



Resilience in the Sahel Enhanced I (RISE I) Endline Survey Findings

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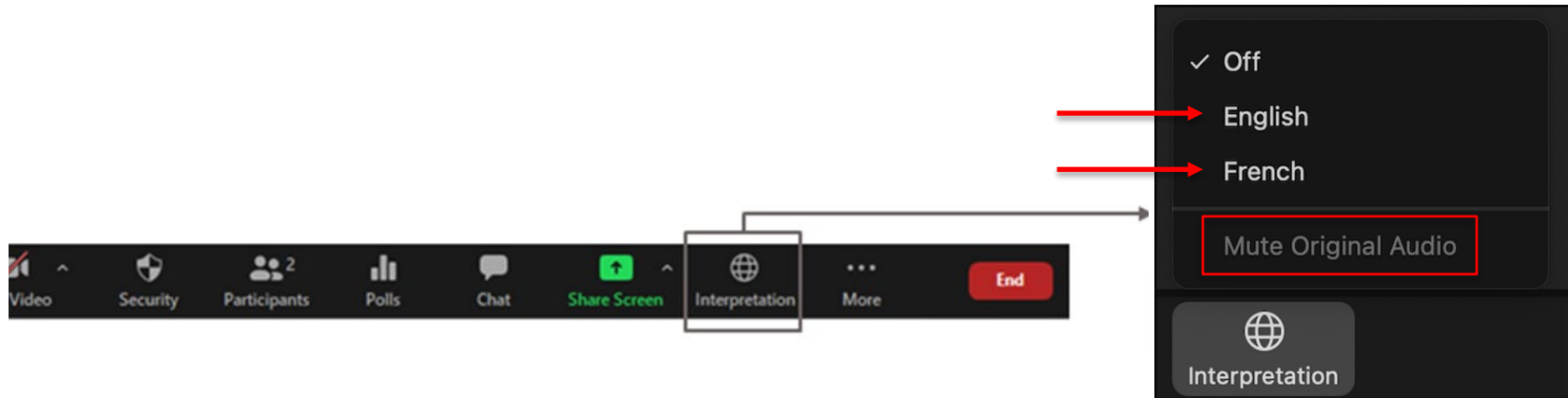
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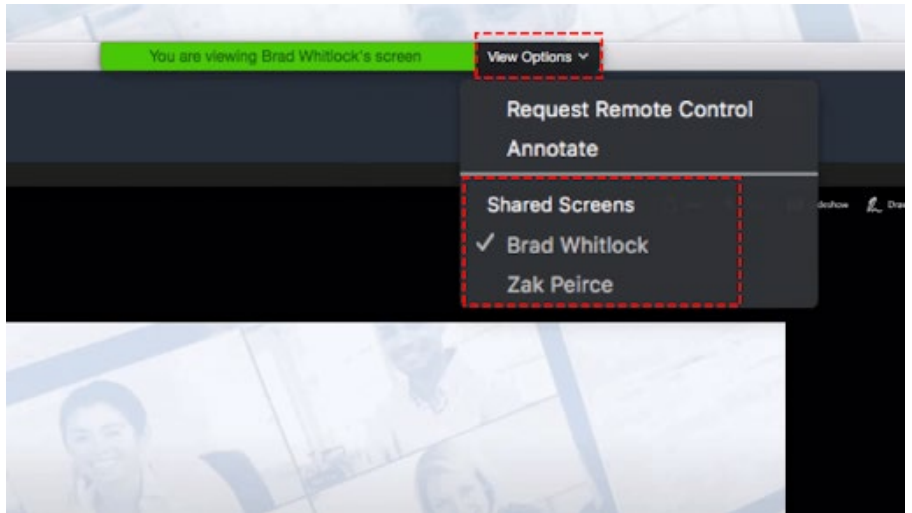
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Available RISE resources on the FSN Network website

Please note that the RISE I Endline survey was implemented under the REAL associate award, funded by the USAID Bureau for Resilience and Food Security's Center for Resilience

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Resilience in the Sahel – Enhanced (RISE) Resources

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Apsatou Bagaya / Save the Children

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The Resilience in the Sahel Enhanced I (RISE I) initiative was implemented from 2014 to 2019 with the goal of increasing the resilience to shocks of chronically vulnerable populations in agro-pastoral and marginal agriculture livelihood zones of the West African Sahel. The second phase of the RISE initiative, referred to as RISE II, is being implemented from 2019 to 2025 in targeted zones of Burkina Faso and Niger. RISE II focuses on building resilience in the Sahel in the face of recurrent shocks, including climate shocks, economic shocks, conflict shocks, and health shocks such as those associated with the COVID-19 pandemic. This collection of resources provides an overarching understanding of the portfolio of RISE I and RISE II activities.

Resources

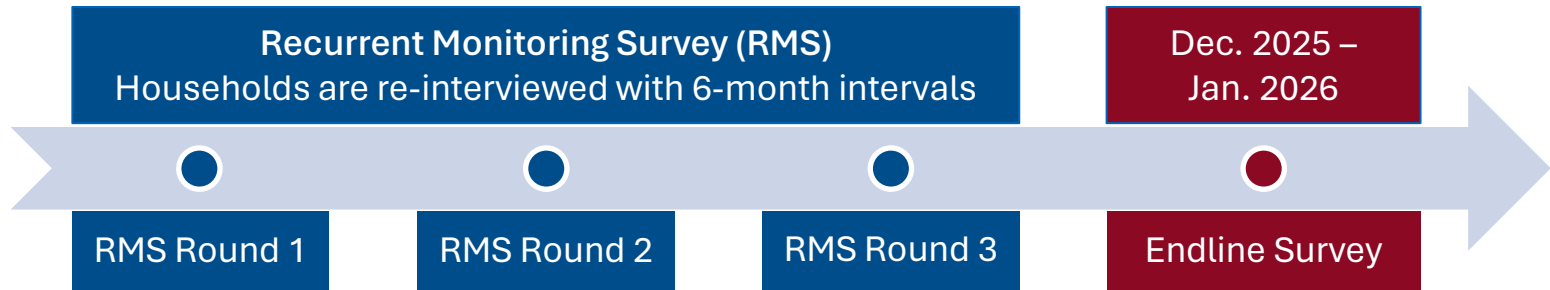
✓ [RISE I](#)

✓ [RISE II](#)

✓ [Additional Resources](#)

About the RISE II Evaluation

- A two-year activity (2024-2026) **funded by the USAID Sahel Regional Office** and implemented by Save the Children and TANGO International
- An **associate award under the IDEAL** (Implementer-Led Design, Evidence, Analysis and Learning) leader with associate awards (LWA) mechanism
- Works to determine the **progress and impact of the RISE II project's** resilience programming in the Sahel
- Will produce and communicate **timely resilience analysis** to inform adaptive management and future programming in the region



RISE I Project



- The Resilience in the Sahel Enhanced I (RISE I) project was implemented from 2014 to 2019 with the goal of **increasing the resilience to shocks of chronically vulnerable populations in agro-pastoral and marginal agriculture livelihood zones** of the West African Sahel.
- To reach its overall goal of increased resilience, the RISE I project had **three specific objectives**.

RISE I Project

Increased and sustainable economic well-being through:

- Diversified economic opportunities;
- Intensified production and marketing;
- Improved access to financial services; and
- Increased access to market infrastructure.

Strengthened institutions and governance through:

- Improved natural resources management;
- Disaster risk management;
- Strengthened conflict management systems; and
- Strengthened government and regional capacity and coordination.

Improved health and nutritional status through:

- Increased access to potable water;
- Improved health and nutrition practices, particularly for mothers and children;
- Improved family planning; and
- Better sanitation practices.

USAID's Office of Food for Peace (FFP) and Office of U.S. Foreign Disaster Assistance (OFDA) also planned to target the most vulnerable with life-saving interventions. FFP and OFDA merged into the USAID Bureau for Humanitarian Assistance (BHA) in June 2020.

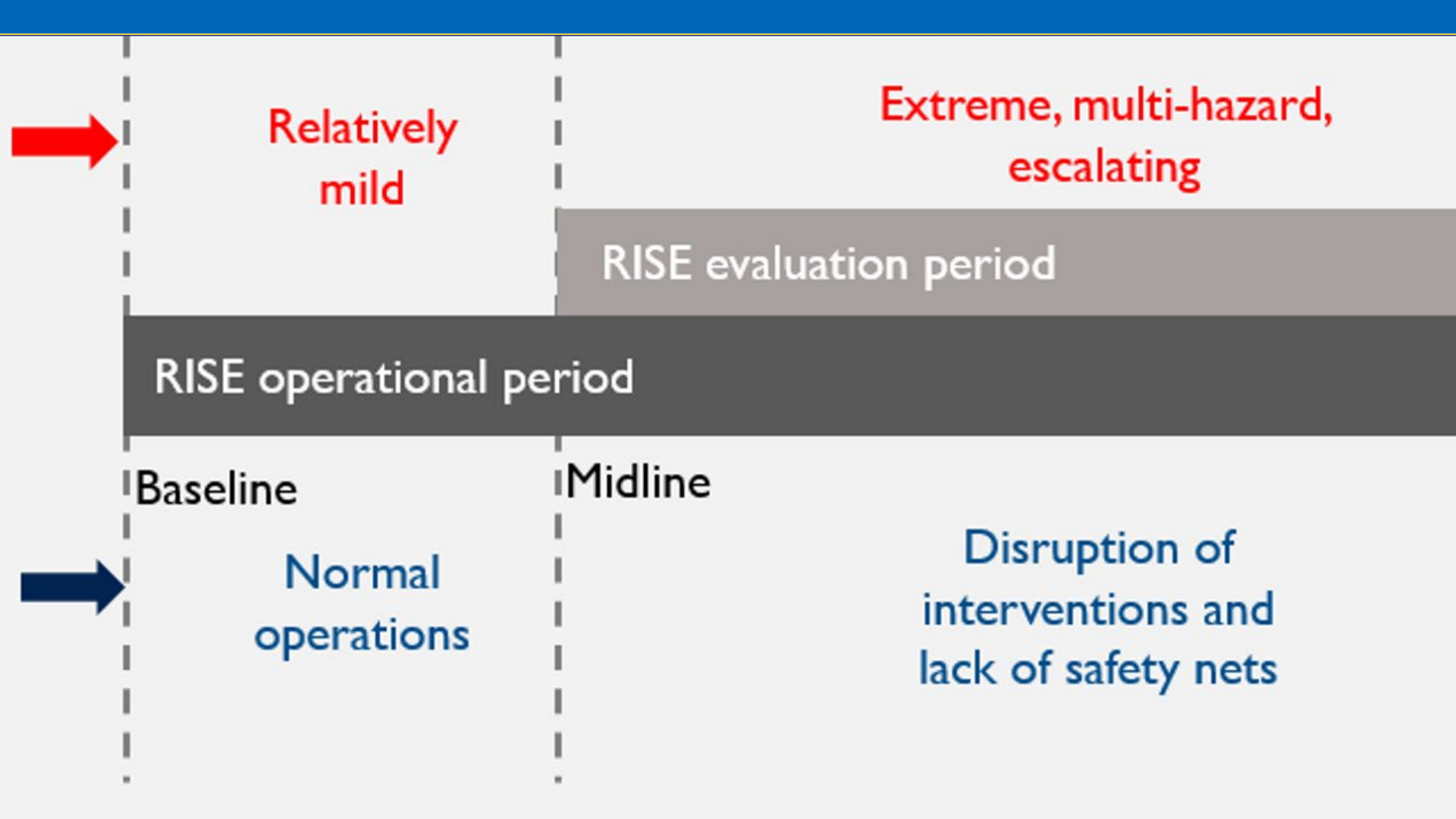


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Endline Survey

- This presentation documents the analysis of the RISE I **endline survey conducted in October/September 2020** as part of an impact evaluation of the project's activities.
- The endline survey sampled **1,753 households residing in 88 villages** and included both **quantitative and qualitative data collection**.
- The endline was designed as a **panel survey**, collecting data from the same households that participated in the midline survey.
- Due to the disruptions of COVID-19 and the high incidence of climate and conflict shocks, the survey was conducted in only **88 of the original 100 baseline-midline villages**.
- This factor, in addition to household non-response in included villages, means that only **1,758 of the 2,492 households** in the midline survey participated in the endline survey.





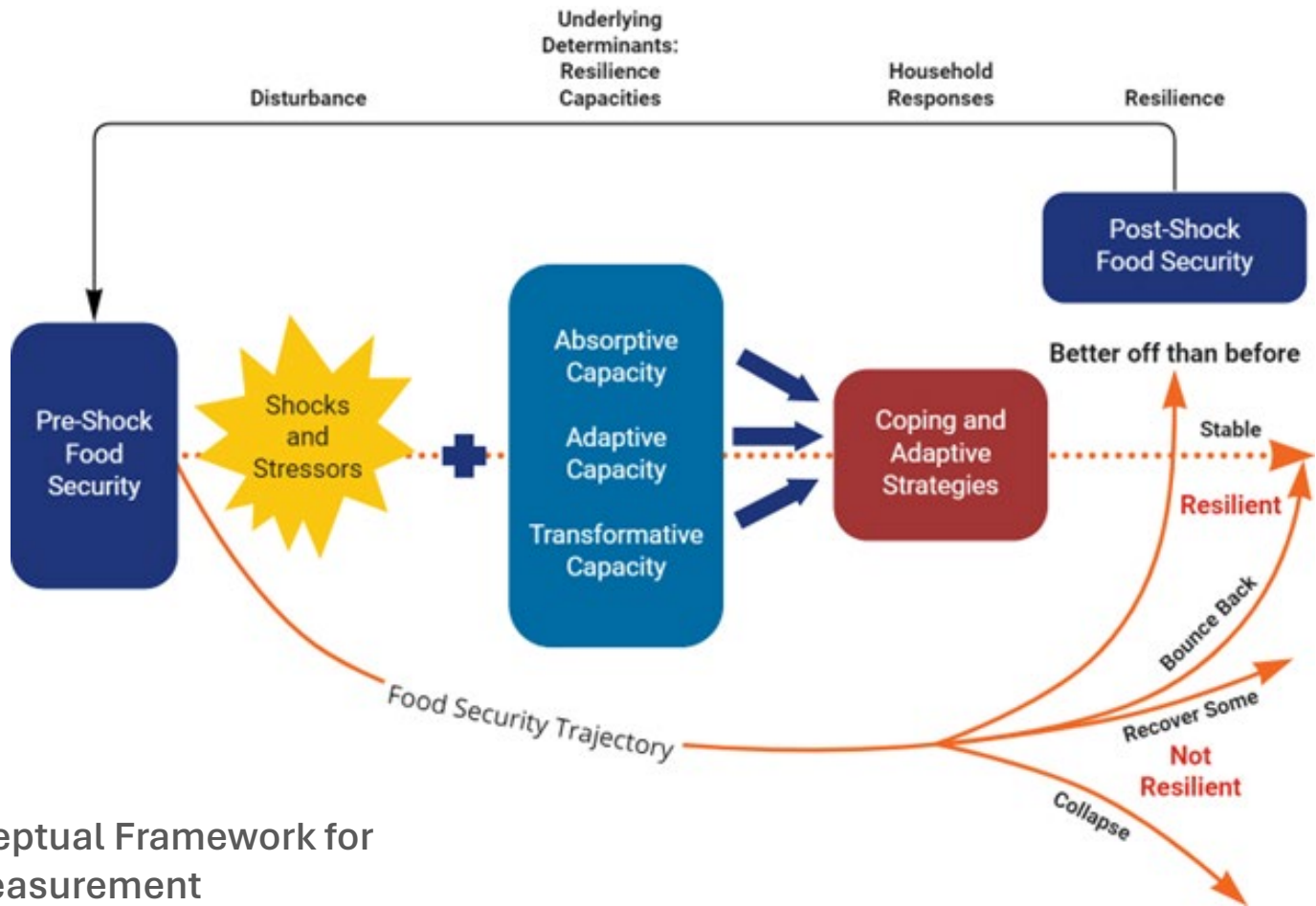
Measurement of Resilience

Resilience is measured for this analysis using two indicators:

1) “**Realized Resilience**” is an ex-ante, objective indicator that captures the trajectory of food security over the course of a shock period.

- Measured as the total change in food security between the midline and endline surveys.
- It is a direct measure of households’ ability to recover from the specific series of shocks that occurred during this period.

2) “**Households’ perceived ability to recover**” is a subjective or “experiential” indicator measured using data from households’ own reports of their ability to recover.



TANGO Conceptual Framework for Resilience Measurement

Determining the Impact of the RISE I Project



- The main technique to determine if and how the resilience-strengthening interventions implemented in the RISE I project area served to increase households' resilience and resilience capacities is **Difference-in-Differences Propensity Score Matching (DID-PSM)**.
- The evaluation period of focus is that **between the midline and endline surveys**, the period for which panel data are available.
- **Panel data are needed to measure households' realized resilience** and to identify an adequate control group of households that matches the treatment group in initial (midline) shock exposure, food security, resilience capacities, and other household and community characteristics.

Research Questions

Context

1. **What shocks did households experience** over the project period and how did their shock exposure and coping strategies for dealing with these shocks evolve?
2. What changes have taken place in households' resilience capacities? What changes have taken place in **poverty and women's empowerment**?
3. **How resilient were households** to the shocks they faced? Have households experienced any **improvement in their resilience**?
4. Did households' resilience capacities help them recover from the shocks they faced? **Which specific capacities have bolstered households' resilience** to shocks?



Research Questions

Impact Evaluation

5. **What impact did RISE I have on household's resilience to shocks?**
Did the project's comprehensive approach make a difference?
6. **Which types of RISE I interventions helped them recover?**
7. **What impact did RISE I have on poverty and women's empowerment in the project area?**
8. Did **direct participation** in interventions have a greater impact on these outcomes than only **indirect exposure**?





FINDINGS

Evolution of Shock Exposure

- Households in the RISE I area experienced **increasing shock exposure** over the project's operational period, with an especially sharp escalation in its final years putting the entire area into an unprecedented crisis.
- According to both global climate database and household reports, the Burkina Faso and Niger project areas were subjected to **great rainfall volatility leading to multiple droughts and floods** that at times dipped into extreme territory.
- While the Sahel is known as a drought-prone region, **flooding dominated over drought**, especially in the Niger area.
- The incidence of **conflict shocks related to civil insecurity** also saw a large increase over the project period.
- Increasing **acts of violence and thefts by armed terrorist groups** led to large populations of **displaced peoples** and had widespread impacts on markets, agricultural production, off-farm income generating activities, and subsequently, on people's lives, livelihoods, and health.

Shock Exposure

- By April 2020, just as the security situation deteriorated further, **COVID-19 restrictions** were imposed, including border closures, market restrictions, and restrictions on travel.
- As would be expected, the combination of **climate shocks, civil insecurity, and COVID-19** restrictions is associated with sharply increasing incidence of economic shocks, from food price inflation to unemployment and inability to access humanitarian assistance.
- A strong increase in the percent of households reporting serious illnesses and deaths, particularly in the Burkina Faso area, is a clear indication that the **multiple shocks of this time period took a serious toll on households' well-being.**
- Other shocks that rocked the RISE I area were sudden **increase in household size associated with civil insecurity displacements** and the **COVID-19 shut down, fall armyworm, and other infestations that damaged crops.**



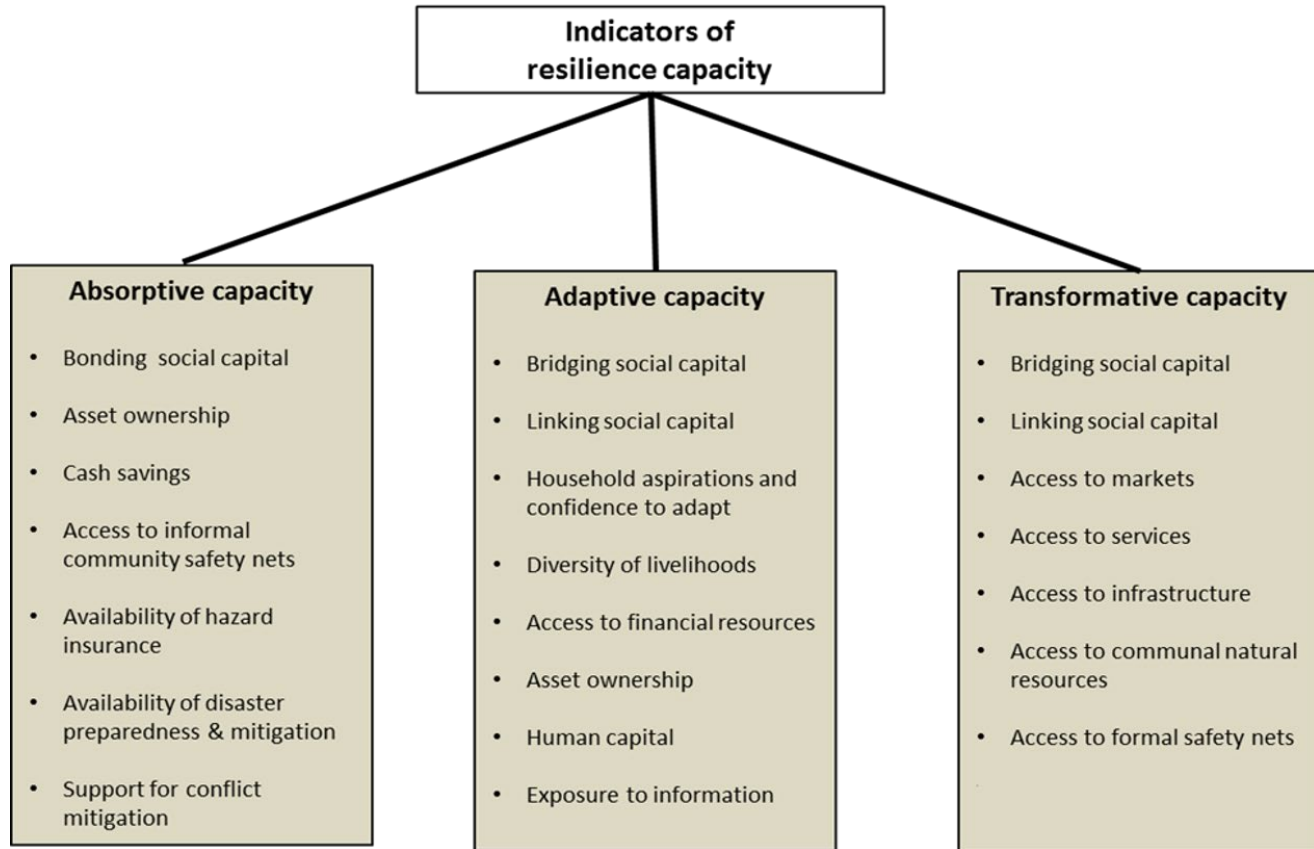
Shock Exposure to the Effects of COVID

- The most commonly-cited impact of the pandemic among quantitative survey respondents was **economic disruption** caused by border closures and restrictions on travel and markets.
- The fallout included **transportation disruptions, consumer price increases, and disruption of agricultural and livestock markets.**
- A large majority of the quantitative survey respondents indicated that the pandemic had a **negative impact on their livelihoods, incomes, and access to food.**
- Very few households reported having a member who was actually diagnosed with COVID-19.
- The shock from the pandemic was mainly caused by the **containment measures** rather than the virus itself.
- The containment measures included isolation of those tested or suspected positive, but most impactful were **closures or curtailment of public venues and markets, travel and border restrictions, and the resulting increased costs of gasoline and transport.**

Household Coping Strategies

- As households struggled to deal with increasing shock exposure, they both **intensified and shifted their coping strategies** in response.
- The most commonly-employed strategy was to **sell livestock** (over 2/3 of the households).
- Others **borrowed or received gifts of money from friends or relatives, reduced food consumption, or changed a source of food, drawing down on savings, migration** (usually of individuals), and **borrowing** from a money lender.
- Large percentages of households **diversified their livelihoods into low-return activities** such as working on other people's fields, charcoal production, wild food sales, and petty trading.
- As shock exposure grew, **negative coping strategies were increasingly used** such as taking children out of school and sending them to work for money, selling production assets, borrowing from money lenders, and compromising health by reducing food consumption.
- **Reliance on humanitarian assistance was not a main coping strategy and in fact declined** over the project period despite the increased shock exposure and crisis.

Indicators of Resilience Capacities



Research Questions

- There has been no improvement in overall resilience capacity in the RISE I area since the baseline.
- The decline in absorptive capacity is due to erosion of households' holdings of savings and in their access to informal safety nets and hazard insurance.
- The decline in transformative capacity is linked to declines in access to markets and basic services.
- The improvement in adaptive capacity in the RISE I area is due to improvements in aspirations and confidence to adapt, livelihood diversity, asset ownership, and human capital.
- The improvements in human capital may be due to the absorption into households of more literate and educated adults associated with displacement from conflict and COVID-19 restrictions
- With respect to differences across the project areas, the Niger area fared better in maintaining households' resilience capacities.



Resilience Capacities that Help Households Recover from Shocks

The analysis finds that households' absorptive capacities, their adaptive capacities, and their transformative capacities all likely helped them recover from the escalating, multi-faceted set of shocks they faced.

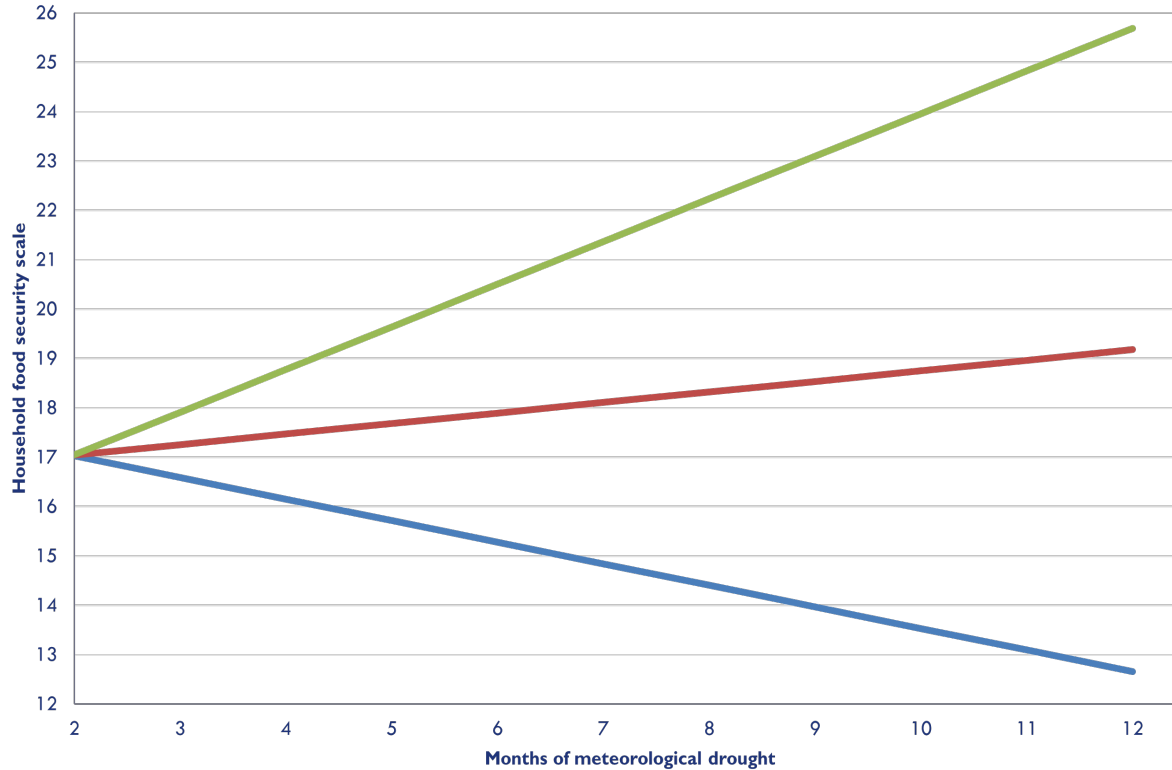
The following capacities were found to have **positive and statistically significant relationships with households' resilience:**

- Bonding social capital;
- Bridging social capital;
- Asset ownership;
- Holding of savings;
- Livelihood diversity;
- Human capital;
- Exposure to information; and
- Aspirations and confidence to adapt

Across the four surveys carried out in RISE I (Baseline 2015, Midline 2017, RMS 2018/19 and Endline 2020) the **capacities that consistently helped household recover** are the following:

- Social capital: bonding, bridging, and linking social capital;
- Economic sources of resilience: holding of savings and asset ownership;
- Disaster preparedness and mitigation;
- Human capital and exposure to information; and
- Aspirations and confidence to adapt.

Estimated Recovery Trajectory as Drought Duration Increases at Differing Levels of Absorptive Capacity



RISE I Interventions that Helped Strengthen Resilience Capacities that Helped Households to Recover

- The RISE I project's Comprehensive Resilience Programming (7 out of 8 project interventions) was found to have had a **positive impact on four of the eight capacities** for which this analysis found strong resilience-strengthening evidence:
 - **Asset ownership;**
 - **Bridging social capital;**
 - **Livelihood diversity; and**
 - **Exposure to information**



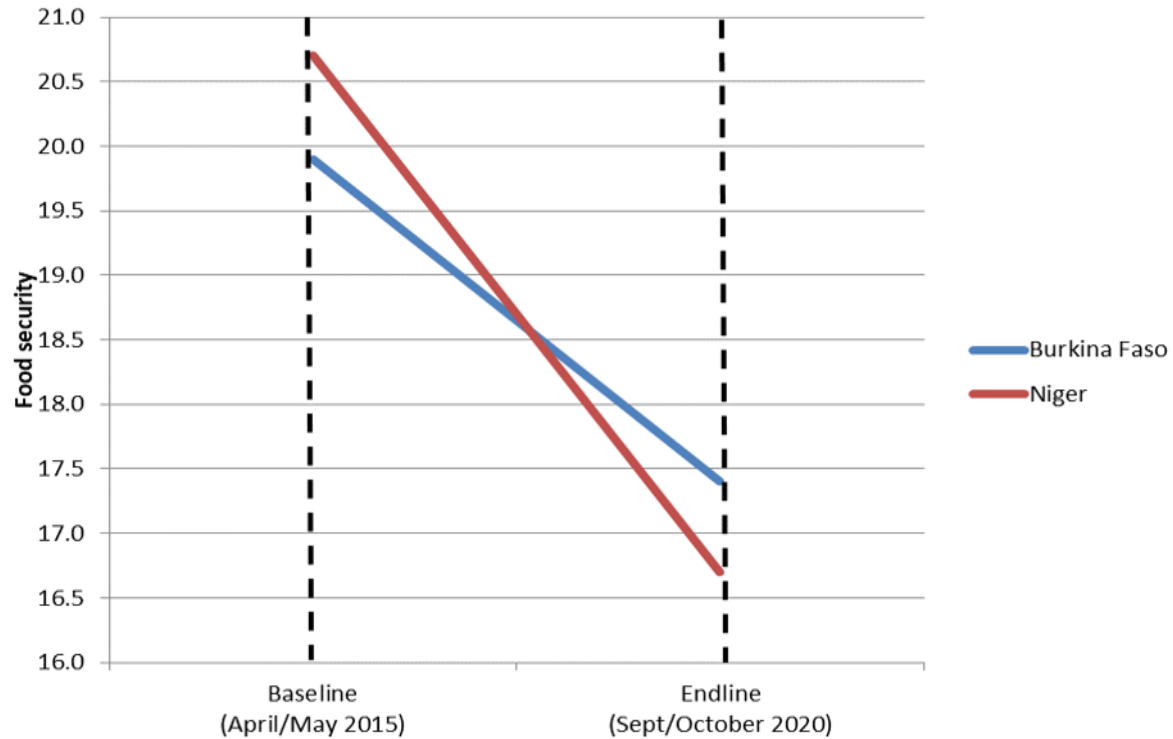
RISE I Interventions that Helped Strengthen Resilience Capacities that Helped Households to Recover

- The **agricultural production** interventions had a positive impact on asset ownership, bridging social capital, and aspirations/confidence to adapt.
- **Community natural resource management and disaster preparation and mitigation interventions** had a positive impact on three capacities: households' holdings of cash savings, livelihood diversity, and exposure to information.
- **Market and business development interventions** also had a positive impact on holdings of cash savings.
- **Financial services interventions** had a positive impact on two of the resilience-strengthening capacities: asset ownership and aspirations/confidence to adapt.
- **Governance interventions** had a positive impact on almost all eight capacities that enable households to recover from shocks.

Household Food Security and Resilience to Shocks

- The RISE I project area experienced a **steep decline in food security** over its operational period extending into both the Burkina Faso and Niger project areas.
- The **prevalence of food insecurity was already very high at baseline**, at 77 percent of households. By endline it was near universal, with over 90 percent of households food insecure.
- The **prevalence of severe food insecurity**, which is associated with such behaviors as going a whole day and night without eating, nearly doubled over the project period, from 26 to 49 percent, attesting to the stress households were under as shock exposure shot up.
- According to the **realized resilience measure**, the average household was not able to maintain its midline level of food security or get back to it by endline.
- **Forty-four percent of households were resilient, while the rest were not.**
- The percent of households who were able to recover from all experienced shocks **declined from an already-low 13.9 at midline to just 5.7 at endline**. Such a decline occurred in both the Burkina Faso and Niger areas.

Trajectory of Food Security Between the Baseline and Endline



Poverty and Women's Empowerment

- Throughout the RISE I project's operational period, the **prevalence of poverty was much higher in the Niger project area** than the Burkina Faso area.
- The **Niger area started out at a very high prevalence of 78.8 at baseline** and the **Burkina Faso area started out at 49.0 percent**.
- While the poverty prevalence stayed steady between the baseline and endline in Niger, it **increased precipitously in the Burkina Faso area, from 49.0 to 57.0 percent**, an eight percentage-point rise.



Poverty and Women's Empowerment



- **Women's empowerment saw significant improvements in the Niger area**, especially between the midline and endline.
- The results are **less clear for the Burkina Faso area**, with some aspects of empowerment improving (especially regarding asset ownership) and others seeing little change.
- The qualitative data highlight changes in the role of women due to **economic empowerment** that allow them to help cover household expenses.

Engagement in Resilience Enhancing Interventions

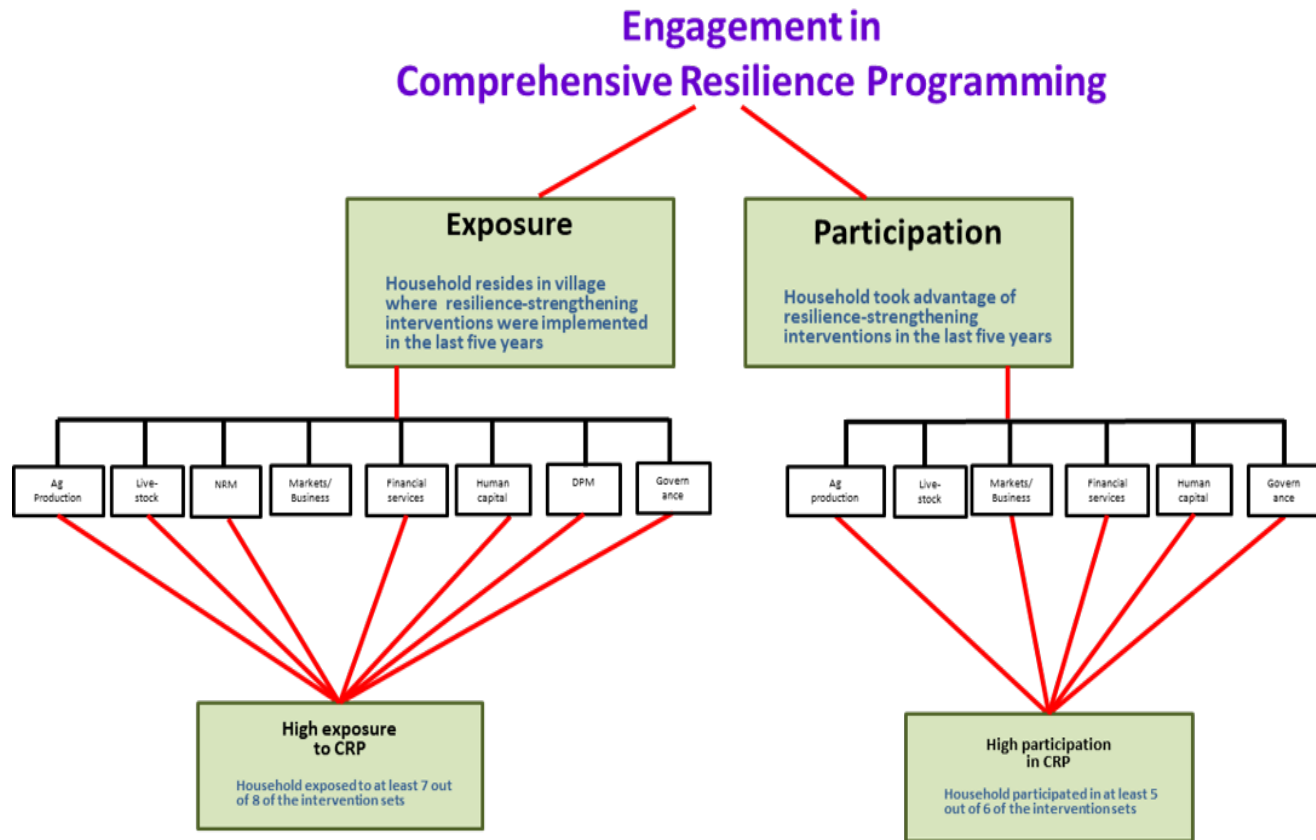
- To determine **impact**, this evaluation relied on separate measures of household exposure to and participation in resilience-strengthening interventions.
- The project's interventions were divided into eight sets:
 - Improved technologies and management practices: agricultural production;
 - Improved technologies and management practices: livestock rearing;
 - Community natural resource management (CNRM);
 - Markets and business development (MBD);
 - Financial services;
 - Human capital;
 - Disaster preparation and mitigation (DPM); and
 - Governance.
- **Indexes for exposure to and participation in** each category were then calculated.
- Recognizing the comprehensive, cross-sectoral nature of the RISE I project, a dichotomous measure of **Comprehensive Resilience Programming** (CRP) was then calculated.
- Households exposed to/participating in at least seven out of eight of the intervention sets were classified into the CRP group.

Engagement in Resilience Enhancing Interventions

- Forty-three percent of the households residing in the RISE I area were exposed to CRP and 12 percent directly participated in it.
- Burkina Faso households were more likely to be exposed to and participate in CRP.
- Very few households reported relying on any humanitarian assistance over the RISE I project period, despite the escalating shock exposure.
- Only one-quarter of households received food assistance over the entire five-year period and just over 10 percent received cash assistance.
- Humanitarian assistance declined over the project period despite the increase in shock exposure, partly because of the inability of humanitarian actors to access areas of need.



Measurement of Exposure to and Participation to Comprehensive Resilience Programming



Impact of RISE I on Household Resilience and Resilience Capacities

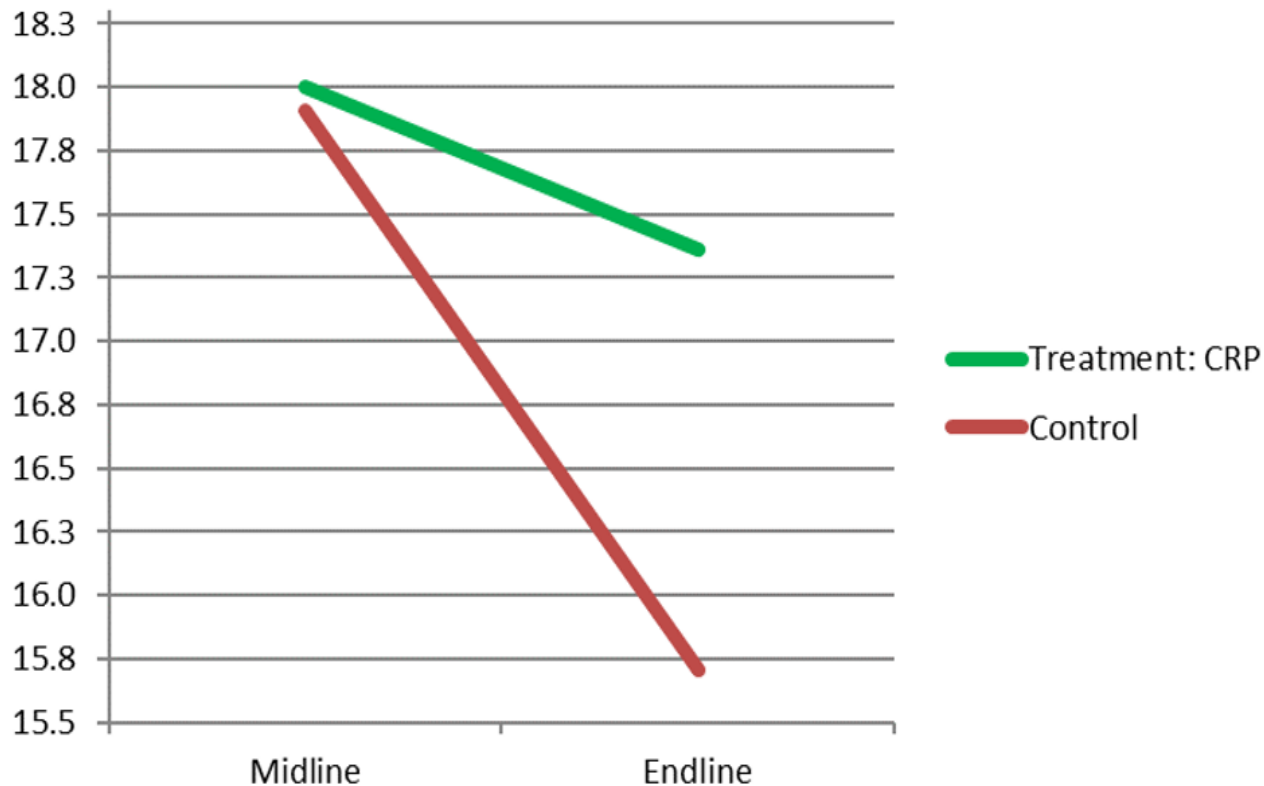


- The analysis finds that household exposure to CRP, and thus multiple intervention sets simultaneously, did indeed **strengthen their resilience despite the extreme and escalating shock exposure** over the evaluation period.
- Translating that gain into real terms, exposure to CRP led to a 9.9 percentage-point smaller increase in food insecurity than would otherwise have taken place between the midline and the endline.
- It also led to a smaller increase in the prevalence of **severe food insecurity**—which is associated with such behaviors as going to bed without eating and going a whole day and night without eating.
- In terms of resilience capacity, it finds that exposure to CRP had strong, positive impacts on households' absorptive and adaptive capacities, but no impact on transformative capacity.

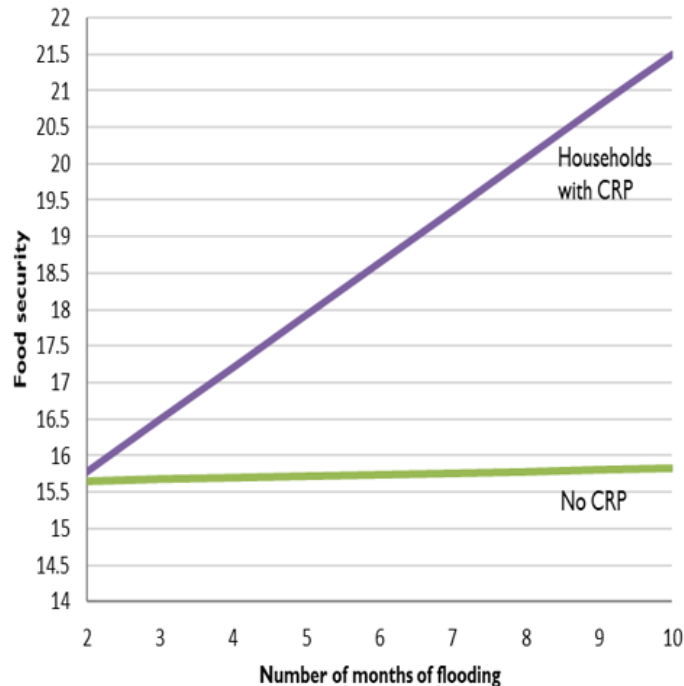
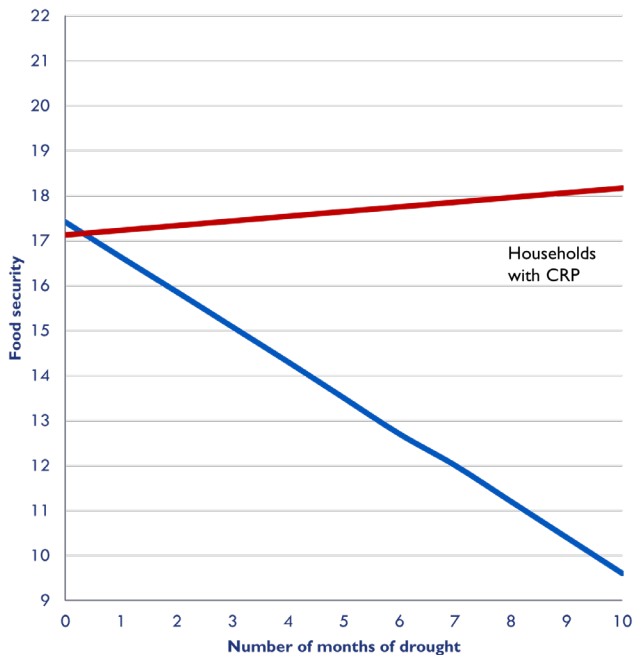
Impact of RISE I on Household Resilience and Resilience Capacities

- Looking at **individual resilience capacities**—which are the actual programming levers for bringing about improvements in the capacities and thus resilience—exposure to CRP had a positive impact on the following nine capacities:
 - Availability of hazard insurance;
 - Disaster preparedness and mitigation;
 - Asset ownership;
 - Bridging social capital;
 - Livelihood diversity;
 - Access to financial resources;
 - Exposure to information;
 - Access to infrastructure; and
 - Access to formal safety nets.
- Direct participation of households in CRP benefited them more in terms of **improvements in resilience and resilience capacities** than did indirect exposure to CRP
- Exposure to CRP served to reduce the negative impact of climate shocks, including both drought and flooding, on households' food security. This is additional evidence that the interventions of the type implemented by RISE I did in fact build resilience.

Impact of Exposure to Comprehensive Resilience Programming on Resilience (Change in Food Security)



Estimated Endline Food Security as Number of Months of Climate Shock Increases for Households with Exposure to Comprehensive Resilience Programming Versus Control Groups



Impact of RISE I on Household Resilience and Resilience Capacities

- The **impact of exposure to CRP on resilience was stronger for the Burkina Faso area than the Niger area.**
- Other project area differences found were that the **impact of CRP on absorptive capacity was stronger for the Niger area** and the **impact of CRP on transformative capacity was stronger in the Burkina Faso area.**
- Looking individually at the contributions of the eight intervention sets, four had **clear, positive impacts on both resilience and most resilience capacities:**
 - Governance;
 - Human capital;
 - Disaster preparedness and mitigation; and
 - Financial services.
- The **financial services** interventions had the strongest positive impact on resilience of the intervention sets.

Impact of RISE I on Poverty and Women's Empowerment

- While **household exposure to CRP** had no statistically significant impact on poverty, it did **boost households' ownership of farming implements, livestock, and land.**
- Two intervention sets helped to mitigate poverty in the RISE I area: **financial services** and **disaster preparedness and mitigation.**
- Exposure to CRP registered no impact on women's empowerment in the post-midline period overall, but this finding is due to **some interventions registering a positive impact and some registering a negative impact.**
- The intervention sets that had **clear positive impacts are MBD and financial services,** both of which strengthened women's decision making over and ownership of assets relative to men's.



Program Implications

- The **humanitarian/development/peace nexus** is crucial to resilience programming.
- In situations where shock escalates into crisis, such as that in the RISE I area, programs should pivot with a **shock-responsive safety net** providing humanitarian support in order to protect previous gains and generally prevent deterioration in resilience capacities and household well-being.
- Greater resilience impact is achieved when interventions from multiple sectors are combined than when they are implemented separately. **Comprehensive Resilience Programming optimizes resilience impacts.**
- Participation of households in RISE I project interventions had a greater impact on resilience and resilience capacity than only indirect exposure. **Resilience programs should encourage direct participation in interventions.**
- **Governance, Human Capital, Disaster Preparedness and Mitigation, and Financial Services interventions had the most positive impacts on resilience and resilience capacities**—despite extreme and escalating shock exposure.
- **There is solid evidence that these interventions are important for achieving resilience in the face of shocks in the RISE I area.**

Program Implications

- Attention to **gender targeting and analysis** is critical to enhancing the positive impacts (and avoiding negative impacts) of interventions on **women's empowerment**.
- In the RISE I case, attention to gender targeting and analysis in two interventions is recommended: **governance** and **market-based development**.
- Special attention needs to be given to addressing **violent extremism**, and activities need to be put in place such as **peace initiatives** and **conflict mitigation measures**, as well as **early warning and monitoring of potential violent encounters**.
- **Greater support needs to be provided to host communities that take on displaced households** to help meet needs and avoid overburdening the hosts.
- Investments in disaster preparedness and mitigation should give **more attention to floods**.
- **Flooding has become more serious** in the project areas over the years, and more actions should be taken regarding relocation of households living in flood plains, construction of small dams and drainage structures, crop and livestock protection, and flood-proofing houses.

Program Implications

- **Access to financial services in the Burkina Faso area declined over RISE I**
- The **financial services** intervention was found to have a positive impact on resilience and needs to be a high priority for RISE II going forward
- Regarding lessons learned for conducting informative impact evaluations, it is **crucial to collect panel data before and after a project's operational period** to clearly identify project impacts.



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Next Steps

- **May 2024:** Inception Workshop in Dakar, Senegal for key RISE II stakeholders to discuss resilience analysis findings to date and inform upcoming data collection efforts
- **June 2024:** RMS Round 1
- **November 2024 – June 2025:** RMS Round 2 and 3
- **September 2025:** In-person workshop to digest RMS findings and inform endline survey
- **December 2025 – January 2026:** Endline survey data collection
- **April 2026:** Endline survey report and presentation



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