Food Security Vulnerability and Capacity Assessment Guidance

Introduction

This work is a product of Mercy Corps' resilience initiative which is testing various methods for assessing the vulnerability and capacity of communities in order to better inform resilience building programs. The guidance presented in this document is based on Mercy Corps assessment experience in the Dry Zone of Myanmar. Mercy Corps is testing similar methodologies in a number of other geographies and will be developing broader guidance on assessments processes based on that combined experience. This document was made possible with support from the American people, delivered through the U.S. Agency for International Development (USAID).

The purpose of this document is to provide guidance for implementing a regional-scale food security focused vulnerability and capacity assessment (VCA). Generally, a VCA is an integrated process for identifying and prioritizing shocks and stresses and understanding capacities to absorb, adapt, and transform when faced with them.

> *The primary objective of a regional-scale food security VCA is to assess the broad and interacting nature of shocks and stresses across scales to yield an evidence-based understanding of the impacts of social, economic, and environmental conditions on the food security of one or several types of communities within an area of interest.*

The intended audiences are donors, research organizations, and development agencies with interest in establishing broad strategies to inform more cohesive and informed resilience programming.

A broad assortment of tools already exists in support of VCAs for individual communities. Examples include the Climate Vulnerability and Capacity Analysis Handbook (CARE 2009), and Participatory Capacity and Vulnerability Assessment (Oxfam 2012).

> **Food Security** exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. The four main dimensions of food security are **availability**, **access**, **utilization**, and **stability**.[1]

This guidance was developed to fill two important gaps related to breadth and scale. First, many of the existing tools tend to focus on climate-induced, natural hazard related vulnerabilities rather than incorporating analysis on social and economic factors. Second, the scale of existing assessment tools is most often limited to the community level. As a result, the impacts and interactions that occur across local, regional, and national scales are not effectively taken into consideration.

A VCA at this scale is best suited when the goal is to develop a broad set of strategies for reducing vulnerabilities of communities. Working at the regional scale, the process helps to identify the nature and interactions of dominant shocks and stresses, common impacts on different types of communities, and the scale at which they are felt. This process seeks insight by consolidating and synthesizing what is already known rather than undertaking an in-depth analysis of a particular issue. This supports a more systematic understanding of the cumulative nature of shocks and stresses and leads to generalized strategies that can then be used to identify and formulate specific community level action plans through additional community-scale research.

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[1] FAO 2008, An Introduction to the Basic Concepts of Food Security

A VCA at this scale is not well suited for the development of specific community level action plans. For example, if there is a critical gap in the understanding of a specific stress (such as erosion), the consolidative nature of this approach does support the development of greater insight into the governing mechanism at play. Secondly, this approach is not suited to providing a deeper understanding of specific community level impacts. While supportive community level data collection is a key element of the process, the insights support (or "ground-truth") broader conclusions applicable to a range of communities.

Phases of Work

The following guidance is broken into five phases of work. The process is most effective when organized sequentially, allowing time for the information and learning from the previous steps to inform the phase ahead.

Scoping Phase

The purpose of the scoping phase is to establish why the assessment process is being undertaken and how it will be accomplished. The scoping process should be informed with inputs from senior managers, technical advisors, implementation staff, local partners, and research (or monitoring and evaluation) staff. The first four steps in this phase could be completed in a number of ways, but the most effective would be in workshop setting. Alternatively a document presenting the information produced for each step could be circulated to key team members.

Tip: Scoping discussions can be a useful way to develop closer collaborative relationships with potential implementation partners. If appropriate, think about inviting them into the Scoping Phase discussions.

0.1 *Identify why this assessment is being done* – There are several reasons for undertaking a regional scale food security VCA. Establishing a clear set of motivating factors will greatly help the team effectively bound the process. Possible reasons include:

- Informing the development of broad program strategies

- Influencing the funding strategies of key donors

- Identifying drivers of vulnerability to monitor after the initial assessment is complete

- Building the capacity of the country team to facilitate additional VCA processes

The final tailored list of rationale for carrying out the VCA will provide significant clarity and support to establish appropriate scope and scale, and define final outputs.

0.2 *Define the problem, scope & scale* – It is important to define the scope and scale of the assessment at a very early stage. It is helpful to develop a problem statement. The problem statement should identify the area of interest including the primary issues to be addressed. There are several dimensions to food security (see Box 1). Based on context, it must be decided which elements of food security should be included.

- What challenges to food security will be addressed? At this early stage, when identifying challenges it is best to identify broad categories. For example: land degradation, unsupportive agricultural policies, shifting rainfall patterns, or conflict.

- At what geographic scope should the assessment be done? Is this a country wide assessment or a region of a country? In some cases the scale of an assessment is best defined by natural boundaries, which may require an approach that considers cross-border, international issues.

These decisions will form the basis for the key research questions that will guide the development of research methodologies and tools

0.3 Establish research methods – A mixed-methods approach to data collection is recommended in order to capture as much information as possible at several scales from a diverse set of sources. Setting a wide net can be time consuming and resource-intensive, but is vital for understanding cross-scale implications (local, regional, national and even international) as well as understanding the perceptions of various types of stakeholders. Potential research options include:

- *Secondary data collection* – Pulling available information from existing studies and datasets by state and non-state actors.

- *Expert interviews* – Taking advantage of the knowledge and insights of researchers and practitioners at the national and regional scale with contextual experience in key subject areas relevant to the study.

- *Field research* – Assessing the local implications for the types of communities of interest in order to better understand their perceptions and ground-truth other sources of information. If community scale research is going to be included, it is important to decide on the sample size. Often this type of research is the most expensive and time consuming.

Tip: For field research, a large sample size is not vital to the process unless statistical significance is desired. Small sample sizes can be a useful way to ground-truth data from other sources and provide indicative 'case-study' perspectives for the study.

Assigning resources – Establish the means to carry out the assessment by estimating staffing and financial needs. Staffing levels will depend on the scope and scale of work, and can be assigned from a combination of internal personnel, consultants, and external partners.

0.4 . Funding options also need to be understood and explored. Based on the expected funding level, a budget should include

- Human resources

- Travel

- Workshops

- Data collection

- Administrative support

Tip: It is advantageous to consider partnerships with local research institutions that might have contextual experience collecting data and working with government officials and processes.

0.5 Background research – This is a key activity that should be completed before the next phase, which will focus on the design of the assessment. Background research builds the framework for the further details to be established in the Design Phase. The research should be framed by the scope and scale previously defined. There are two primary purposes to the background research. The first is to inform the identification of specific shocks, stresses, and capacities. The second is to inform, and add context, to additional research activities in later phases. Possible sources of information include:

- *Existing studies* – Look specifically for studies that cover the topics of interest (i.e. policy, environment, governance, agriculture, water resources, socio-economics, nutrition, export markets, etc.)

- *Project proposal and reports* – Look for information on the types of approaches being tried in the area of interest

- *Presentations* – Look for topical reviews from subject experts

- *Surveys* – Look for survey reports that cover key topics (i.e. food security, socio-economic conditions, nutrition, etc.)
- *Maps* – Different types of topical maps can be very helpful for understanding the spatial context of the issues of interest

Design Phase

The purpose of the Design Phase is to fully prepare the assessment characteristics (or topics of data collection and analysis), data collection tools, and analysis framework. The first two steps of the Design Phase would benefit from being done in a workshop setting and informed by a set of participants that include research specialists, staff with implementation experience in the target region, technical advisors in the subjects of interest (i.e. agriculture, food security, market systems, governance, nutrition, health, conflict, land security gender, etc.).

1.1 *Disturbances (shocks & stresses)* – Identify the specific shocks and stresses within each broad category identified during the Scoping Phase. Regions are often heterogeneous in nature. Therefore it is likely that different locations in the area of focus will be exposed to different disturbances in different ways. Spatial information from the background research is useful.

There is no single way to decide which disturbances to include. Utilizing background research and the experience of the team, identify those that likely have the most significant impact on communities of interest. If, for example, land degradation was identified in the Scoping Phase, potential disturbances might include deforestation, erosion (wind or water), soil salinization, and wastewater or chemical contamination.

Tip: It is important at this stage to acknowledge that any one study will not be able to address all of the potential shocks/stresses. Think back to the decisions made to define the problem and scope of the assessment during the Scoping Phase in order to enforce boundaries on the assessment.

1.2 *Livelihoods and coping strategies*– Identify a set of the most common and important strategies that selected types of communities employ. The list should be prepared for each type of identified livelihood. Background research related to economic activities in the area of interest is vital to this effort. However at this stage, the list need not be final. It can be revised during data collection based on additional insights gained through discussions and interviews. Examples of livelihood strategies might include crop selection, when products are sold, how much labor is employed, and seasonal migration. Examples of coping strategies might be taking loans, using supplemental irrigation, income diversification, and selling assets.

1.3 *Tools* – The second step of the Design Phase is to establish a set of data collection tools to be used for the assessment.

- *Interviews* – The set of questions that comprise each individual interview tools should be custom-made based on the assessment's aims. It is useful to seek the advice of internal or external subject experts when drafting these. Examples of key insights to be gained from experts include characteristics, drivers, and trends of disturbances, the impact of disturbances on livelihoods and communities of interest, interrelationships between disturbances, relationships between relevant stakeholders, and source locations of secondary data.

- *Field research* – There are several research tools available to collect vulnerability and capacity data at the community level. Frequently used tools are generally either focus group discussions or group exercises. Specific types of helpful exercises may include village resource mapping, disturbance definitions, historical disturbance timelines (occurrence, frequency, and magnitude), disturbance impact rankings, disturbance severity prioritization, and linking causal relationships between disturbances.

Tip: If time is short, consider designing a quick multiple choice survey-based tool for interviewing key informants.

1.4 *Analysis* – Develop a process to compile, synthesize, and analyze the information collected in order to create a clear picture of how shocks and stresses are eroding communities' coping and adaptive capacities.

- *Ranking tools* – Establish methods to synthesize the data in order to identify the dominant issues (such as particularly sensitive strategies or impactful disturbances). This should be done individually from the viewpoints of specific groups (experts, communities, small-share farmers, laborers, households, etc.) in order to capture differences in perspectives but also cumulatively in order to establish overall conclusions.

Data Collection Phase

The Data Collection Phase is the most time-consuming component of the assessment process. Up-front planning and good organization is key to smooth execution. The different methods can be implemented in parallel to save time. However, if possible, collecting the secondary data and performing expert interviews in advance of field research can be beneficial in lending additional clarity to issues at play at the community level.

2.1 *Secondary data collection* – Secondary data is often located in several places and can be difficult to obtain. It is important to determine which actors are active in the relevant areas of interest when doing background research. Government data can sometimes be guarded. Moreover, desired datasets may be located in regional, state, or township capitals, so it is sometimes necessary to budget travel costs for the purpose of secondary data collection. Examples of useful secondary data include agricultural statistics (production, yield, imports, exports, prices, etc.), socio-economic statistics (household incomes, livelihoods, land-holdings, health, etc.), food security statistics (market access, food consumption, dietary diversity, etc., environmental (deforestation rates, annual rainfall, etc.).

Tip: Establishing good networks with national experts who have either worked in government, work in government, or have access to government data can be very beneficial. Interviewees may be good sources of secondary information.

2.2 *Expert interviews* – Experts in relevant subject areas can be found either at the national or regional level. Interviews should be scheduled as early as is feasible due to scheduling constraints. Travel to regional capitals should be budgeted for in order to speak with those with the best contextual understanding. The background research should help to identify topical experts. Experts should represent a range of government and non-state perspectives.

Tip: Seek the support of regional or national coordination forums and networks in order to identify high-quality subject experts.

2.3 *Field research* – Field-based data collection is the most logistically challenging, resource-intensive, and time consuming part of the data collection process. It is helpful to plan this component carefully with close attention to logistical arrangements. The general process is as follows:

- *Permissions* – Determine the governmental permissions process (if necessary) to engage in research with local communities. This could require a type of MOU with a specific ministry or department, a letter of support, notification, or some other form of engagement.

- *Pre-test* – It is important to test field research tools before they are used. If they are custom designed, they may require fine-tuning after a trial run. It is also important to acknowledge that field data collection staff may require practice before they are proficient both with the

study concepts as well as how the tools should be used. Include training days before and time for additional work after the pre-test.

- *Fieldwork* – Once the team is demonstrably proficient with the tools, full field engagement begins. Depending on the available timeframe, multiple teams can work simultaneously, or a single team can work serially through the entire set. If the area of interest is large enough, it may make more sense to deploy two or more teams (one per state/district, for example).

- *Debrief and data compilation* – Upon return from field, devote several days to debrief with the research team(s) in order to capture their impressions, review the data, and help them organize the data for effective analysis.

Analysis Phase

The purpose of this phase is to organize and evaluate the collected data. The first step is to compile and organize information from each step of data collection. The established analysis methodology (including ranking tools) is then used to draw conclusions. Finally, an analysis workshop is conducted to share and discuss results with a wider audience who can provide additional context and insight by expanding the groups' understanding of the primary issues.

3.1 *Compile and assess the data* – Organize the information collected from each method (expert interviews, secondary sources, fieldwork, etc.) around common themes such as disturbances, livelihood strategies, types of communities, and adaptive capacities. Use the assessment tools to establish the ways in which communities are vulnerable to identified shocks and stresses.

3.2 *Analysis workshop* – Bring together experts, government officials, and partner organizations (especially those involved in earlier steps in the process) for an extended workshop. The opportunity should be used to present, discuss, and analyze assessment results in order to validate initial conclusions and deepen the understanding of findings.

3.3 *Additional analysis* – Once initial findings are presented, workshop participants can be engaged in further analysis. This will provide an opportunity to utilize the experience and expertise of the participants to help analyze the initial findings. Tools such as problem trees can be helpful for organizing and relating information. Stakeholder maps can be useful for mapping out different actors and their role in managing important processes. Structured conversations around particular topics that still require additional qualitative analysis might also be useful.

Program Implications

The final step in the process is to circle back to the identified assessment goals and outputs from the Scoping Phase. In cooperation with senior management and other relevant internal decision makers, use the analysis to develop strategies and inform programmatic initiatives. Consider what the results of the assessment mean to the program of interest. This is a good time to reconsider what written outputs are required. Review the selected reasons for undertaking the initiative. Finally, consider how the established strategies can bolster broader organizational initiatives.

Tip: One helpful way to identify useful development strategies from the assessment results is to invert generated problem trees into solution trees.

Acknowledgement