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# RESILIENCE MEASUREMENT PRACTICAL GUIDANCE NOTE SERIES

## Risk and Resilience Assessments



### About the Resilience Evaluation, Analysis and Learning (REAL) Associate Award:

REAL is a consortium-led effort funded by the USAID Center for Resilience. It was established to respond to growing demand among USAID Missions, host governments, implementing organizations, and other key stakeholders for rigorous, yet practical, monitoring, evaluation, strategic analysis, and capacity building support. Led by Save the Children, REAL draws on the expertise of its partners: Food for the Hungry, Mercy Corps, and TANGO International.

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## 1. Introduction

Resilience is a compelling concept for development and humanitarian assistance because it can enhance practitioners' understanding of the complex dynamics that influence peoples' ability to prevent and respond to risk. Incorporating resilience analytics into humanitarian and development assistance can enable people, households and communities to sustain positive long-term development trajectories in the face of shocks and stresses, potentially reducing the need for humanitarian aid. The increased interest in resilience has sparked the need for investments in rigorous yet practical strategies for identifying, implementing and measuring resilience-building interventions. USAID's Resilience Measurement Practical Guidance Note Series responds to this need by providing pragmatic guidance for practitioners to integrate core aspects of resilience measurement into their program assessments, design, monitoring, evaluation and learning.<sup>1</sup>

### Why do risk and resilience assessments?

To develop effective, measurable resilience-building strategies, practitioners must consider the complex interactions that exist between risks, people and the socio-ecological systems in which they live.<sup>2</sup> These interactions occur at various spatial and temporal scales, and are inherently dynamic. Thus, when shocks hit a system, they do not occur in isolation; rather, they interact with multiple factors that can compound their impact and provoke downstream effects.<sup>3</sup> For example, a hurricane might have a larger negative impact on a struggling community with poor infrastructure and few social safety nets, than on one with more robust infrastructure and government response mechanisms. It might also provoke increased future risk by destroying flood protection infrastructure that protects people from storm surge. Due to these complex interactions, improvements in resilience capacity often demand multiple long-term changes across various systems, such as markets, governance structures and social norms.

### Why a Systems Approach?

Systems thinking is a way of organizing a set of related units or elements and identifying the interconnections, patterns and structures that make up the whole. Understanding social-ecological systems, for instance, requires understanding how people think, engage with one another and their environment, and react to and affect changes from the local level to the national (or even global) level.

A systems approach may help to build effective resilience strategies and programming because it emphasizes consideration of the cross-scalar and interacting factors that influence the ability of people to prepare for and manage risk within complex, dynamic contexts.

<sup>1</sup> USAID (2017)

<sup>2</sup> The forthcoming *Resilience Measurement Practical Guidance Note Series: Key Terminology Companion Guide* will offer further explanations and definitions of key terms including *systems*, *socio-ecological systems*, and *systems thinking*.

<sup>3</sup> Sagara, B. (2018)

A risk and resilience assessment provides a means for practitioners to better understand the complex factors that influence resilience to shocks and stresses in a given context. This process is critical to developing and improving a theory for effecting change, upon which resilience-building strategies can be based. Risk and resilience assessments can be conducted over a range of levels of effort and for a variety of reasons, including: 1) to inform program design, development and adaptation; 2) to improve monitoring and evaluation of a program with relation to specific resilience metrics; and 3) to increase awareness and understanding of staff and partners of the value and practicalities of adopting a resilience approach.

### **What's Unique about Resilience Assessments?**

Though many approaches to resilience assessments exist, they share in common several features:

- Consideration of multiple interacting and cross-scalar factors
- Use of both qualitative and quantitative data collection processes
- A focus on the ability of people, communities, and systems to mitigate risk
- Recognition of existing capacities already supporting resilience and which are inherent in systems, e.g. traditional practices based on social capital which can serve as safety nets in times of shocks or stresses

Resilience assessments differ from other types of related assessments, which tend to narrowly focus on individual or specific types of risks, favor either quantitative methods or community perceptions, assess static snapshots in time, or have limited analysis of the root causes of risk mitigation capacity.

See “Risk Assessments,” “Vulnerability Assessments,” “Climate Risk & Vulnerability Assessments” in the *Terminology Companion Guide*.

### **What comes after a risk and resilience assessment?**

Risk and resilience assessments are not the end point for understanding the contexts in which development programs take place because these contexts continue to change and evolve over time. As a result, assessment findings must be regularly updated to ensure program strategies remain relevant and impactful. Risk and resilience assessments can therefore play a key role in supporting an adaptive programming process through which humanitarian and development strategies can be monitored, assessed, evaluated and refined over time.

## **1.1. Learning Objectives**

The purpose of **Guidance Note No.1 on Risk & Resilience Assessments** is to increase awareness and knowledge of the key elements and value of risk and resilience assessments, and to provide resources for additional, deeper learning. It does not focus on best assessment practices, which are already well covered elsewhere.

This Guidance Note is guided by the following learning objectives:

- Improved awareness of the purpose and scope of a risk and resilience assessment;
- Enhanced understanding of the processes by which a risk and resilience assessment is conducted, supported by relevant resilience measurement principles highlighted in other guidance notes as appropriate;
- Increased appreciation for the value of risk and resilience assessments in formulating effective Theories of Change and measurement frameworks that link resilience-building strategies to humanitarian and development program outcomes.

## 1.2. Conceptual Framework

A risk and resilience assessment can employ practical elements of **systems thinking** to explore the relevant social, political, economic, and ecological factors in a given context; to identify the multidimensional risks that different populations face; and to assess their ability to mitigate those risks, determined by the extent to which the population sustains progress towards clear development outcomes. In this way, risk and resilience assessments capture the interrelationships between risks (the combination of exposure and sensitivity/vulnerability to shocks and stresses), sources of resilience (resilience capacities) and well-being (development outcomes) (see Fig. 1).

**Figure 1: Simplified Resilience Measurement Framework.**

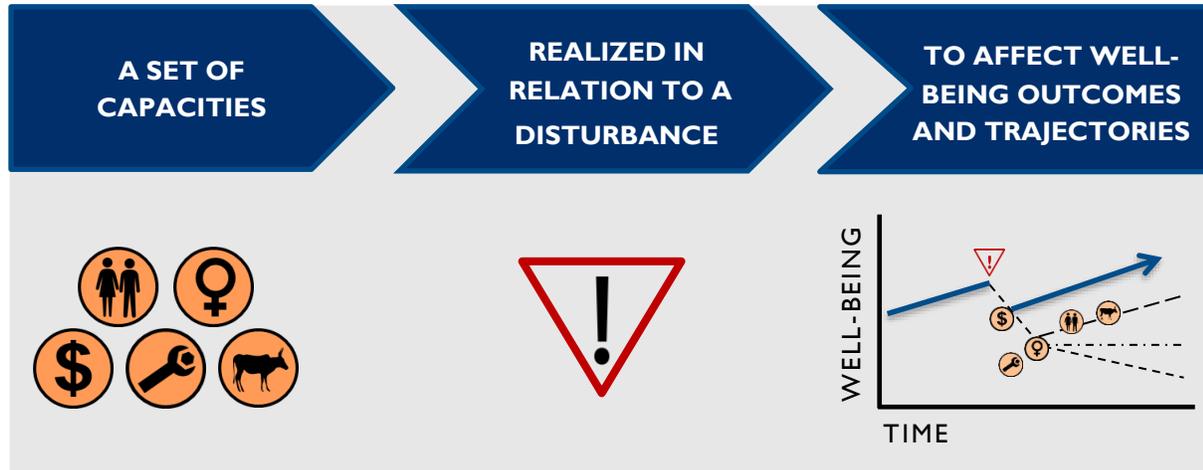


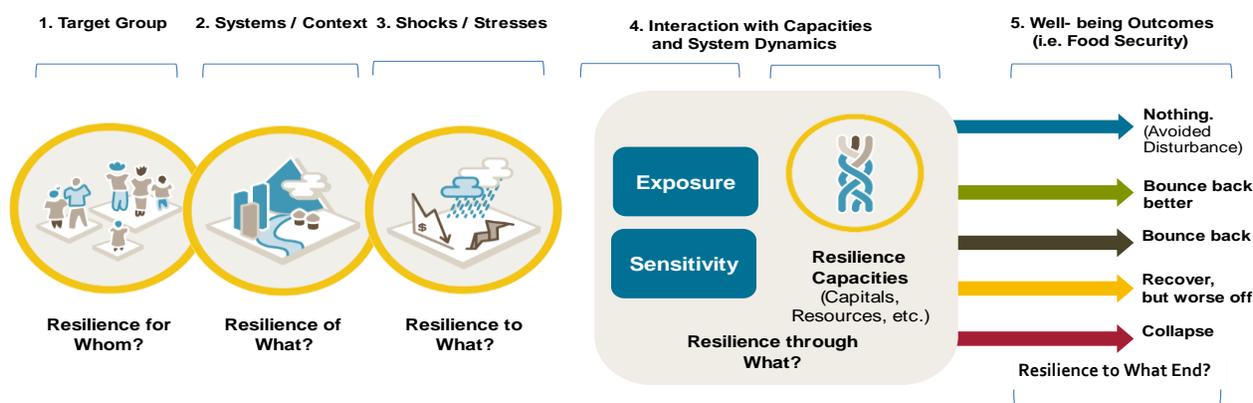
Figure 1, adapted from Mercy Corps' resilience framework, illustrates how resilience capacities, when measured in connection with a shock or stress, can help us understand programs' impacts upon development and well-being outcomes.<sup>4</sup>

<sup>4</sup> Adapted Mercy Corps' Resilience Framework presented in: *Our Resilience Approach to relief, recovery and development*. Mercy Corps (2016)

Throughout the resilience assessment process, the assessment team answers **Five Guiding Resilience Questions** by applying resilience thinking to a given program or portfolio aimed at well-being outcomes:<sup>5</sup>

1. **Resilience for Whom?** The target populations and their attributes that include location (urban, peri-urban, rural), demographic factors (sex, age, ethnicity) and livelihood (agriculture, trade, unskilled labor).
2. **Resilience of What?** The enabling environment, including formal and informal institutions, infrastructure, social, ecological and economic factors that impact the target population's ability to anticipate, absorb and adapt to risks.
3. **Resilience to What?** The complex and compounding shocks and stresses that impact people's capacities to achieve development outcomes.
4. **Resilience through What?** The absorptive, adaptive and transformative capacities that strengthen the ability of target populations to mitigate risk.
5. **Resilience to What End?** The primary wellbeing or development outcomes for which we want to build resilience.

**Figure 2: Conceptual framework for understanding resilience** in particular social, political, economic, and ecological context based on the five resilience questions.<sup>6</sup>



Applying this framework (See Figure 2)<sup>7</sup> serves to focus how risk and resilience will be assessed in a given context; otherwise, assessing resilience can easily become too broad and unwieldy to move specific program strategies forward. This framework also supports a sector-neutral analysis process in which one can explore multi-dimensional cause-and-effect relationships and ultimately develop a resilience Theory of Change (ToC). A resilience ToC should articulate how a program builds resilience in support of humanitarian and development goals, and should form the foundation upon which a resilience measurement framework is built.

<sup>5</sup> Mercy Corps. (2017). *Strategic Resilience Assessment Guidelines*. More information available at: [www.mercycorps.org/resilience](http://www.mercycorps.org/resilience)

<sup>6</sup> Framework developed by Mercy Corps

<sup>7</sup> Adapted from the Resilience Framework presented in: *Our Resilience Approach to relief, recovery and development*. Mercy Corps (2016)

Deriving a ToC from a sector-neutral process is necessary because resilience contributes to a wide array of development outcomes across sectors, and multiple sectors are needed to effectively build resilience and lead to potentially transformational change. For instance, the resilience of a community to a shock such as a flood may be linked to multiple sectors involved in community planning and infrastructure development; influenced by factors such as social capital and economic standing; and linked to development outcomes related to health, education and livelihoods.

## 2. Risk and Resilience Assessment Process

The process of undertaking a risk and resilience assessment can be categorized into four adaptable steps, summarized below:

**Step 1: Planning and Design.** Determine the purpose, scope and scale of the assessment and decide Level of Effort. Take stock of existing data, identify knowledge gaps and create a research plan to respond to key questions on resilience capacities and risks.

**Step 2: Data Collection.** Collect qualitative and quantitative data from primary and/or secondary sources to fill knowledge gaps identified in Step 1.

**Step 3: Analysis.** Combine and interpret data to answer key questions as determined in Step 1.

**Step 4: Strategic Planning.** Translate findings into appropriate outputs, based on the purpose of the assessment. Possible outputs include a new or revised Theory of Change, new resilience-building programmatic strategies, and/or the creation of learning documents.



The next sections take a deeper look at each step and illustrate a case study through which Mercy Corps implemented these steps in Karamoja, Uganda.

### Case Study – The Karamoja Strategic Resilience Assessment

The following sections are grounded in a case study of a Resilience Assessment conducted in 2016 of the Karamoja region in Uganda, following **Mercy Corps' Strategic Resilience Assessment (STRESS) process**. The purpose of the assessment was to develop a vision for resilient development in Karamoja and strategies for better integrated programming and partnerships in support of more resilient development outcomes.

#### Overview

Karamoja is a region in transition. Having experienced intra- and inter-community conflicts in the past years, the region is slowly recovering. While important achievements have been made in areas like health and nutrition, a range of impediments (such as rigid gender norms) present major obstacles to progress. Shocks and stresses (such as variable rainfall, land degradation and key commodity price shocks) continue to adversely affect the region, thus undermining the progress that has already been made in terms of development.

## 2.1. Step 1: Planning and Design

The conceptualization and design of any risk and resilience assessment starts by clearly defining the purpose (intended outputs and outcomes), the scope (well-being outcomes of interest) and the scale (boundaries and dynamics) of the assessment, to properly contextualize local conditions, any foreseeable programmatic technical issues and associated needs for the assessment. The purpose of risk and resilience assessments varies depending on institutional needs, resources, geographies and programs. In general, the scope and scale should be established according to the programming, strategy and learning needs of the supporting institutions. To achieve the most grounded results, this process must be driven and “owned” by key stakeholders at the level that corresponds with its scope (region, country, state, etc.).

It is critical that key staff are in place and involved in initial scoping discussions to ensure the team will function with a common understanding of the assessment framework and research questions throughout the process. Ideally, the staff involved will have familiarity with risk and resilience theory, experience carrying out interdisciplinary research, and proficiency in qualitative research methods.

### Special Scoping Considerations

**Fragile Contexts** – In fragile contexts, emphasis can be placed on understanding the factors that influence social cohesion, social accountability and access to basic services, resource-based conflict, and food security.

**Urban Areas** – In built-up and densely population areas, emphasis can be placed on understanding the role of basic services and municipal governance in managing risks.

**Drylands** – In water-scarce areas, emphasis can be placed on understanding the fragility of ecosystems, climatic risks, and sustainable livelihood strategies.

### Resilience Assessment Team Composition

#### *Core Team*

**Who?** 5-10 locally-based program staff from various relevant disciplines.

**Tasks:** Guide the assessment and provide context and technical support

#### *Assessment Lead*

**Who?** Background in interdisciplinary research methods and ideally some resilience theory

**Tasks:** Lead assessment, ensure correct execution of all phases, and prepare written outputs and final assessment products.

#### *Assessment Coordinator*

**Who?** Experienced in coordinating interdisciplinary research and conducting participatory appraisals

**Tasks:** Organize and coordinate activities, files and information. Supervise any necessary field research.

Before beginning the process, several considerations can help to determine what level of effort should be undertaken based on available resources which may be limited by budget, staffing, and time constraints.

These decisions may entail tradeoffs in the following areas:

- **Purpose, scope and scale** – Which elements of the social, political, economic, and ecological context should be included based on the relevance to the high-level development outcomes and assessment goals of interest, and across which geographies?
- **Existing data and analysis** – What quantitative and qualitative data are available and accessible, and are relevant to the topics, geographies and stakeholders of interest?
- **Analysis** – What methods and tools are needed to fill in key knowledge gaps, assess risk, and evaluate resilience capacity at a desired level of detail?
- **Sampling** – From how many different types of groups and how many locations can responses be collected? What total number of responses from each group is appropriate to achieve the high-level assessment goals?

Setting the scope of the assessment is best done cooperatively with local team members, community representatives and partners. A useful starting point is to ask local team members to develop initial responses to the Five Guiding Resilience Questions (see Section 1.2) based upon their own knowledge, a brief review of existing literature, or expert interviews. These can be used as inputs for an initial round of collaborative examination in workshop setting that draws on practical elements of systems thinking.

These sessions are designed to build upon initial assumptions about system dynamics that reveal the social, economic, and ecological context and key relationships that contribute to the risks facing different target populations and systems and their resilience. This work informs the design of key research questions to address identified knowledge gaps, supplemented with secondary data. It will also inform final decisions on an appropriate sampling strategy, research tools and methodologies.

Table 1 offers a potential tool to inform decision-making during the planning and design process, which can be used to estimate the most appropriate and feasible level of resilience assessment based on available resources and restrictions.

	LOW	MEDIUM	HIGH
<i>Estimated Time</i>	5-10 weeks	3-8 months	>8 months
<i>Purpose, Scope &amp; Scale</i>	Fewer sectors or development outcomes may be included	Wider range of sectors, development outcomes and geographies	Broad range of sectors, development outcomes and geographies
<i>Data Collection &amp; Sampling</i>	Reliance on existing analyses combined with limited field work and limited geographic resolution of primary data	Increased use of primary data with moderate geographical resolution and limited investment in external technical studies	Focus on primary qualitative and quantitative data at a high-level of spatial resolution supported by secondary data and external studies, perhaps multiple rounds
<i>Analysis</i>	Validate existing knowledge, limit timeframe of trend analysis and capacity characterizations	Longer-term trend analyses with deeper characterization of risks and capacities	Complete trend analyses coupled with in-depth characterization of risks and capacities
<i>Outputs</i>	Revisions to existing theories of change, shorter planning horizons	Revised or new theories of change and knowledge products	Detailed theories of change and/or detailed knowledge products, long-term planning
<i>Examples</i>	Bangladesh: Carried out over 8 weeks from July to September 2016, an assessment focused on southwest Bangladesh's complex risk environment and the capacities of people, households and communities to mitigate, adapt to and recover from shocks and stresses. The assessment collected no new primary data, instead relying on existing data, surveys, evaluations, analyses and maps from over 100 sources. The findings informed the development of a country resilience-building strategy.	Mongolia: Carried out over eight months from March to October 2016, an assessment of the Western, Altai, Khangai, Eastern and Gobi Regions of Mongolia employed qualitative instruments in communities to explore opportunities to build the resilience of rural and urban communities for future programming. A focused background study of existing data and analysis of climate patterns was commissioned to support the analysis.	Zimbabwe: Carried out over 18 months from June 2015 to December 2016, an assessment in Mberengwa and Mbire Districts of Zimbabwe employed a detailed household survey and qualitative instruments in communities in three rounds to explore the impacts of a drought year on community and household resilience. A detailed GIS hazard analysis provided deeper insight into how risk is spatially distributed.



Field-level assessment in Kenya. Photo Credit: USAID Kenya

Conducting a risk and resilience assessment is a powerful capacity building and relationship building process; the process often holds as much value in itself as the results it produces. Ensuring and encouraging the active participation of a diverse set of partners and teams is key to enhancing learning. Doing so can enable each participant to confront the complexity of their working context and better understand how their contributions to increased resilience capacity can connect their work to achieving broader development goals.

→ **Outputs and Outcomes:** The potential outputs of the design process typically include:

1. A preliminary systems analysis that identifies key relationships between shocks, stresses, risk drivers, development constraints, capacities, and outcomes based on existing knowledge
2. A preliminary set of resilience capacities that correspond with the risks and negative outcomes articulated in the systems analysis; and
3. A detailed research plan that identifies key knowledge gaps, primary data collection methods, and a sampling strategy.

## Karamoja – Planning and Design

Carried out over 6 months in 2015/16, the Karamoja Resilience Assessment aimed to better understand the livelihood factors and trends that influence food security and economic wellbeing, as well as the main risks to development progress. The process was designed to identify long-term development strategies that improve the ability of people and communities to mitigate these risks and to harness development opportunities. There was specific focus on livelihood shifts from pure pastoralism to a mix of pastoralism and agriculture and trade (in urban areas), recognized as a major driver of change in Karamoja.

Mercy Corps Uganda led the process, bringing together program staff and local partners from five different projects in the target area with the goal of developing a cohesive development vision and long-term resilience strategy for Karamoja. The team employed participatory systems mapping exercises supported by desk reviews on the topics of health, social norms, livestock, agriculture, and natural resources management.

Of What	For Whom	To What	Through What	To What End
Karamoja agro-ecological zone, focused on livelihood shift from pastoralism to a mix of pastoralism, agriculture, and trade	Pastoralists &	Drought	Early Warning Systems & Disaster Response	Food Security
	Agro-pastoralists	Flood	Climate smart agriculture	Inclusive Economic Opportunity
	Youth	Crop & livestock disease	Pest Management	Social Cohesion
Increasing interactions between rural and urban areas	Women	Land Degradation	WaSH Strategies	
		Conflict	Conflict Management	
	Children	Price shocks	Appropriate financial services	
		Gender-based violence		

## 2.2. Step 2: Data Collection

A risk and resilience assessment typically employs qualitative and quantitative data, and includes data from primary and/or secondary sources. This is done in order to inform the analysis from the existing evidence base, as well as the perspectives of various stakeholders in the target populations and the enabling environment. Primary data can be collected to fill specific gaps in knowledge identified in the scoping phase, while testing resilience-related hypotheses with communities in

target areas. The timing of these activities is fluid, iterative, often done in parallel, and able to be adapted as needed.

Though data is primarily collected according to the factors identified during scoping, tools should foster open discussion and critical thinking that can allow for discovery to occur. This is an important way to ensure that the right set of factors (shocks, stresses, development constraints, resilience capacities) inform the analysis process.

**Fieldwork.** After developing a research plan in the Planning and Design phase, training data collectors and finalizing logistics, the collection of primary and secondary data can begin. Scale is an important consideration for the data collection process because resilience assessments transcend any one sector. Individual, household, community, and landscape-level perspectives are vitally important.

### What Factors Influence Resilience Behaviors?

Identifying the social, economic, and cultural factors that influence the way people act with respect to resilience behaviors is an essential element of a resilience assessment. Using social and behavioral change methods such as Barrier Analysis can be a practical way to discover the barriers and motivators (such as social norms, access, self-efficacy, and culture) that influence the adoption of resilience-enhancing behaviors and resources (e.g. accessing loans to purchase drought-resistant seeds).

It is paramount to understand four things from these perspectives: 1) how risks and development constraints are perceived;<sup>8</sup> 2) how risks to supporting systems (food, market, governance) manifest; 3) how risks to people and systems are mitigated; and 4) the underlying factors that enhance or inhibit their ability to absorb, adapt and transform in the face of risk, including social capital<sup>9,10</sup> information access and flows. Qualitative data can be collected using existing data, or employing a combination of participatory rural appraisal methodologies,<sup>11</sup> focus group discussions, and key informant interviews.<sup>12</sup>

Additional literature review may be necessary to meet any gaps identified during the design process, and may rely on previous studies, assessments, published research and datasets for additional information.

→ **Outputs and Outcomes.** Outputs and outcomes may include: a literature database; datasets that bridge knowledge gaps; deeper awareness of the differential risks, capacities, and vulnerabilities of target populations; and greater understanding of the systems within which they are embedded.

<sup>8</sup> Béné et al. (2016)

<sup>9</sup> Grootaert et al. (2004)

<sup>10</sup> Dudwick et al. (2006)

<sup>11</sup> Thomas, S. (n.d.)

<sup>12</sup> USAID (2011)

## Karamoja – Data Collection

The assessment team carried out an iterative process of data collection over a period of six weeks. While multiple sources of data and information were consulted, each process focused on increasing knowledge in four key areas: (1) development trends/constraints; (2) shocks and stresses; (3) differentiated vulnerability of population groups and across geographies; and (4) current and potential gaps in risk management.

Desk studies and literature reviews were used to ensure adequate understanding and incorporation of existing knowledge. Sources included existing risk and vulnerability assessments, livestock market assessments, conflict and security reports, analyses, national and regional reviews of governance initiatives and policies. **Key Informant Interviews** were used to fill gaps in information on key topics missing from the literature review, solicit opinions of technical experts, and get access to additional data (on topics related to effectiveness and reach of early warning systems, land tenure and governance, institutional strategies, education and literacy rates). **Focus Group Discussions (FGDs)** were useful for increasing understanding of vulnerabilities and the effectiveness of existing risk mitigation strategies at the community level. Urban FGDs were prioritized to address the greatest gaps in knowledge existing at the local level which included learning more about the unique factors influencing vulnerability of those living in urban areas and the influence of social and economic links with family members in rural areas.

Type	Location	FGD Types	KII Types
Urban (towns)	Sidok Town	4 Total: Men, Woman, Boys, Girls	Local shop owners Employees Local/Regional Government Representatives
	Kotido Town	4 Total: Men, Woman, Boys, Girls	
Rural	Nyakwae	4 Total: Men, Woman, Boys, Girls	Local shop owners Employees
National / Regional	Kampala		DFID Uganda Representatives, INGO Country Directors, FAO, Ministry of Water and Environment, Karamoja Youth Empowerment Network, Uganda Land Alliance, National Early Warning Network

## 2.3. Step 3: Analysis

The objectives of the data analysis step are to combine data from various sources in order to answer key questions related to risk, resilience capacity and development trends, as determined during the design phase.

In the Analysis stage, the team may elect to do the following:

1. Identify relevant development trends;
2. Deepen understanding of the different risk profiles of target populations and systems including the effects of risk drivers and recent trends;
3. Identify key resilience capacities, and how well they are accessed and used to mitigate potential or realized impacts of shocks or stresses; and
4. Identify gaps related to risk mitigation that need to be addressed in order to foster improvements in resilience over the short, medium, and long-term.

Integrating risks in resilience assessments can be particularly challenging. Risks can have not just acute and immediate effects, but also cumulative impacts over time. Risk can also occur at different scales, from a drought at the landscape level to the death of a breadwinner at the household level. In addition, drivers of risk change over time, such as the effects of climate change.

Incorporating **trend analysis** can be a valuable way to better understand how well target populations and systems are employing risk mitigation strategies. It is important to consider trends that are related to different risks (drought, floods, conflict, disease outbreaks), risk drivers (rainfall, temperature, price variability, population growth), resources (vegetative cover, soil quality, flood protection infrastructure), and outcomes (food security, health, crop productivity, income). Land use and land cover from remote sensing analysis are particularly valuable to understanding how changes in development (urbanization, agricultural extensification, population shifts) and ecosystems (deforestation, erosion, desertification) contribute to the risk profiles of different target populations. Panel data is also an especially valuable way to track changes in outcomes in target populations over time.

#### Gender Sensitivity during the Assessment Process

Adequate inclusion of **gender-sensitive approaches** to resilience strengthening is critical to addressing root causes and supporting community-wide transformation. These include equitably engaging women and girls, men and boys, as well as understanding their unique exposures to shocks and stresses, vulnerabilities and sensitivities to them, and their respective resilience capacities.

Two types of analysis that can be helpful to analyzing risk are detailed below:

**Risk Profile Analysis** is an approach that requires organizing primary and secondary data to characterize the unique risk profiles for different target populations and systems. To conduct this analysis, one should: 1) revisit and potentially revise any assumptions made in the resilience assessment design process; 2) develop a detailed understanding of the key development trends and contributing factors (shocks, stresses, development constraints); and 3) gather perceptions of target populations and stakeholders of the sources, drivers and effects of risk. It may be important to consider heterogeneity across different types of communities and households for different kinds of target populations (women, youth, marginalized groups, type of livelihood).

**Resilience Capacities Analysis** is an approach that requires organizing primary and secondary data to characterize the resilience capacities of different target populations and systems. To conduct

this analysis, one should: 1) revisit and revise assumptions made during the design phase; 2) categorize the resources the target population (people, households, communities) and systems need to mitigate different aspects of their risk profile; 3) detail the actions target populations and systems take to mitigate different aspects of their risk profile; and 4) consider the underlying enabling and disabling factors that underpin the ability of target populations and systems to access those resources and undertake those actions necessary to mitigate risk over the short-, medium- and long-term. Consideration should be paid to structural factors including governance and policies, social attitudes and cultural practices.

→ **Outputs & Outcomes.** Outputs may include a revised Systems Analysis, Risk Profile Analysis and/or Detailed Resilience Capacity Analysis, which provides a complete overview of the characteristics of each resilience capacity.

### **Karamoja – Analysis**

The analysis process in Karamoja was designed to allow for local Mercy Corps staff to contribute their best understanding of the reality on the ground. To facilitate this process, outlines of key research findings were created and regularly updated by the assessment leads. Staff were invited to review and add to research outlines, and attend regularly scheduled discussions with the assessment team to discuss findings and additional sources of information. The outlines discussed with the staff formed the structure of what eventually became the narrative of the final report. Near the end of the process, an Analysis Workshop was organized with staff and outside experts to discuss the findings and detail prioritized resilience capacities using the factors described below.

**Summary Resilience Capacities Analysis Matrix**

<b>Capacity Type</b>	<b>Shock/ Stress</b>	<b>Provisioning System</b>	<b>Capacity User</b>	<b>Timing of use</b>	<b>Effect of the Capacity</b>
<i>Brief Description of the Capacity</i>	<i>Identify the shock/stress it's being used against</i>	<i>Group, institution, individual or process which supplies the capacity</i>	<i>Identify the group, individual, institution that would use the capacity</i>	<i>When the capacity is used</i>	<i>Intended outcome or result achieved of using the capacity</i>
Access to appropriate Credit or Loans products (including Sharia-compliant, where applicable)	Drought	Financial institutions (e.g. banks) as well as microfinance institutions	Pastoralists and agro-pastoralists (including both men and women)	Before, during, after drought.	Pastoralists and agro-pastoralists can access loans and credit to purchase or develop inputs that would decrease vulnerability prior to a drought (drought resistant seeds, fodder reserves), during a drought (veterinary inputs), or after a drought has ended (new assets to recover).
School Incentives to encourage attendance during shocks	Disease Outbreak Price Shocks Drought	Schools, in partnership with PSNP and other government initiatives	Households in pastoralist and agro-pastoralist regions with school-aged children	During and immediately following the occurrence of a shock	Providing incentives during these shocks - either in-kind (e.g. school feeding programs or weekly food rations to take-away) or other types - will motivate parents to send their children to school despite losing a potential opportunity cost of keeping children at home for additional labor.

## 2.4. Step 4: Strategic Planning

In the Strategic Planning Step, findings from the resilience assessment are translated into the appropriate outputs, depending on the purpose of the assessment. Outputs may include new or adapted intervention plans that strengthen a set of resilience capacities; learning documents that reveal new or updated understandings of resilience in a development context; or a new or revised Theory of Change for a new or ongoing program, a portfolio of programs, or even a country strategy for a given institution.

**Theory of Change.** The cause and effect interactions between resilience capacities, shocks, stresses, development constraints, and wellbeing outcomes developed through the analysis process can form the basis of new or refined ToC's. A resilience ToC should articulate how a program builds resilience in support of humanitarian and development goals and should form the foundation upon which a resilience measurement framework is built.

**M&E Framework.** ToC's should include indicator values for different elements to support monitoring, evaluation and learning processes. The following steps can be used to develop a measurable framework for monitoring and evaluating changes in resilience: 1) design ToC's based on results of the analysis; 2) establish appropriate indicators linking resilience capacities and the desired well-being humanitarian and development outcomes; 3) articulate appropriate sequencing of resilience building strategies; and 4) develop a plan for periodic review of program data to regularly monitor, evaluate and adaptively manage the validity of these indicators within the intended assessment outputs and outcomes, as needed.

*In Niger, Mercy Corps conducted a resilience assessment that led the organization to tackle groundwater management issues in a new way. The assessment revealed that groundwater was an increasingly problematic constraint for Niger's development, and the existing community-based water management strategy failed to tackle root causes of water insecurity. With insights from nontraditional actors, like NASA, participants discovered the power of remote sensing data to provide higher level perspectives of the country's water issues and to identify new solutions. A revised Theory of Change pointed to the government as the key actor for effecting change, and programming was refocused to build government capacity to monitor groundwater conditions and to develop supportive groundwater management policies*

**Resilience-building Strategies.** The analysis of priority resilience capacities forms the basis of new programmatic strategies by improving access to and use of these capacities. New resilience strengthening strategies should target both risks and capacities, as well as the root causes of risks and the factors that help support capacities. These strategies may be further detailed using standard techniques such as problem tree analysis<sup>13</sup> or results chains.<sup>14</sup>

→ **Outputs & Outcomes.** Potential outputs can include strategic-level Theories of Change used to build out a portfolio of programs; a ToC for a multi-year program design; or results chains for how to strengthen resilience capacities. Process-level outcomes may include improved staff and partner capacity-strengthening around systems thinking and resilience assessment processes.

<sup>13</sup> ODI (2009)

<sup>14</sup> Stem, C., Flores, M. (2016)

## Helpful Resources

The following lists select resources that provide background on Risk and Resilience Assessment, illustrating the diversity of thought leadership in this field, including academics, research institutes, donors, implementing agencies and consortia partners. These resources also provide some indication of how the field has evolved over time, from largely independent primary research to concept notes and technical guidance.

### **Technical Notes and Working Papers:**

Béné, C., Frankenberger, T., Langworthy, M., Mueller, M. & Martin, S. (2016). *The Influence of Subjective and Psycho-social Factors on People's Resilience: Conceptual Framework and Empirical Evidence*. Report prepared by the Technical Consortium, a project of the CGIAR. Available at: [http://www.technicalconsortium.org/wp-content/uploads/2016/02/Report-5-The-influence-of-subjective-and-psychosocial\\_18Feb2016.pdf](http://www.technicalconsortium.org/wp-content/uploads/2016/02/Report-5-The-influence-of-subjective-and-psychosocial_18Feb2016.pdf)

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OECD. (2013). *Risk and Resilience: From Good Idea to Good Practice*. Available at: <http://www.oecd.org/dac/conflict-fragility-resilience/risk-resilience.htm>

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TANGO International. (2017). *USAID/Bangladesh Comprehensive Risk and Resilience Assessment*.

### **Manuals, Guidance, and Tools:**

Arup and The Rockefeller Foundation. (2013). *City Resilience Index*. Available at: [http://publications.arup.com/publications/c/city\\_resilience\\_index](http://publications.arup.com/publications/c/city_resilience_index)

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UNISDR. (2015). *Assessment Tools: City Resilience Scorecard*. Available at: <http://www.unisdr.org/campaign/resilientcities/home/toolkitblkitem/?id=4>

USAID. (2015). *Resilience Training: An Introduction to Resilience at USAID and Beyond*. Available at: <https://agrilinks.org/training/introduction-resilience-usaid-and-beyond>

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Stem, C., Flores, M. (2016). *Using Results Chains to Depict Theories of Change in USAID Biodiversity Programming*. Guide published by the USAID Bureau for Economic Growth, Education, and Environment/Office of Forestry and Biodiversity. Available at: [http://cmp-openstandards.org/wp-content/uploads/2016/10/USAID\\_ResultsChains\\_Guide2\\_2016.pdf](http://cmp-openstandards.org/wp-content/uploads/2016/10/USAID_ResultsChains_Guide2_2016.pdf)

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USAID's Resilience Measurement Practical Guidance Note Series synthesizes existing technical documents into pragmatic guidance to assist practitioners in integrating core aspects of resilience measurement into their program assessments, design, monitoring, evaluation, and learning.

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