Conflict Resolution, Youth, Gender



# FSP employed RMS in response to both seasonal and shock-triggered RMS

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## Seasonal

- Low-frequency (half-yearly)
- Complementary mixed-methods (survey-heavy)
- Focused on agricultural shocks and stresses

## Shock-triggered

- High-frequency (monthly)
- Complementary mixed-methods (KII-heavy)
- Focused on COVID-related shocks and contextual changes

This presentation focuses on the seasonal component of FSP's RMS. Presentations about our shock-triggered COVID Recurrent Monitoring System (COVID-RMSYS) can be found here:

- Conception d'un COVID-RMSYS dans un contexte de surveillance à distance ([webinaire](#), [présentation](#), [blog](#), [FAQ](#))
- COVID Adaptive Management Showcase ([Poster Presentation](#))

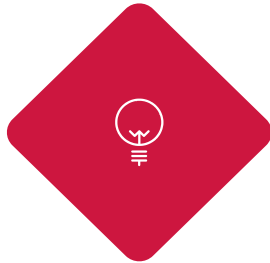
# Steps for integrating RMS in MEL systems, FIAT-style

## 02 Identify Information Gaps

- Review what information the MEL system does not yet produce. Focus on shocks and resilience capacities.
- Suggest drafting visual pitch (How should analysis look like so it can be used?)

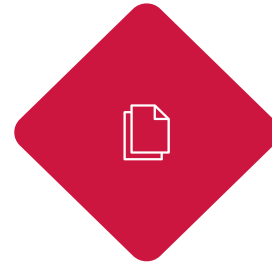
## 04 Tool and Retool

- Supplement existing tools with question items
- Adjust data collection workflows (who collects what data when)



## 01 Frame Anticipated Changes

- Target participants
- Intervention/program outcomes
- Shocks and stresses
- Resilience capacities
- Anticipated interventions



## 03 Adapt MEL strategies

- Decide on seasonal or shock-triggered RMS
- Decide on data collection strategy (e.g. surveys vs. KIIs)
- Decide on embedding RMS into annual surveys or not
- Draft RMS protocol and budget
- Mobilize budget, HR, tech resources



## 05 Analyze, Learn, Adapt

- Create analysis plan
- Export, process, analyze data
- Present in a mgt-friendly format
- Organize sense-making sessions at program decision-making gates
- Decide on adaptive actions
- Document and track adaptive actions



# Shock Profile in the FSP Intervention Zone

**Pests and Plant Disease** - Reported to be a very severe issue including army worm, brown streak and mosaic of cassava and banana BXW.

**Food availability**



**Soil Degradation** – Broad evidence of erosion and poor soil quality. Erosion risk map of the target geography. As a result, the agricultural production base is at risk and communities are placed at growing risk of landslides

**Food availability**

**Multiple Taxation** - Agricultural products are exposed to many different forms of taxation, only a portion of which are formal. People report this as a serious issue that compromises their market access.

**Food access**



**Crop thefts** – unexpected result. People report theft of crops from the field, from storage, and materials such as stones and gravel from their land - a key disincentive to investments in agricultural production.

**Food access**



**Land Conflict** – Though encompassing a broad set of issues, small-scale land conflicts are largely the result of unclear land tenure rules (formal and informal) - a factor that constrains investments in agricultural production.

**Food availability**



**Waterborne Disease** - Through encompassing a broad set of issues, waterborne disease compromises food utilization outcomes, paralyzes economy and relates to broader water, hygiene, and sanitation issues.

**Food utilization**





# 2018 - Untapped Potential to Improve Resilient Agriculture Interventions

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- Anecdotal evidence of high agricultural losses, but no time-sensitive information about what shocks hit farmers the worst and how much they cost them
- Resilient agriculture training not geared towards the most useful, least practiced techniques
- Initially low adoption rate of agricultural techniques and no evidence about how well trainings improved technique adoption

# Embedded or stand-alone RMS?

## Trade-off between cost and counterfactuals

	RMS embedded into Annual Surveys (FSP's solution)	Standalone or BL/FE-embedded RMS
<b>How to</b>	<ul style="list-style-type: none"> <li>Build a panel off of existing survey respondents</li> </ul>	<ul style="list-style-type: none"> <li>Build a panel off of BL/FE evaluations or population census</li> </ul>
<b>Illustrative designs</b>	<ul style="list-style-type: none"> <li>Pooled or fixed-effects regressions</li> <li>Regression discontinuity designs</li> </ul>	<ul style="list-style-type: none"> <li>Quasi-experimental designs (respondents from high vs. low-exposure villages)</li> </ul>
<b>Use case</b>	<ul style="list-style-type: none"> <li><b>Suitable</b> for rapid adaptation to shifts in shocks and resilience capacities</li> <li><b>Not suitable</b> for attributing wellbeing outcomes to interventions</li> </ul>	<ul style="list-style-type: none"> <li>Suitable for detecting large-scale shocks; compare between exposure levels/projects</li> <li>Suitable for attributing wellbeing outcomes to interventions</li> </ul>
<b>Cost</b>	<ul style="list-style-type: none"> <li>~\$13.9/respondent in South Kivu when using enumerators; \$2/respondent when using staff-led phone interviews</li> <li>Smaller sample size (n≈350)</li> <li>Can be done in-house depending on internal statistics capabilities</li> </ul>	<ul style="list-style-type: none"> <li><b>Higher total cost</b></li> <li>Larger sample size (n≈500-1000)</li> <li>Might require listing/tracing of respondents</li> <li>Typically added consultancy cost for large-scale data collection and analysis</li> </ul>

# Dollar-based shock metrics help to compare across VCs and prioritize, but calibration matters

## Phase 1 (Nov 2018 - Jan 2019):

- Bought fields in the different geographic zones of the program
- Standardized the weight of 17 local measurement units (Murongo, Gobelet, Sachet, Basin, etc) into International System of Units, taking into account wet and dry weight

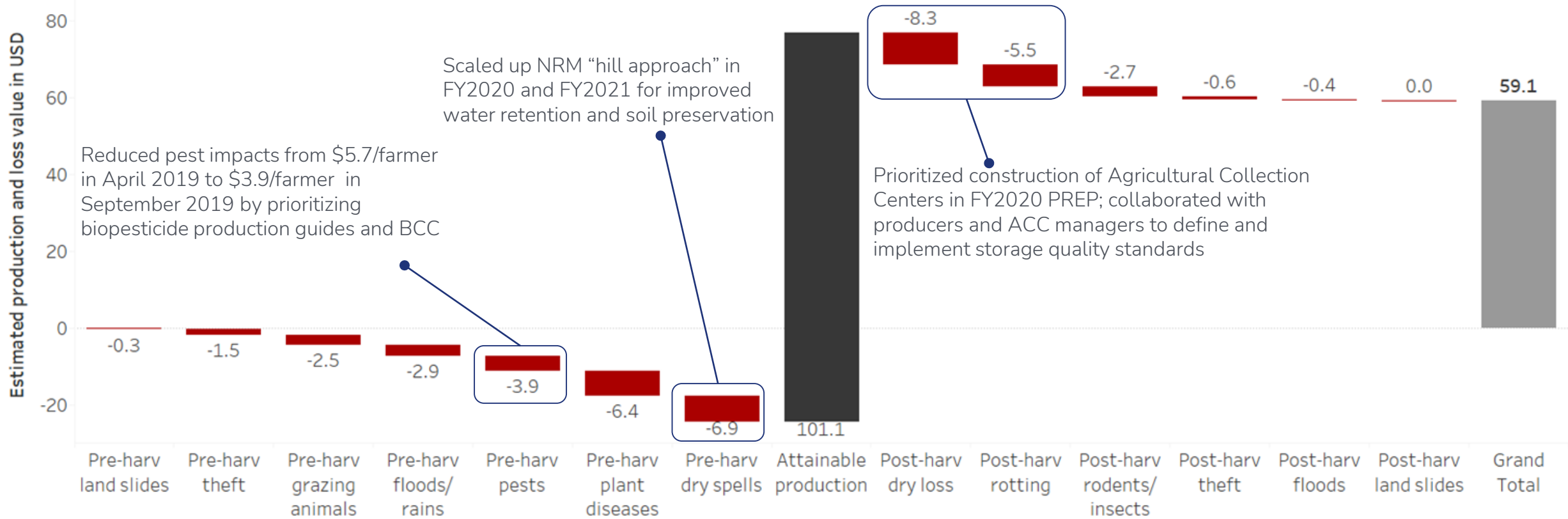
## Phase 2 (Feb 2019 - Aug 2019):

- Estimated financial production value based on agricultural survey production and sales data
- Experimented with question items to improve precision of pre- and post-harvest loss estimations
- Embedded panel survey into seasonal farmer-based survey



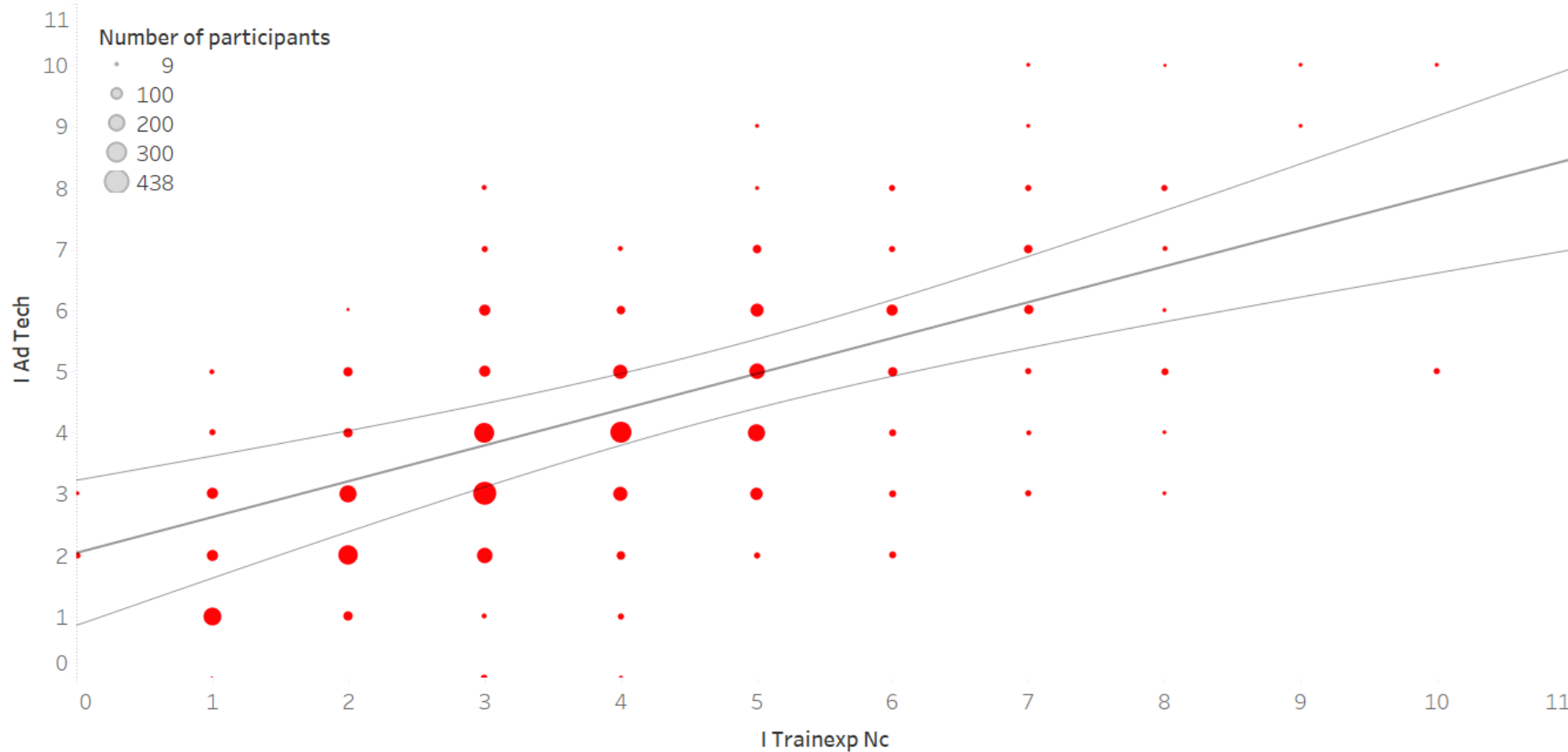
# Analyze, Learn, Adapt: ~41.5% of agricultural production value lost, ~24% preventable

Average shock-adjusted attainable harvest realization and retention value in USD, 2019 Season B



# Adoption of resilient Ag techniques can be optimized through relevant trainings and quality checklists

Stronger participation in sustainable agriculture trainings is associated with an increase in techniques applied

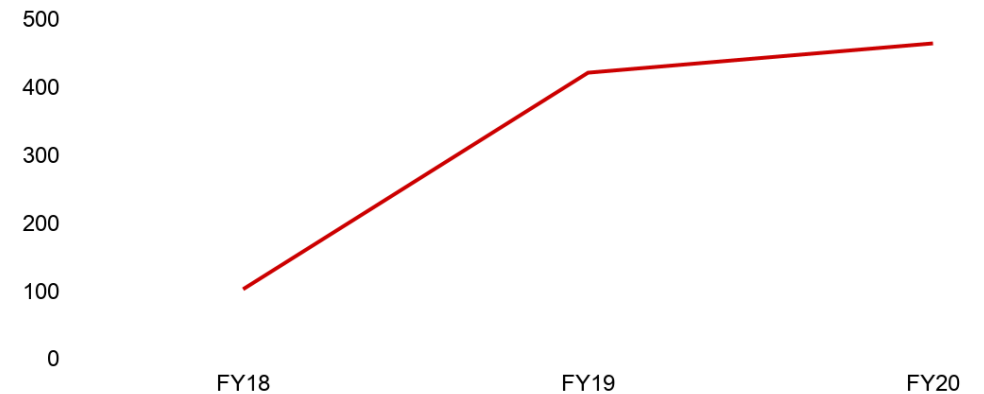


- Designed a training vs. adoption index to benchmark and optimize the scope of agricultural adoption
- Implemented quality monitoring checklists
- Achieved 60% likelihood of farmers adopting one new agricultural technique for each module they were trained on in FY20, relative to 45% in FY19

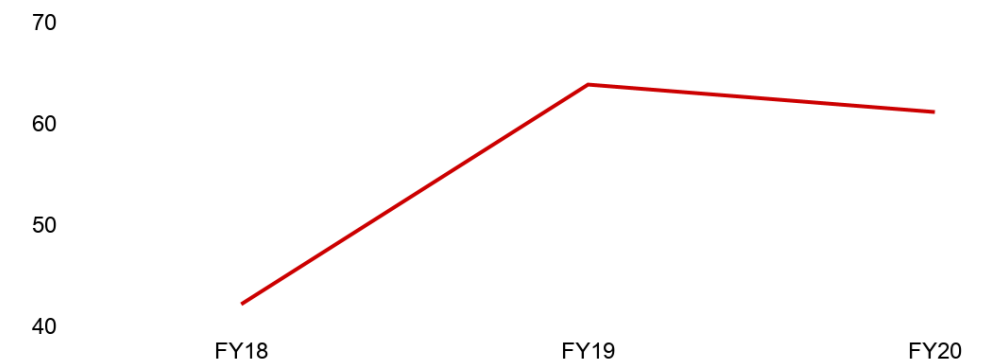
# Suggestive Evidence: Design and adaptations contributed to increased production and sales

- Higher training exposure associated with higher adoption rate
- Higher technique adoption rate associated with lower shock exposure and and higher production value
- Strong increase in agricultural sales at individual and systems level
- Limitation: No statistical relationship confirmed between resilient Ag and sales; COVID as a confounding factor

Value of Annual Sales across targeted Value Chains, in



Average value of sales per farmer



# Lessons learned on embedding RMS into MEL systems

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- RMS generally a good bang for the buck if teams are willing to prioritize and adapt intervention approaches
- The more severe and the less well understood shocks are, the higher the expected value of an RMS
- RMS yield more precise, more comparable shock and capacity measurements
- Panel can be used for high-frequency surveys if sudden-onset shocks hit
- FSP was able to harvest its RMS findings because the data demand came from the team and the anticipated decisions, analyses and visuals were mapped out even before the survey was designed
- Automating statistical and visual analyses improved reliability and efficiency
- RMS cross-roads: Need to decide between need to keep cost low or having strong counterfactuals

Q&A



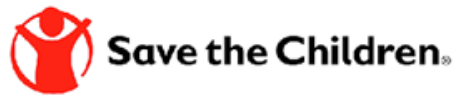
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