



# **Humanitarian and Development Resilience Collaboration Training**

## ***Participant Guide: Case Study and Exercises***

**January 2015**

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## Case Study Country Background: Bulungi

Pastoral and agro-pastoral Bulungi of the Sahel is one of the most shock-prone areas in the world, providing a unique opportunity to measure resilience and to determine what kinds of interventions will maintain and improve households' livelihoods and well-being in the face of shocks and chronic vulnerability. The USAID zones of influence (ZOI) of Bulungi have been selected based on the high levels of *chronic vulnerability* characterized by malnutrition and poverty, the *comparative advantage* of building from previous and existing investments, and the *enabling environment* that includes relative security and government participation. The ZOI includes all districts of Bulungi (six total) excluding the capital city, and is comprised mostly of pastoral, agro-pastoral and marginal agriculture livelihood zones.

**Geo-political context:** Bulungi is a landlocked country of over seven million people. Its longest border is shared with Nigeria. While it is considered a weak state, for the past five years there have been no major internal conflicts in Bulungi. The main conflict areas are near the borders of some neighboring countries that are conflict-ridden due to rebel activity and tensions around mineral extraction by international conglomerates; these conflicts occasionally flare up and spill over into Bulungi. The geo-political context is therefore fragile.

**Poverty, demographics and gender:** Bulungi is among the least-developed, lowest-income, food-deficit countries in the region. More than one-third of the population lives below the national poverty line, and 45 percent of the population survives on an income of less than \$1.25 per day; the majority of those are characterized as severely impoverished.

Bulungi is a predominantly rural and young society. About four out of five residents (80 percent of the population) live in densely populated rural agricultural areas; the remaining one-fifth of the population lives in the northern district. The urban population fluctuates between 25-35 percent due to temporary migration to cities for petty trade or wage labor. The country has a high youth population: approximately 45 percent are under age 14, and another 20 percent are 15-24 years. The population growth rate is three percent, which is among the top ten highest rates in the world. The birth rate (45 births/1,000 population) is also among the top ten highest rates globally and one of the highest in the region—second to neighboring Niger, which has the highest birth rate in the world. The life expectancy at birth is 56 years. The sex ratio is highest for males (1.03) under 14 years old.

Bulungi is a multilingual and multiethnic country; its majority population (65 percent) belongs to the Bulungi ethnic group, and there are numerous additional ethnic and tribal groups. The government and private sector are dominated by the Bulungi. More than half of the population is Muslim and 23 percent is Christian; a variety of belief systems comprise the remainder.

Gender inequality is high, ranking in the lowest ten on the Gender Inequality Index. Females are less likely to be literate, as well as less likely to own property or household assets. Female heads of household are likely to be widows, relying on a single source of income and dependent on remittances from family members in urban areas and on small trade.

**Food security and nutrition:** An estimated three million rural residents face food insecurity, with millions more experiencing transitory food insecurity during lean seasons, and acute malnutrition among children is often at “serious” and “critical” levels. Despite some economic

growth since 2009, Bulungi remains a highly food insecure country, with growth and structural improvements hampered by chronic vulnerability. While enough food is available domestically to satisfy the caloric needs of the population, the United Nations Food and Agriculture Organization (FAO) estimates that over two-fifths (42 percent) of all Bulungians are undernourished. Further, the quality of the available food is very poor, with over 80 percent of calories coming from cereals, roots and tubers; this signals that many people's diets are not meeting their needs for micronutrients and protein. Thus, the prevalence of micronutrient deficiencies is high: 73 percent of children and 46 percent of women are anaemic, and 98 percent of children under six months are reportedly breastfed, but less than one quarter of these infants are breastfed exclusively.

Another critical and distressing manifestation of the poor food security situation in the country is that a full 44 percent of children under five years are stunted and 12 percent are wasted, with acute malnutrition rates often reaching the World Health Organization's emergency threshold.

**Health, water and sanitation:** Chronic food insecurity is exacerbated by limited access to safe water, sanitation and basic health services. Availability and access to water are a regular challenge (76 percent of the rural population have an improved source), as is the sanitation infrastructure (only seven percent of the rural population have an improved facility, while another estimated 20 percent have an unimproved facility; the remainder have no regular sanitation infrastructure), and conditions are exacerbated by prolonged drought. Access to health services is limited, especially in rural areas, which are often more than a day's travel from health facilities. There is just one hospital bed and one physician per 2,000 people. Overall, health expenditure is low, at six percent, and government health systems are weak.

Infectious diseases pose a high degree of risk. Two percent of the adult population has HIV/AIDS. Other major infectious diseases include: bacterial and protozoal diarrhea, hepatitis A, and typhoid fever among food/water-borne diseases; dengue fever, malaria, and yellow fever from mosquito vectors; and rabies, among others.

**Education:** School enrolment and completion rates are very low, and females have markedly lower educational attainment rates than males. Absence and dropouts are mainly caused by poverty and family labor requirements. Traditional views that do not value education also persist, particularly in pastoral areas where the highest numbers of out-of-school children reside. Overall, 90 percent of Bulungian women and 75 percent of Bulungian men have had no formal education; fewer than one in twenty Bulungians age 15-49 has completed the secondary level or above. Literacy rates are low, particularly in rural areas, where 15 percent of women and 25 percent of men are literate.

**Economy:** Economic growth has been stable but stagnant, ranging from two to three percent in the past five years. Food security relies largely on domestic agricultural production (crop farming and livestock herding), contributing to about 45 percent of the gross domestic product. About one-fifth of the country's area is arable land; most agriculture is rain-fed. Eighty-five percent of agricultural output is from subsistence plots of less than two hectares. Agricultural productivity is beset by erratic and unpredictable rainfall, high mean temperatures, pest infestation, crop disease, and inefficient agricultural practices. Desertification, soil degradation, and overgrazing have been increasing at an accelerated pace given longer and more severe drought in recent years.

Other main industries contributing to Bulungi's economy are food processing, chemicals, textiles, refining imported petroleum, and tourism. Primary exports are chemicals, cotton, and groundnuts. Bulungi has some natural mineral resources (e.g., manganese, limestone), and development of the minerals extraction industry is underway.

Bulungi's main trading partner is Nigeria, and its sole access to ports is via Nigeria. The transportation infrastructure is developed primarily around the arteries that lead to Nigeria's port. However, it is poor in rural areas, especially the routes connecting remote areas to markets and government centers.

**Livelihoods:** The majority (75 percent) of Bulungians are pastoralists or agro-pastoralists and marginal farmers. Livestock and livestock products are an income source and are also used for home consumption (dairy, meat). Pastoralists depend on domestic livestock markets as well as markets across the border in Nigeria. There is a symbiotic relationship between the domestic and Nigerian markets: given differences in drought conditions in pastoral areas in each country at certain times of year, one or the other market is more active on a cyclical basis. Pastoralists also cross borders to graze their livestock given differential drought conditions, generally abiding by traditional compacts and historical pasture-sharing practices of pastoralist leaders and tribes.

These pressures have led many agro-pastoralists and marginal farmers to transition out of their farming and livestock keeping, and moved them to seek alternative livelihoods. The transition is creating a dynamic of rural-urban migration in the project areas, weakening social capital and networks. It is also creating a dichotomy between poorer and richer livelihoods, with poor pastoralists pursuing survival-oriented, low-cost input strategies for increasing production while rich pastoralists are focusing more on increasing productivity by engaging in livestock-based market opportunities.

The households that transition out of agro-pastoralism face a number of challenges. Families often send youth to peri-urban areas to diversify risk. Those sent to earn money or get an education to enhance future income earning often end up finding limited availability of jobs and other income-generating opportunities. Those transitioning out of necessity when agro-pastoral strategies fail may be the least prepared to find alternative livelihoods. They are often older, lacking in formal education and the skills demanded by employers (numeracy, literacy, technical), and have fewer contacts and support networks. They also face limited access to financial and other support services to start businesses, and many face indebtedness. Women, and female-headed households in particular, are vulnerable when seeking an alternative livelihood; having limited opportunities to attend school or find work, they may depend on remittances and trade.

For agro-pastoralism to thrive over the long term, it requires dynamic and sustainable balancing of human populations, livestock populations, water, agricultural and rangeland resources. Ongoing climate change is expected to increase the unpredictability of rainfall, and lead to more frequent droughts and floods. Recurrent shocks have made recovery more difficult by reducing the time affected Bulungians have to rebuild assets and savings before the next shock. Competition for land amid rapid population growth leads to farming on marginal soils; the situation is exacerbated by inequitable land rights for women, limited access to quality seed and other inputs, poor roads, limited market access and insufficient food storage and processing facilities. In Bulungi, the primary livelihood systems are under increasing pressures due to

natural and man/population-made shocks that are leading to imbalance between these populations and the resources they depend on to sustain themselves, leading to production volatility and food price increases.

Seasonal Calendar for Bulungi											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Land preparation										
				Planting							
						Weeding					
			Off-season harvest					Main harvest			
						Rainy season					
						Lean season					
	Livestock migration										

Meanwhile, poor access to financial services (savings and credit) also reduces households’ ability to cope with shocks and to recover their livelihoods when conditions improve. Fragmented market systems for inputs and support services (e.g., animal health services and supplies, epidemiological control of crop and animal disease, market price information, transportation) inhibit households from investing in more resilient and efficient production models. Output markets are also under-developed and distant.

About one-quarter of Bulungian households are non-pastoralist. The non-pastoralists reside mostly in the urban centers and make their living primarily from petty trade and the informal economy, though a small proportion work in government and the formal private sector. Bulungi has experienced a “brain drain” as its educated workforce increasingly migrates and stays abroad; permanent outmigration is also an increasing trend among less educated workers, as fewer and fewer Bulungians are able to depend year-round on a pastoral livelihood due to cyclical drought that has been worsening in recent years. Bulungian households rely increasingly on remittances to meet basic needs, especially during the hungry season.

**Recent history:** Nearly forty percent of the population of Bulungi was food-insecure during the drought crisis of 2011-2012, with vulnerable households requiring up to three years for recovery, which is the average time between major droughts in the region since 2000. The security situation is stable; however, in light of regional tensions and the spill-over of refugees from Mali and Nigeria, the government has increased security measures to counteract cross-border threats and minimize risks such as loss of remittances and income opportunities. This action has also contributed to reduced trade flows and fluctuating food prices. Despite adequate harvests for two seasons, staple food prices have not returned to pre-crisis levels. The risk of Ebola virus disease (EVD) in Bulungi looms as its neighbors with reported cases struggle to contain this public health threat, though as of the end of 2014, there have been no reported EVD cases in Bulungi. The ministries of health, agriculture, immigration, and trade, as well as national offices for security and disaster response, have been coordinating internally and across borders, largely with the facilitation and support of the United Nations system.

## Module 1: Comprehensive Assessments

**Participants will learn, assess, and apply current assessment techniques used in resilience and livelihoods programming and have the opportunity to practice assessment.**

### Session 1.1 Introduction to Integrated Programming

#### Presentation 1.1: The case for integrated programming

*The humanitarian caseload continues to remain large in the Sahel due to a combination of both acute and chronic factors such as climate change, conflict and population growth. Some 16 million people across the region are conservatively projected to be at risk for 2015. Fortunately, humanitarian agencies are responding with increasing success to the caseload. Donors continue to respond generously to the financing needs. And governments in the region are increasingly engaged in policies to target the most vulnerable communities. Yet we have not started sustainably reversing the overall growth in this humanitarian caseload and millions of households are becoming progressively less resilient as new crises hit faster than they can recover from the last one. Humanitarian actors can do more to build resilience and reduce the future humanitarian caseload. Much earlier response to warning indicators in order to protect the erosion of coping capacities is at the heart of this strategy. Reducing the length of recovery times and increasing transfer of knowledge and know-how to local actors are other important components. Chronic problems need structural solutions however, and the most influential actors on the future humanitarian caseload are, ultimately, governments and their development partners. Beyond saving lives and bolstering the coping capacity of the households with whom we are working, a new mission for the humanitarian community in the Sahel is to engage, partner with, and influence these development actors much more systematically in order to build greater resilience of this fragile community. A number of fault lines will need to be bridged in order to deliver such an integrated response.<sup>1</sup>*

Following the 2011-2012 drought crises in the Horn of Africa and the Sahel, USAID provided policy and program guidance on resilience<sup>2</sup> that draws on decades of experience in humanitarian and development assistance. For areas facing recurrent shocks, the guidance states the aim “to decrease the need for repeated infusions of humanitarian assistance.”<sup>3</sup> For the Sahel, to achieve: “A conceptual framework to inform resilience programming; the operational changes we seek, including operational changes to better coordinate humanitarian and relief and development teams around resilience; and the impact we seek. Through these efforts, we aim to reduce chronic vulnerability and promote more inclusive growth in areas of recurrent crisis.”<sup>4</sup>

**Layering, integrating, and sequencing:** To be effective, a resilience approach also needs to incorporate programming that addresses these three key components: layering, integrating, and sequencing, which is further expanded upon as follows per USAID:<sup>5 6</sup>

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<sup>1</sup> ICRC. 2013.

<sup>2</sup> See: <http://www.usaid.gov/resilience>

<sup>3</sup> USAID. 2012.

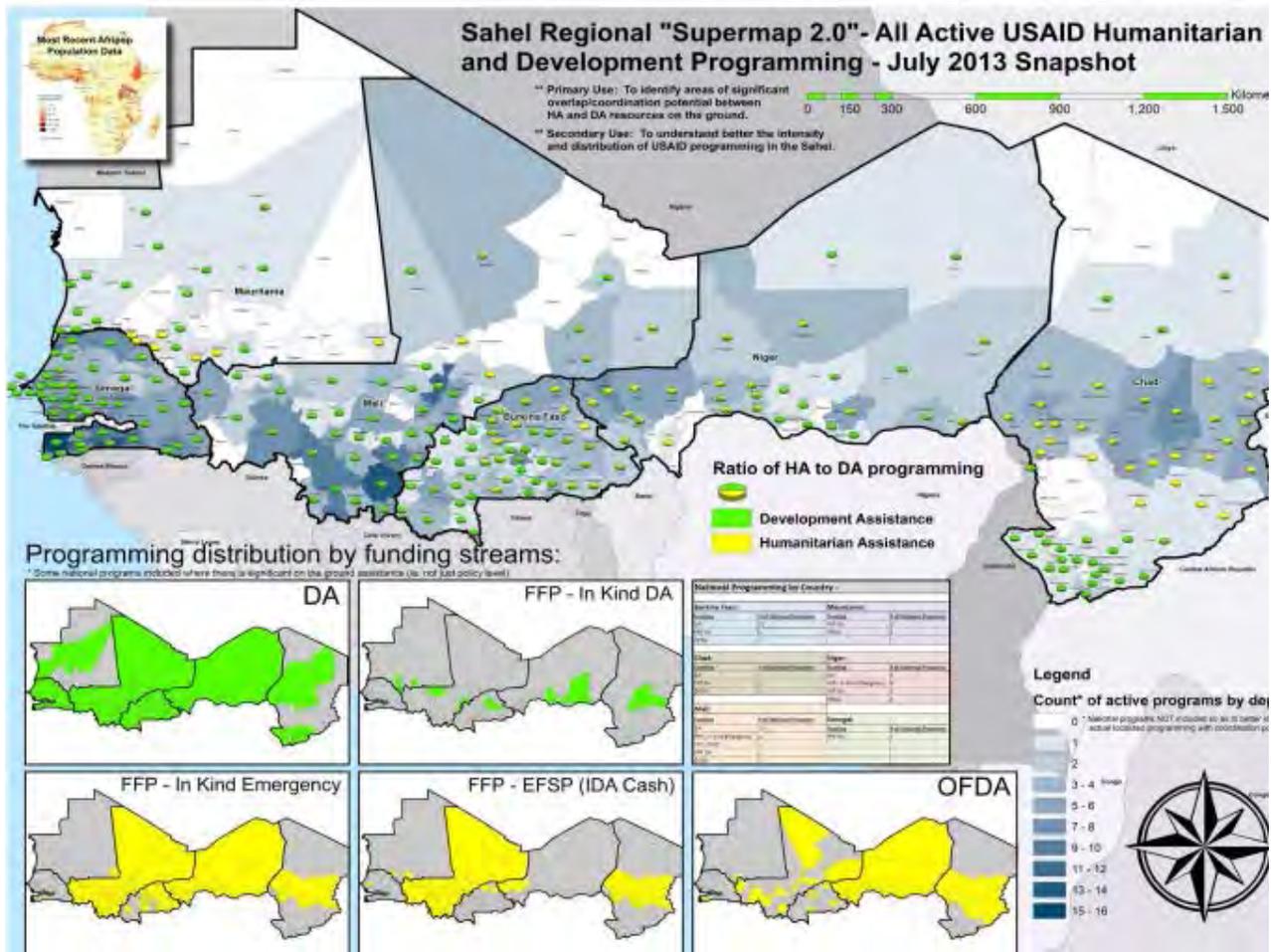
<sup>4</sup> USAID/Senegal. 2013.

<sup>5</sup> USAID. 2012.

<sup>6</sup> USAID. N.D. Principles of SLI.

- **Layering.** Layering programs involves targeting the same geographic area and demographic population with both humanitarian and development assistance. This allows humanitarian actors a means of protecting development gains, primarily through early and appropriate response to early warnings. Consider the Figure 1.1b, which shows all USAID Humanitarian and Development Programming active in 2013 in the Sahel Region.
- **Integrating.** When program objectives are *integrated*, investments in development assistance can be used as a means of reducing recurrent humanitarian assistance needs and building greater resilience capacities.
- **Sequencing.** Strategic and logical *sequencing* of programs allows development assistance to transition smoothly and build upon the successes of humanitarian programming, both in response and recovery.

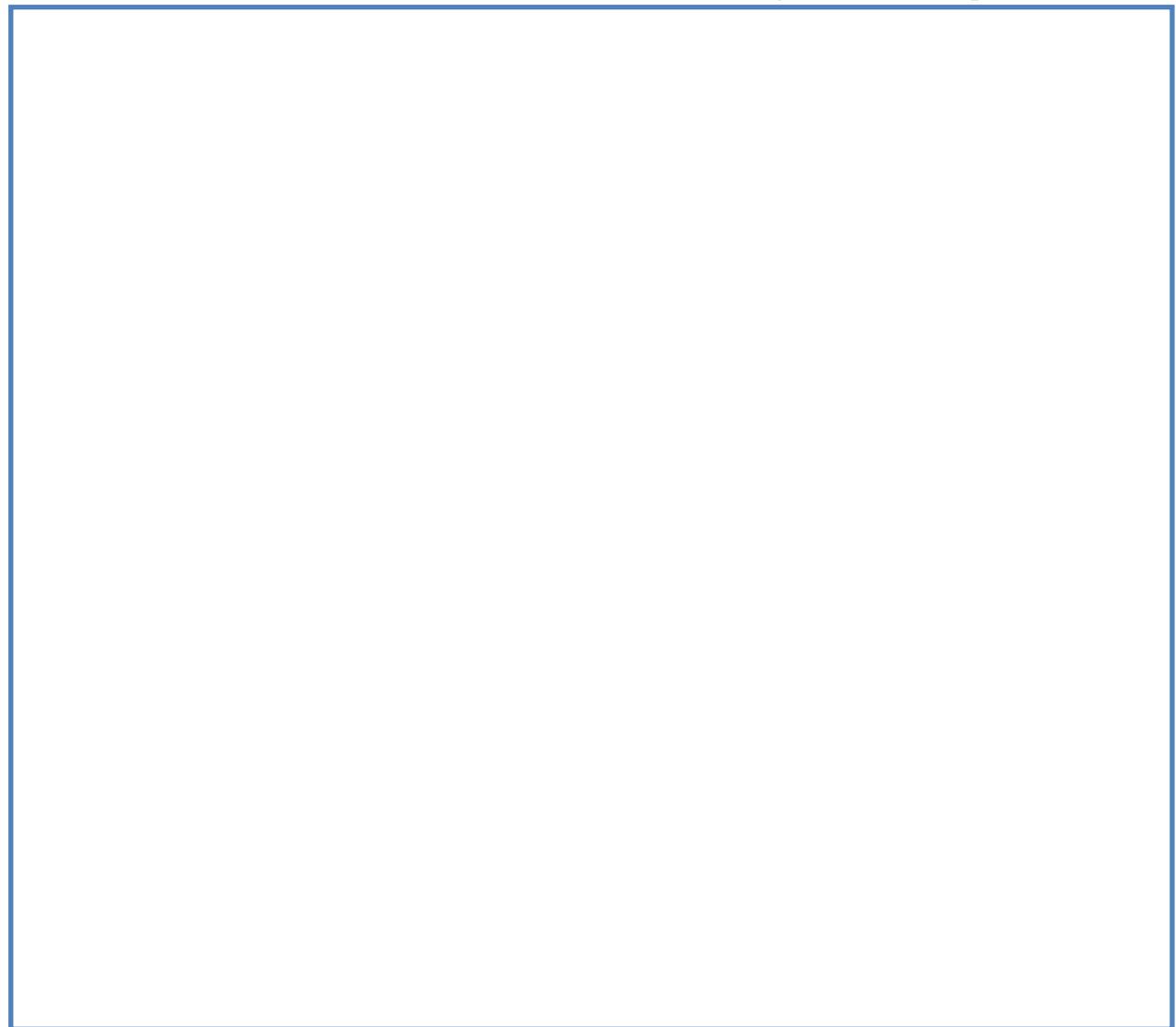
**Figure 1.1b: All active USAID humanitarian and development programming in Sahel region**



Notice the geographical distribution of humanitarian and development programs across the Sahel region. Development programs are concentrated in more urban/high-productive areas while humanitarian efforts are in more rural/low-productive areas. There are only a few programs in 2013 that incorporate a layered or joint approach.

Identifying opportunities to include layering, integrating and sequencing is instrumental for successful joint humanitarian and development assistance which will “further the objectives of each to a greater extent than by programming in isolation.”<sup>7</sup> Actively working toward a common goal includes coordination throughout planning, project design, procurement and learning. This can help ensure a coherent strategy that ensures better utilization and strengthening of host country systems to promote greater capacity building, lasting institutions, and resilience. In this context, development programs need to be designed with flexibility to allow for changes that occur on the ground to manage and adjust to “crisis modifiers” through embedded humanitarian responses.<sup>8</sup> Humanitarian assistance programs, on the other hand, need to establish a platform that development investments can build upon in order to protect resilience and development gains.<sup>9</sup>

*How do we translate our **collective interest** into **collective action** for **collective impact**?<sup>10</sup>*



<sup>7</sup> USAID. 2012.

<sup>8</sup> USAID. 2012.

<sup>9</sup> USAID. 2014.

<sup>10</sup> USAID. Principles of SLI.

In order to successfully layer, integrate, and sequence humanitarian assistance and development assistance (HA/DA), the following four guidelines are useful<sup>11</sup>:

1. Develop a methodological approach that adopts a joint analysis method where problems and common objectives are clearly defined. This includes strengthening communication within joint program design to include, for instance, defining risk and hazard analysis that affects both humanitarian and development stakeholders.
2. Strategically plan and coordinate in a way that highlights the interdependence of humanitarian and development assistance. For instance, practitioners should recognize that failing to meet humanitarian needs may undermine long-term development gains; understanding this will contribute to designing more successful pathways in HA/DA program design.
3. Design projects in a joint manner, including addressing the difficulties in procurement, may instill joint HA/DA programming from the inception. Joint program design should also take into account that humanitarian and development assistance may occur *simultaneously* and that special mechanisms, such as crisis modifiers, may be necessary to ensure coordination around appropriate responses.
4. Collaborative monitoring and evaluation will also be useful to diagnose problems and improve joint HA/DA planning. Increased use of traditional indicators for food security and nutrition and income, as well as indicators that address gender and context-specific indicators, will be necessary to ensure adequate monitoring and evaluating.

### **Plenary Discussion 1.1a: How do we currently coordinate for resilience using layering, integrating and sequencing?**

Follow facilitator's instructions on group discussion format. First discuss the guiding questions below in small groups, and then share in plenary discussion.

- *How do we currently coordinate and collaborate for resilience?*
- *What are some examples of Resilience in the Sahel Enhanced (RISE, or other) programs that currently use layering, integrating, sequencing? How is this done?*

### ***Real Examples of Successes and Roadblocks in Joint Programming***

A program plan should be driven by a theory of change that leads to an end goal that is determined by the problems actually affecting a community. In addition, many other factors – such as funding availability and structure, among others – must be taken into consideration. Several real-life examples exist of successful program plans as well as bureaucratic roadblocks to strong programming.

Integrated programming between humanitarian and development actors requires an active and deliberate process. To be effective and efficient, resilience programming must be able to address and adapt to challenges and changing circumstances.

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<sup>11</sup> USAID. 2012.

## Successes

One example of a successful model for joint HA/DA is the *Joint Planning Cells (JPC)*, which serve as temporary structures that “facilitate working across USAID’s bureaus, missions, funding sources, and sectors in times of acute crisis and create a forum for regional approaches to transnational complexities.”<sup>12</sup> In 2012, USAID created the Sahel Joint Planning Cell to focus on building resilience in Senegal, Mali, Mauritania, Burkina Faso, Niger, and Chad. The plan includes multiple funding sources, several partners, and a focus on activities that can be layered, integrated, and sequenced to address resilience capacities among different populations.

The *RAIN program* implemented by Mercy Corps in Ethiopia also effectively linked humanitarian and development programming. In the wake of a food price crisis, the Office of Foreign Disaster Assistance (OFDA)-funded program was created to build resilience capacities to future shocks. This included interventions that would protect assets and prevent food insecurity by diversifying livelihoods and promoting economic development. The program successfully navigated a steep learning curve that involved multi-year, flexible, development-focused funding; employing adaptive management practices; operating integrated programs; and handling expectations from field staff and local governments. By the end of the five-year program, it was viewed as an excellent example of linking humanitarian and relief programming.

An evaluation of World Food Programme (WFP) programs that offered food assistance in post-conflict countries found the including food assistance in peacebuilding efforts can have benefits, though finding a balance between humanitarian aid and political and security action is challenging. Some positive impacts of including food assistance in post-conflict settings include that it may: reduce tension and help restore order, help to restore community confidence in the state, contribute to state-building, build social cohesion, restore infrastructure, stimulate local food production, and re-establish livelihoods and assets.

## Roadblocks

In 1996, USAID published a paper on the bureaucratic constraints to linking relief and development programming.<sup>13</sup> The authors identified five key issues that limit the ability to link these areas:

- Philosophical, fiscal, and physical separation of disaster and development experts.
- Legislative and regulatory requirements that create difficulties moving from relief to development.
- Financial and human resource limitations.
- Isolated programming planning processes.
- USAID policies and procedures.

While several of these points continue to present challenges in 2015, the focus is shifting. Resilience is a relatively new concept in the world of international aid and development. As such, many of the elements – proper design, implementation and measurement – remain ambiguous and confusing. Development practitioners tend to see resilience as a humanitarian

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<sup>12</sup> USAID. 2012.

<sup>13</sup> USAID. 1996.

issue, while humanitarian actors consider resilience as belonging to the development realm. An additional complication is that implementing joint, integrated programming requires support and incentives that may not be in place. Staff must have the capacity to manage integrated efforts, and the burden and time necessary for coordination and analysis must be seen as worthwhile. Finally, operational policy and procedures – including funding – are still being developed to effectively coordinate and integrate programs. This includes difficulties with coordination and co-management.

With the growing influence of resilience programming donors are recognizing the need to adjust internal corporate culture and structure. Constraints and challenges identified more recently include similarities to past challenges, as well as new roadblocks related to how resilience programming should be developed and implemented

Other constraints that have been identified include:

- Lack of training and experience in layering, integrating and sequencing programs.
- Culture of competition among partners, rather than the view that everyone is working toward the same goal.
- Procurement timelines and funding mechanisms and structures that are not conducive to resilience programming.

### **Plenary Discussion 1.1b: What bureaucratic constraints should be considered for joint programming? How can these challenges be overcome?**

Follow facilitator's instructions on group discussion format.

#### ***Multi-year and Flexible Funding***

1. What can be done to promote multi-year and flexible funding in order to encourage joint humanitarian and development planning?

#### ***Adaptive Management***

2. What specific measures can management adopt to promote a more collaborative process vis-à-vis evolving constraints?

#### ***Program Integration***

3. How can joint program interventions be supported a) within USAID and b) between USAID and partners?

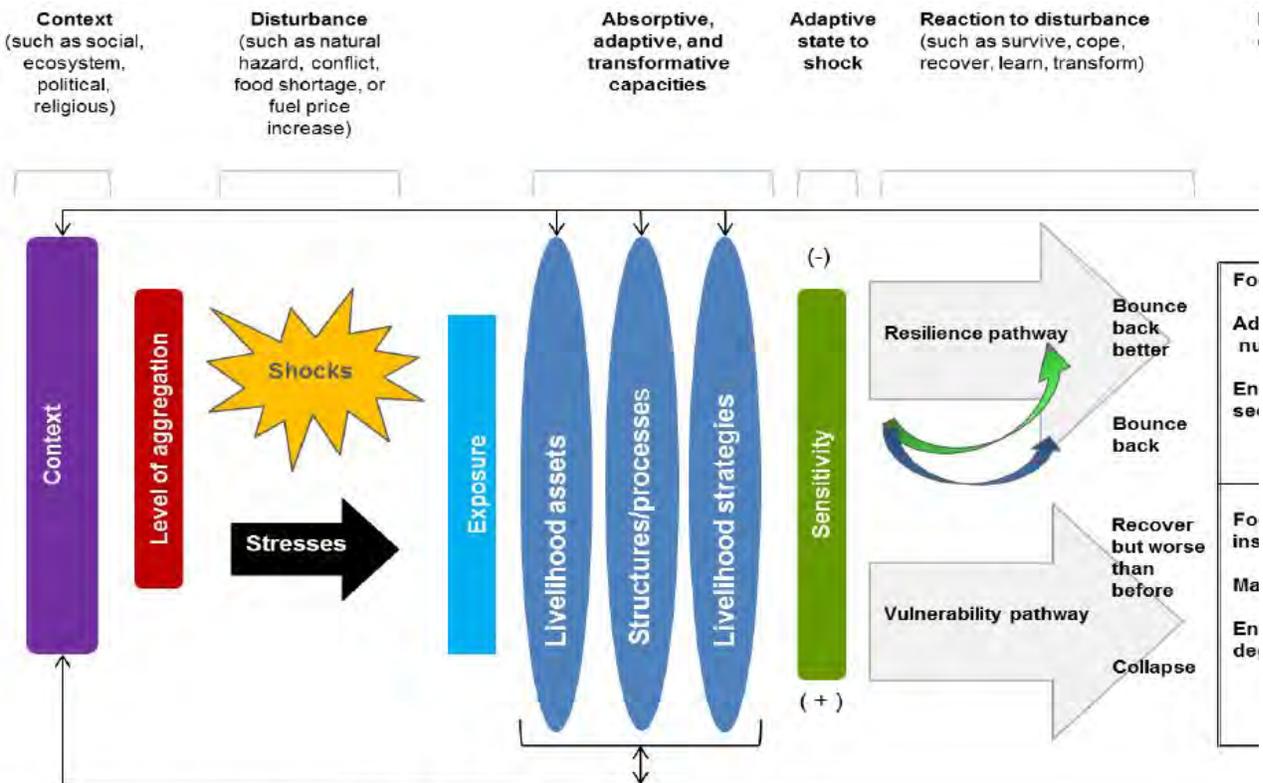
#### ***Other***

Government Priorities?  
Survey fatigue by beneficiaries?

**Session 1.2 Resilience Framework and Measurement**  
**Presentation 1.2: Resilience framework and measurement**

**Resilience approach:** Strengthening resilience requires an integrated approach and a long-term commitment to improving the three resilience capacities: absorptive, adaptive and transformative. *Absorptive capacity* relates to disaster risk management, as it is the ability of households and communities to minimize exposure to shocks if possible and to recover quickly after exposure. *Adaptive capacity* is the ability of households and communities to make active and informed choices about their lives and their diversified livelihood strategies based on changing conditions. *Transformative capacity* relates to system-level changes that ensure sustained resilience. During immediate post-shock recovery, humanitarian assistance can enable and accelerate complementary development efforts that provide support across the capacities.<sup>14</sup> See the resilience conceptual framework chart below (Figure 1.2b) and corresponding examples of capacity indicators that follow.

**Figure 1.2: Resilience conceptual framework**



Source: Updated from Frankenberger, Spangler, et al. (2012).

The context includes environmental, political, social, economic, historical, demographic, religious, conflict, and policy conditions. Contexts influences and is impacted by absorptive and adaptive capacities.

<sup>14</sup> Frankenberger, T., T. Spangler, S. Nelson and M. Langworthy. 2012.

The level of aggregation, or unit of analysis (i.e., individual, household or community levels), for building resilience capacities should be determined with the following questions in mind, beginning with: *resilience to what and for whom?* The capacities represent a nested hierarchy that should be considered when determining the target unit. Resilient individuals and households are the foundation for resilient communities. However, resilience at one level does not automatically result in resilience at higher levels, and resilience to one type of shock does not ensure resilience to others. Finally, resilience and vulnerability are not outcomes—they are processes, and the resilience capacities are not linear.

The type and level of disturbance are also important to understand. Resilience to one type of shock does not ensure resilience to others. This is the point where risk reduction and absorptive capacity are crucial. Resilience can be measured before, during and after shocks.

**The following indicators have been identified for each resilience capacity:**

**Absorptive Capacity**

Bonding Social Capital	Conflict mitigation
Preparedness (early warning, response planning)	Low coping strategy Index
Informal safety nets (saving groups, other self-help groups)	Mitigation measures (seed banks, livestock offtake)
Hazard insurance	Ability to recover

**Adaptive Capacity**

Bridging social capital	Human capital
Diversity of livelihoods into different risk profiles	Asset ownership and use
Aspirations/attitudes/confidence/risk tolerance (psycho-social measures)	Access to financial services
	Access to natural capital/resource flows

**Transformative Capacity\***

Linking social capital	Policies and regulations
Formal safety nets	Governance mechanisms
Communication networks	High quality basic services
Functioning and well-governed markets	Well-managed and sufficient natural resources
Sufficient quality and quantity of infrastructure	Security

\*Transformative capacity building requires a systems perspective to construct measures that reflect the highly interconnected relationships at the systems level.<sup>15</sup>

Resilience is a determinant of well-being and livelihood outcomes, such as food security, poverty, and nutritional status. These outcomes affect future vulnerability to risk. Overall, baseline and endline analysis of well-being and livelihood outcomes, basic conditions, shock exposure and resilience capacity indicators will enable the program—based on the comprehensive assessment and sound problem analysis/theory of change—to determine changes over time in resilience capacities.<sup>16</sup> Thus, building resilience requires an integrated approach, and a long-term commitment to improving absorptive, adaptive and transformative capacities. Resilience responses can be measured before, during and after shocks and at household, community and higher systems levels.

<sup>15</sup> FSIN (Papers 1-2). 2014.

<sup>16</sup> The information for this session and presentation is adapted from: USAID. 2013.

Measures of initial conditions include food security/nutrition, assets, social capital, access to services, infrastructure, psychosocial measures, and poverty measures. These can be single or composite indices that represent some level or state of well-being/condition and can be measured at the household, inter-household, community, and higher systems levels. These same indicators may be part of a performance monitoring system and measured at baseline and endline along with changes in risk exposure and resilience capacities. Data will come from surveys, interviews/focus groups, monitoring activities, and other secondary sources.

### **Plenary Discussion 1.2: What information is important and how do we get it?**

- *What information do you currently use to inform program design?*
- *Thinking of the resilience framework, what information is important to collect during a comprehensive assessment?*
- *After identifying what types of information are needed, discuss methods for collecting this information.*
- *What stakeholders have key contributions for the assessment topic and/or secondary data?*

## Session 1.3 Comprehensive Assessments

### Presentation 1.3: Comprehensive assessments

This session provides more information on using resilience measurement for comprehensive assessments, and the case study is introduced for practical application.

**Methods:** There is no single correct comprehensive assessment method or approach. The choice and selection of methods depends on the objectives of the assessment; the types of information required; and, practical constraints in the field that affect the methodology (resources, time, access to areas, skills and experience of assessment team members). Comprehensive assessments use a mixed-methods approach that make use of qualitative and quantitative information related to individual, household, and community trends and allows for triangulation of the data. Nearly all assessments will draw upon a combination of secondary data (information that has been collected by other people) and new or primary data collected through field-based research.

**Assessment preparedness and purpose:** The comprehensive assessment is conducted prior to planning a program; it provides a description of the conditions and resilience capacities in an area and serves as a starting point for program planning. The preliminary assessment also provides useful information that can guide future, more detailed or tailored evaluations or assessments during other phases, such as during or after shocks. Assessment preparedness includes readiness of funding, training, rosters and partnerships.<sup>17</sup> Alternatively, a *baseline evaluation* takes place after a program is designed and helps to measure change moving forward. The baseline evaluation is further discussed in Session 2.3.



The purpose of undertaking the comprehensive assessment goes beyond identifying immediate needs. The assessment should also provide information on underlying risk factors, coping and livelihood strategies, and existing household and community assets and structures that can serve as a basis upon which to improve resilience to shocks.

**Case study introduction:** Considering trends in the country context (see Country Background, page 4 of this guide), the integrated programming team decides that the comprehensive assessment should gather information on differences between pastoralist statuses across the ZOI's livelihood zones: pastoralist, agro-pastoralist and non-pastoralist (farming or labor). The intent of the data and findings presented in the example exercise is to provide a general overview of the steps an integrated programming team would take in order to utilize a comprehensive assessment for resilience program approaches. The examples are for illustrative purposes only and do not represent the actual outcome of a resilience assessment carried out in the Sahel. This allows for specific examples of how USAID program staff might make decisions based on potential for partnering, existing links to government and donor stakeholders, and other factors.

The assessment was administered during the lean season in Bulungi from August 19 to September 24, 2014 in four of the six sub-regions within the ZOI area of implementation, representing the three livelihood zones. It has two quantitative components—a household survey and a community survey—as well as a qualitative component. The qualitative data were

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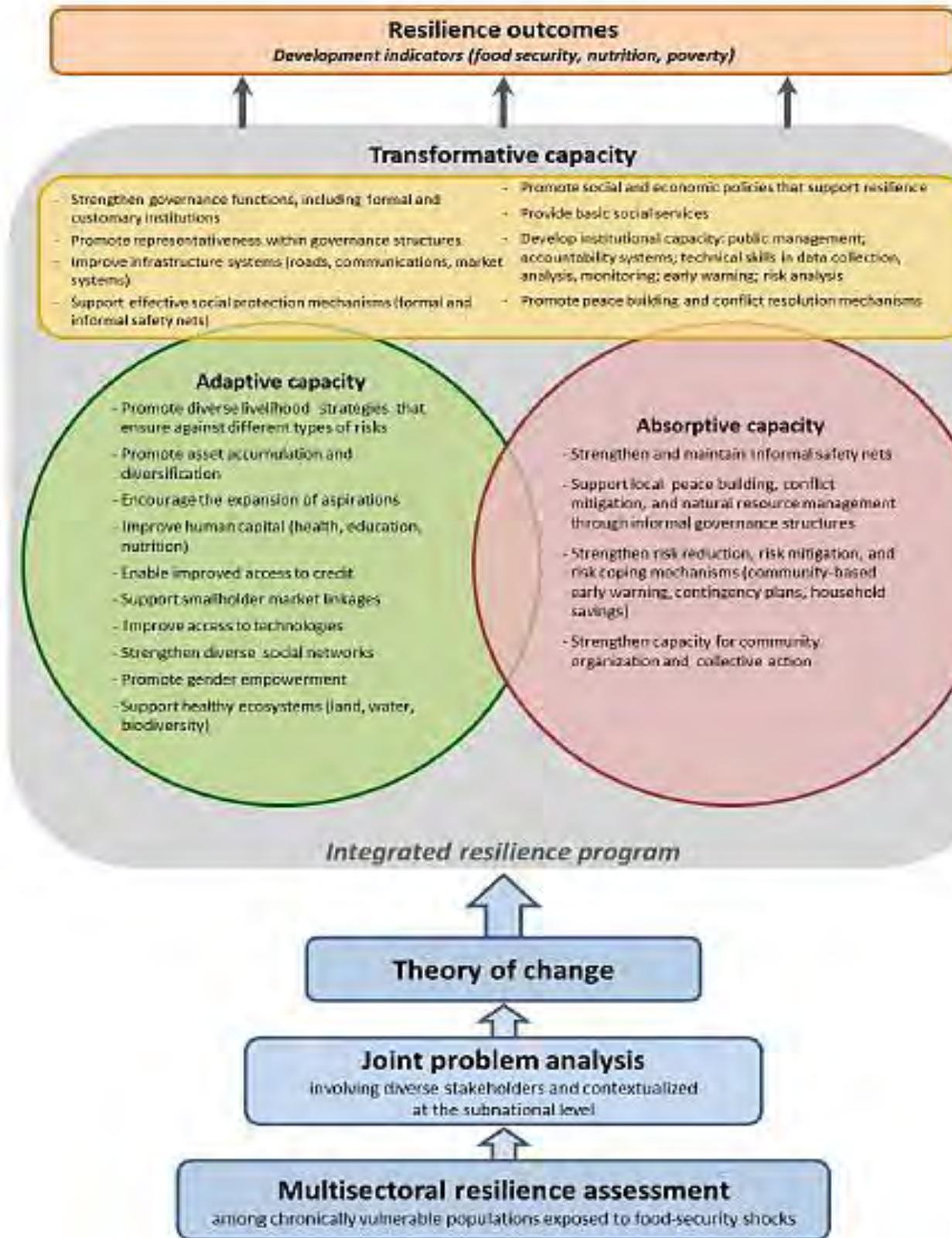
<sup>17</sup> FAO and ILO. 2008.

collected through focus group discussions, key informant interviews, and positive deviant interviews. The analysis and interpretation of the assessment results lead to the identification of key leverage points that can bring about positive outcomes for those who are vulnerable to shocks in resilience/integrated programs.

*Interpretation* is commonly understood as attaching meaning and significance to the analysis, explaining descriptive patterns, and looking for relationships and linkages among descriptive units.

Following the comprehensive assessment and interpretation of the information gathered, programming moves to joint problems analysis, **theory of change** (Module 2), then implementation and adaptation of **resilience programs** based on the resilience framework (Modules 3-4), ultimately for **resilience outcomes** and transition strategies (Module 5). Figure 1.3 provides a conceptual graphic that shows this programming progression.

Figure 1.3: Resilience programming framework



Source: Frankenberger, T., M.A. Constan, S. Nelson, L. Starr, 2014.

## Plenary Discussion 1.3: Interpreting assessment findings

*What do the findings reveal about resilience capacities and vulnerability?*

Review the case study comprehensive assessment findings and discuss the key findings. Consider the following questions when interpreting the findings:

- What is the overall picture of shock exposure, level of risk, and ability to recover?
- What livelihood assets (e.g., social capital, human capital, financial capital, physical capital, natural capital, and political capital) are present in the community and what is the quality of these assets? Are there differences among different groups (sex, ethnicity, wealth, age, etc.)?
- What cultural and gender norms exist?
- What are the main livelihood strategies and do they differ within the area? Is there potential for diversifying livelihoods and crops? How are households managing risks?
- What are the well-being outcome differences across livelihood groups? Which offer the greatest opportunity? Which outcomes are most challenged? Why?
- What are the emerging resilience capacities and leverage points, in terms of coping, confidence to adapt, social capital and networks?
- What institutions and organizations operate within the area? Are they complementary or competing? What opportunities exist for institutions and organizations to layer, integrate, and sequence?

**See Case Study Comprehensive Assessment Data: Annex 1**

### Case Study Exercise 1.3: Joint problem analysis

**Objective:** To use comprehensive assessment data to identify problems and causes in the program area, and to generally organize problems and causes into a logical flow.

**Materials:** Comprehensive Assessment

**Instructions:** Participants work in small groups from Module 1. Using the Comprehensive Assessment Data, groups should collectively identify the primary, or major, problems and causes. Then, they should identify secondary problems and causes, and lower level problems and causes. Organize problems into a flow chart.

**NOTE:** Participants should keep in mind that higher level causes will become mid-level problems, and mid-level causes will become low-level problems. Also, problems may have multiple causes, and one cause may affect multiple problems. *These multiple linkages should be identified.*

Focus primarily on logical flow of problems and causes, rather than on the level of detail. The most important aspect of this activity is to understand how comprehensive assessment data should be utilized when moving toward program planning.

After some time, the facilitator will reconvene small groups to discuss the problem analysis.

## Session 1.4 Bringing it Home to RISE and Other Programs

This discussion provides a summary of the key learnings from the day and remaining questions, and allows time for application of joint assessment techniques to RISE projects.

### Plenary Discussion 1.4: What are key challenges and opportunities for coordination in comprehensive assessment?

The facilitator guides a plenary discussion on applying key learnings on joint assessment to the context of RISE projects. The discussion identifies challenges and constraints, successes and opportunities for coordination according to HA/DA participants.

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## Module 2: Integrated Program Planning

**Participants will learn about joint planning methodology and use the methodology and data from the case study to begin planning a joint intervention.**

Module 2 will primarily focus on how a theory of change can be used to plan a joint humanitarian and development approach and to integrate resilience as a common objective across programs. Participants will learn the key conceptual elements of theory of change and use examples to understand the causal logic used when developing a theory of change. Participants will be encouraged to evaluate theories of change for projects with which they are currently working. Finally, a presentation and discussion on actual bureaucratic successes and constraints will further help participants understand how these can be considered when planning a program.

### Session 2.1 Theory of Change

Learning theory of change in program planning requires a thorough understanding of the process and the final product. The process begins with collecting and synthesizing qualitative and quantitative data on all topics related to the resilience framework, as was shown in Module 1. When the information is organized, program planners should have a complete picture of their target area and population. After this, problems and related causes must be identified and prioritized, followed by solutions and associated outcomes. Finally, a complete theory of change includes assumptions and risks, stakeholders, interventions, and indicators. In practice, the full process can take weeks or months and requires many conversations with stakeholders and technical experts. Understanding the causal logic at each step of the process is critical, and program planners must know how to ask the proper questions to continually test that logic and to know how to fill in information gaps when logic breaks down.

#### Presentation 2.1: Overview of theory of change

A theory of change conceptual model describes a process of desired change by making explicit the way we think about a current problem, its underlying causes, the long-term change we seek, and what needs to happen in order for that change to come about.<sup>18</sup> A theory of change is a link between theory and action: it explains our hypotheses about what catalyzes change, and it clarifies the assumptions that underpin our beliefs about what will improve resilience and why. A theory of change model is a useful tool for attaining consensus; it helps us to build a common understanding of our collective thinking with regards to the processes needed to achieve a desired change. The model can also help to identify potential weaknesses or gaps in our collective thinking, such as certain hypotheses or assumptions that need to be tested, refined, or discarded. Using a theory of change model gives your team members and diverse stakeholders an opportunity to combine their various disciplinary expertise (food security, peace-building, natural resource management, animal husbandry, climate change, finance, etc.) in order to design and implement integrated programs. In cases where resources are particularly limited, your team will need to collaboratively prioritize response options.

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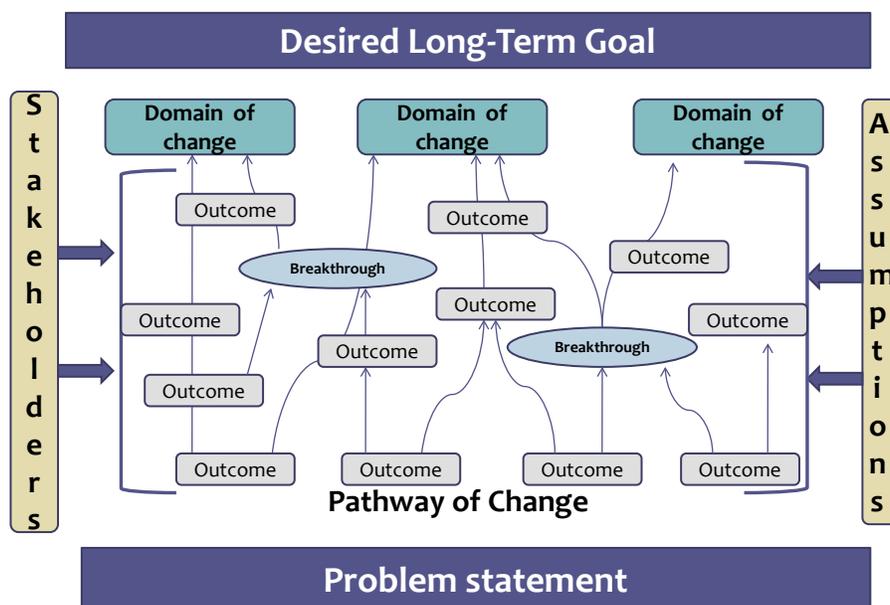
<sup>18</sup> TANGO. 2013.

Six key elements are included in a theory of change model and are shown in Figure 2.1 below. We'll look at each component in detail.

- A problem statement
- A desired long-term goal
- Domains of change (or key leverage points) that need to be addressed to achieve goals
- Pathways of change, which include breakthroughs and incremental outcomes (also known as results or preconditions)
- Assumptions and risks
- Stakeholders

Figure 2.1: Theory of change conceptual model

### Theory of Change Conceptual Model



Livelihood outcomes are typically multi-faceted and much more complex than a simple cause-and-effect stream. Problems and their causes can occur sequentially or simultaneously. They may occur independently from each other or be intricately interconnected.<sup>19</sup> Frequently, dozens of causes can be identified, yet for sustainable change, *we need to identify the causes that contribute most significantly to problems*. Likewise, all outcomes on a pathway of change should be required to reach the long-term goal. The logic in a theory of change helps us to: a) prioritize the outcomes (and subsequently the actions linked to each outcome) and b) weed out incremental outcomes that may be desired but are unnecessary to achieve the goal we have in mind.

During this process, the logic and evidence base of the developing theory of change can (and should) be checked. Simple questions can guide program planners through the causal analysis and solution-outcome tree.

<sup>19</sup> Organizational Research Services. 2004

**For problem/causal analysis** start at the top of the problem tree, and ask: “*According to the data, what are the causes of this problem?*” or “*This is happening because \_\_\_\_\_.*” And then, “*Is there anything else causing this problem?*” Then, work back toward the top of the map, asking, “*Is this condition contributing to that problem?*”

**For solution-outcome trees**, start at the bottom of the solution tree, and ask: “*According to the problem analysis and data, will achievement of Outcome 1 lead to Outcome 2?*”

### Case Study Exercise 2.1: Analyzing a theory of change

#### Checking causal logic – What are the right questions to ask?

Objective: To understand how to prioritize problems and solutions and check the logical flow during development of a theory of change and to understand how to adapt the theory based on answers to those questions.

Materials: Handouts: Problem Tree 1, Problem Tree 2, Solution Tree 1, Solution Tree 2 (See Module 2 Handouts)

Instructions: Participants work in small groups from Module 1. Participants should use the data from Module 1 and the questions above to check the logic of each step along the problem tree. Then, they should check the logic in the corresponding solution tree. After some time, entire group reconvenes to discuss.

## Session 2.2 Joint Intervention Design

### Presentation 2.2: Using the theory of change

The theory of change helps program planners identify partnerships and utilize comparative advantage to achieve the long-term desired goal. It is important to remember that the theory of change shows all the outcomes and solutions required to achieve a goal, but one organization does not (and should not!) have to address or achieve every outcome shown. Formal and informal partners should be recruited to fill in gaps and to address entire pathways of change. Further, partner organizations should not necessarily include those that an organization has worked with in the past. Rather, partnerships should be based on what outcomes need to be achieved and which organizations are best suited to achieve them.

Once a theory of change is completed and agreed upon by stakeholders, program planners can begin to design the interventions that will be used to affect the change shown. This includes choosing and designing interventions for different outcomes that will contribute to the same goal. Often, interventions and activities that reflect both humanitarian and development ideals are necessary to move through pathways of change and comprehensively achieve an overall goal. Using the theory of change to identify where interventions are necessary will help participants understand when, where, and how they can jointly solve problems in the same geographic area using both humanitarian and development approaches in an integrated way.

#### *Choosing interventions*

In order to achieve a goal or breakthrough that will serve as a precondition for the following goal, some kind of intervention must occur. Occasionally this may happen naturally, if circumstances allow. In many cases, though, program planners must design interventions that will help a community reach the anticipated outcome. If you have followed the process thoroughly and rigorously to this point, choosing interventions to fit anticipated outcomes should not be difficult, though this step still requires creativity and brainstorming.

Consider the *critical questions* that must be asked to determine appropriate activities. The answers to these questions will help program planners place interventions at the correct stage within the theory of change and build stronger programs.

Choosing the best intervention for any given cause requires a good list of options and alternatives. This is where creativity in project design is important.

Ideas for intervention alternatives can come from many places. While creativity and an open mind are both important, these alternatives should have a basis in some evidence or experience. They can come from:

- Best practices
- Lessons learned from previous projects (including evaluation reports)
- Individual and institutional experiences
- Inputs from communities on desired solutions
- Ideas from review of research and secondary literature

Below are examples of possible alternative intervention ideas:

- **Outcome (behavioral level):** Improved infant and child feeding practices.

- **Possible interventions:** a) Community-based nutritional education for young mothers, b) Billboards and radio spots promoting proper nutrition, c) Physical growth monitoring and counseling, d) Supplementary feeding in community kitchens or in schools.

At this point, our intention should not be to select an intervention, but rather to make a list of possible interventions that will move the impact and/or target population from outcome to the next.

Once all alternatives have been expressed, the next step is to examine and eventually select one of them. The selection process can be as simple as arriving at group consensus or as complicated as applying decision tools to make the choice. Regardless of how a team ultimately arrives at selecting an intervention, it is important to do three things: 1) develop criteria on which to base decisions, 2) list the assumptions about the connections between activities and outcomes they are expected to generate, and 3) ask the critical key questions.

Some possible selection criteria include:

- Community support
- Social acceptability
- Political sensitivity
- Sustainability
- Required management support
- Technical feasibility
- Cost effectiveness
- Level of risk

This is not a comprehensive list of criteria for selecting interventions, but it is a starting point. Program planners should always consider the assumptions, risks, key questions, and local context when narrowing down and finally deciding on interventions.

### **Assumptions related to interventions**

Once a program strategy is defined based on a theory of change, there will be assumptions about the connection between particular activities and the outcomes/breakthroughs they are expected to generate. As with the assumptions related to causal linkages, these are the factors that are outside of our control but will affect the project. In addition, there are critical questions planners must ask and answer to build a strong program strategy.

All program design requires consideration of critical questions. Critical questions differ from assumptions in that they can lead to actions as part of the design. Critical questions help your team determine the appropriateness of the initiatives you propose. Some questions will comprehensively ask about the set of initiatives, for example:

- How does the proposed pathway of change fit in with existing programs? Will adjustments have to be made in ongoing programs (e.g. targeting, cross-project coordination etc.), or will new initiatives need to be pursued?

Other questions might be specific to one activity within the program. For example, if you are designing a project to address poor soils and have determined that a key action will be to plant nitrogen fixing plants, a critical question would be, “*Is a steady, and preferably local, supply of seeds for nitrogen fixing plants available?*” It is **NOT appropriate** to list as an assumption

“steady supply of local seeds.” This either exists or it does not. If it does not exist, either a different source of seeds must be identified, or the program must incorporate plans to fill that gap in the supply chain.

Additional, critical key questions to determine the appropriateness of responses include:

- Do proposed responses enhance positive livelihood activities currently implemented by households and communities? Do they fill gaps?
- Do proposed responses build on the strengths and opportunities that exist in communities?
- Could recommended program activities create new inequalities or disincentive effects? How will unintended consequences be monitored?
- If new initiatives are recommended, does your organization presently have the skilled staff to take on such initiatives? If not, where will the staff and resources come from?
- Can diverse sectors within your organization work together to address domains of change?
- Are partners needed to implement the project activities? How will these partners be selected? What (if any) additional institutional capacity development is necessary to improve partner performance? What are the constraints to successful partnerships?
- What resources and technical assistance are needed for establishing baselines and M&E systems? Which indicators will you monitor? Which methodologies and tools will be most effective?
- Is there a livelihood niche that is not presently filled for which your organization could obtain donor funding? Does this activity fit in with your organization’s strategic plan or mission?
- Do recommendations fit in with the Government's overall development strategy? How do they fit in with donors' strategies? If the proposed initiatives do not fit Government or major donor strategies, what approaches will be developed to bring these entities on board?
- Do they prevent vulnerable households from falling back into poverty/livelihood insecurity?
- Does the project have wide social support within the community and target population?
- Will the project be sustainable in the event of a shock to the target population?

It is important to note that this is *not necessarily a comprehensive list* of questions. Many variables can determine which questions should be asked.

A large variety of questions are appropriate and critical to almost any interventions targeted at a vulnerable population in a developing or low-income country. In addition to these questions, though, program planners must remember to ask questions specific to the context. Using the Sustainable Livelihoods Framework introduced in Module 1, think about potential questions to address the outcomes, assumptions, and risks identified.

For example:

- If land is limited, can livestock activities be implemented and how?
- In populations with low education and literacy levels, what types of training opportunities are appropriate and how will the project conduct these?

Increasing agricultural production is one factor contributing to nutritional outcomes. What other should be considered?

## Indicators

Indicators tell us how success will be recognized at each step in the pathway of change, thus verifiable indicators for each outcome should be defined in great detail. Essentially you need to take an abstract concept (each outcome) and define it in a way that research teams can gather data and track progress on the extent to which the program is reaching the outcome.

The Organization for Economic Co-operation and Development (OECD) defines an indicator as a “quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development factor.”

Helpful questions to determine indicators include:

- Who or what is the target population of change?
- How much change has to occur on this indicator for your program to claim to have successfully reached the outcome?
- How long will it take to bring about the necessary change in this indicator in the target population?<sup>20</sup>

For example, an indicator of the outcome ‘improved soil structure and fertility’ might be ‘water-holding capacity of soil’. An indicator of ‘improved livestock production’ might be ‘% of farmers keeping livestock’.

A complete theory of change should have an indicator for every outcome or goal. This includes the Domains of Change and desired, long-term goal. (Even though this will often not be measured directly in program evaluations, it is still useful to have a way to know if we have achieved the goal.)

## Outcomes Matrix

Various schools of thought exist on the best way to fully develop a theory of change. A complete theory of change graphic can become quite complicated when one attempts to illustrate all the components: desired goal, outcomes, domains of change, pathways of change, assumptions, risks, interventions, indicators, stakeholders, etc.

While it is possible to develop one product that expresses all these pieces, the separate components can also be divided into two distinct, but closely connected products. An *outcomes matrix* allows program planners to provide greater detail while maintaining the integrity of theory of change and clearly showing the connections between the pieces.

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<sup>20</sup> Anderson. 2005.

## Case Study Exercise 2.2: Using the theory of change

Objective: To understand how a thorough theory of change can be used by both humanitarian and development actors to plan and design complementary programming that will lead to a desired shared goal.

Materials: Flip chart and markers. Bulungi Resilience Program (BuRP) Theory of Change graphic and narrative; Outcomes Matrix template. (See Module 2 Handouts)

Instructions: Ensuring small groups have an even mix of humanitarian and development participants, participants should examine the BuRP theory of change. Using the outcomes matrix template, first discuss and list indicators for the outcomes, then list several potential interventions for the outcomes in the theory of change, taking into consideration interventions that demonstrate strong synergy and complementarity between humanitarian and development goals. Following group discussion, the entire group will share their experiences.

### Plenary Discussion 2.2: Using theory of change to guide performance monitoring

This session will consist of facilitator-guided discussion regarding the small group activities, including the process – and challenges – of checking the causal logic and utilizing key elements of a theory of change, particularly in how it relates to developing a program logframe and the performance monitoring system.

## Session 2.3 Baseline Evaluations

### Presentation 2.3: Baseline evaluations

A baseline evaluation is conducted after program design. Where the comprehensive assessment was broad and used to gather information on many topics related to livelihoods and resilience, the baseline evaluation is built around the objectives, intermediate results, and indicators identified during program design. Where the comprehensive assessment described the overall state of the population in an area, the baseline evaluation will give quantitative and qualitative measures on indicators used by the program to measure change during the program period. Some overlap will occur in the outcomes measured with each of these tools, but we must recognize the differences.

The primary purposes of the baseline evaluation are accountability and learning.<sup>21</sup> First, strong monitoring and evaluation can demonstrate the effectiveness, relevance and efficiency of a program. This is important for resource allocation and decision making, especially in public organizations. Further, the baseline evaluation helps to show internal validity of program design. Credibility of analysis and disclosure of findings to stakeholders also contribute to accountability. Second, learning is used by program planners to refine and improve the design of future efforts. This requires rigorous practices, includes careful selection of research questions and methods to ensure internal and external validity of findings. In addition, strong systems must be in place to disseminate findings to key stakeholders and to integrate findings into future decision making and program planning.

### Case Study 2.3: Baseline evaluation

The primary objective of the BuRP Baseline Evaluation is to determine the impact of the project's interventions on pastoralist household's resilience to shocks and, thus, on well-being outcomes including poverty, food security, and children's nutritional status.

In addition, the baseline survey analysis will help achieve four further objectives:

- a. To understand the livelihood environment in which households' resilience is determined in the evaluation areas.
- b. To provide baseline estimates of indicators of household well-being outcomes, shock exposure, and resilience capacities.
- c. To explore baseline differences across the evaluation comparison groups that will be used to measure the BuRP project's impact at the time of the endline survey.
- d. To investigate the relationships between household outcomes, shock exposure, and resilience capacities in the project area.

The baseline evaluation will collect and analyze quantitative and qualitative information on:

- a. The livelihood environment, including demographic and housing characteristics, livelihood activities, migration patterns, livestock ownership and access to land, livestock production and marketing.
- b. Well-being outcomes, including poverty, food insecurity, and child malnutrition
- c. Shock exposure, including types of shocks experienced, and perceived severity of shocks.

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<sup>21</sup> USAID. 2011. Evaluation: Learning From Experience. USAID Evaluation Policy.

- d. Resilience capacity, including ability to recover and cope with past shocks, psychosocial measures of resilience capacity (aspirations and confidence to adapt), social capital, livelihood diversification, productive assets and access to financial resources, access to market and services, infrastructure, access to information, availability of disaster planning and response services, indexes of household resilience capacity (absorptive, adaptive and transformative), and community resilience.
- e. Links between shock exposure, resilience capacities, and well-being outcome

The evaluation will address Feed The Future (FTF) Learning Agenda questions 1-4 related to Improved Resilience of Vulnerable Populations. This baseline evaluation will investigate what BuRP activities will strengthen the resilience of food insecure and vulnerable households in the project areas.

The research questions are:

1. *What interventions improve the ability of vulnerable households to withstand (stable consumption and protected assets) stresses/stressors and extreme shocks affecting their economic activities? In what ways? (FTF Learning Agenda Question)*
2. *What interventions strengthen the ability of vulnerable households to recover from common and extreme shocks? (FTF Learning Agenda Question)*

Questions 1 and 2 address households' ability to withstand and recover from shocks and stresses. 'Ability to withstand' is defined in this baseline evaluation as food security and protected assets. Information about food security comes from survey modules about dietary diversity and household hunger. Information about household productive assets comes from modules about livestock and non-livestock assets, financial assets, and livelihoods. Qualitative questions about livelihood characteristics provide context in terms of how households and communities perceive and respond to challenges and changes to livelihoods over the past five years.

Households' ability to withstand and recover from shocks is a function of coping strategies, social networks, access to and use of services, and confidence to adapt. Each of these capacities has a survey module. An index of shocks and exposure comes from the work of the Feinstein International Center at Tufts University and is based on a survey module<sup>22</sup>, 'shocks and recovery'. Qualitative questions on coping strategies, social capital, and aspirations provide in-depth information about how households and use community resources to manage shocks.

In addition, we will use qualitative information to understand formal and informal institutions and how they shape household strategies. Data from six comparison groups allow us to compare the impact of three levels of intervention over two culturally and geographically distinct areas.

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<sup>22</sup> Bapu V., G. Tesfay, M. Rounseville, D. Maxwell. 2012. Resilience and Livelihoods Change in Tigray, Ethiopia. Feinstein International Center, Tufts University.

3. *To what extent do different interventions to promote market access generate the participation of poorer households? (FTF Learning Agenda Question)*

Information to answer question 3 comes directly from survey responses to questions about access to and use of markets, including BuRP markets. 'Poorer households' will be identified using the data collected in the household survey expenditures module. In addition, qualitative research will help to explain market and value chain access in terms of cultural norms and institutions.

4. *What BuRP interventions improve the participation of the poor in value chain activities? Which value chains exclude the poor and women? Which value chains are generally more stabilizing (i.e., reduce vulnerability because they are counter cyclical or not strongly influenced by drought) and which are more cyclical? (FTF Learning Agenda Question)*

This will be answered using qualitative data. Qualitative data will identify stable vs. cyclical value chains and gender differences in market-oriented activities and opportunities.

This question will also be addressed with quantitative survey data. Participation in value chains will be compared by household characteristics (gender, poverty level) and by type of support provided by BuRP.

5. *What are the relationships between household and community resilience?*

Community resilience is defined<sup>23</sup> as the ability of a community to engage in positive networked adaptation before and after a crisis and engage in effective and efficient recovery through coordinated efforts and cooperative activities. A community is defined as a socially connected group larger than a household, living and working together in a common location such as a village, town or neighborhood. Communities demonstrating less resilience fail to mobilize collectively.

A community is resilient when it can function and sustain critical systems under stress, adapt to changes in the physical, social and economic environment and be self-reliant if external resources are limited or cut off. Dimensions of community resilience include: a) support for personal and familial socio-psychological well-being; b) organizational and institutional restoration; c) economic and commercial resumption of services and productivity; d) restoring infrastructure systems integrity; and e) re-establishing operational regularity of public safety and governance.

The resilience of a community is dependent on social bonds and collective action based on networks of relationships, reciprocity, trust, and community norms. Social capital can assist in recovery by serving as informal insurance after a disaster, overcoming collective action problems, and strengthening voice.

Household and community resilience are connected by social capital. Understanding resilience also includes information about exposure. Exposure measures come from monitoring at

<sup>23</sup> Aldrich, D. 2012 Building Resilience: Social Capital in Post-Disaster Recovery. University of Chicago Press. Chicago.

sentinel sites. Three types of social capital are critical for community resilience: bonding, bridging and linking<sup>24</sup>. Bonding social capital, which relates to the strength of the relationships within the community, is often the only social capital that poor households can access. Bridging social capital is access to groups or individuals in different locations which are not exposed to the same risks. Linking social capital connects individuals/households, to government authorities and decision-makers.

BuRP interventions focus on strengthening community and private sector customary and formal institutions to improve resilience. As part of the quantitative analysis, we will collect information about locations of BuRP interventions and how these activities strengthen the capacity of communities and households to manage risk. Survey modules provide quantitative information regarding ties to other households inside and outside of the community and across ethnic groups and use of BuRP interventions. Qualitative research provides information about institutional capacity and functioning including collective action. Information will be gathered on local level participation in politics, institutional development and program management, as well as cultural and institutional norms about who gets what.

6. *Have interventions strengthened risk-reduction strategies pursued by men and women to cope with shocks (agro-climatic, health, economic, and socio-political)?*

The answer to question 6 comes primarily from qualitative data about men's and women's participation in interventions and institutions as well as cultural norms that affect participation. Qualitative focus groups will be disaggregated by gender in order to capture men's and women's perspectives separately.

Baseline and endline analysis of the well-being outcomes, basic conditions, shock exposure and resilience capacity indicators will enable the BuRP baseline evaluation to determine changes over time in resilience capacities. Measures of the initial conditions include food security/nutrition, assets, social capital, access to services, infrastructure, psychosocial measures, and poverty measures. These can be single or composite indexes that represent some level or state of well-being/condition and can be measured at the household, inter-household, community, and higher systems levels (e.g., large-scale infrastructure). These same indicators are measured at endline along with changes in risk exposure and resilience capacities. Data will come from surveys, interviews/focus groups, monitoring activities, and other secondary sources.

**Outcome measures:**

*Food security:* Score on household hunger scale

*Adequate nutrition:* Dietary diversity and children's nutritional status

*Assets:* Number and quality of livestock, equipment, financial assets and other livelihood assets

*Income and poverty:* Per capita expenditures

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<sup>24</sup> Gittell, R. and A. Vidal. 1998. *Community Organizing: Building Social Capital as a Development Strategy*. Thousand Oaks, CA: Sage.

Woolcock, M. 1998. "Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework" *Theory and Society* 27(2): 151-208.

**Determinants of outcomes:**

*Social capital:* Access to and use of social networks

*Access to services:* Availability of, access to, and use of services

*Infrastructure:* Availability of and access to community and regional infrastructure

*Psychosocial measures:* Risk tolerance, aspirations, confidence measures

*Resilience capacities:* coping strategies, livelihood strategies, support from government (e.g., productive safety nets)

*Disturbance measures:* Type, duration, intensity and frequency of shock or disturbance

The household survey is designed to examine the impacts of household participation in the project's (to-be-determined) interventions on household outcomes (e.g., food security) and resilience capacity in the face of shocks. Additionally, it is designed to determine whether the project's impact on household outcomes can be attributed to the induced changes in resilience capacity. The participation variable (i.e., treatment groups for a quasi-experimental design) would typically be determined prior to the baseline evaluation to guide the sampling frame. For this case study, detailed description of the mixed methods methodology is not provided.

**Methodology**

The data were collected with two main objectives in mind. The first was to collect appropriate data on three key sets of variables of interest: household well-being outcomes (including poverty, food insecurity and child malnutrition), household shock exposure, and household and community capacities that promote resilience. Additional complementary data were collected on subjects such as the livelihood environments of households and how they are impacted by shocks. The second objective was to collect data that will allow evaluators to determine project impact after the endline data collection has been completed. These techniques are propensity score weighted regression with first-differencing, propensity score matching, and double-difference estimation.

The qualitative component of data collection focused on capturing contextual information about resilience and the impact of shocks in order to understand and explain outcomes, as well as to interpret the quantitative findings. In particular, qualitative findings help explain how households and communities perceive change, how they define resilience and how they view the challenges to livelihoods posed by shocks and stresses.

**See Sample Baseline Instruments Annex 2-5 and (as needed) Sample Baseline Data Annex 6**

**Plenary Discussion 2.3: Baseline evaluations**

*How can an integrated HA/DA program design effectively conduct and utilize baseline evaluation?*

## Session 2.4 Bringing it Home to RISE and Other Programs

This discussion provides a summary of the key learnings from the day and remaining questions, and allows time for application of joint assessment techniques to RISE projects.

### Plenary Discussion 2.4: What are key challenges and opportunities for program planning in combined HA/DA contexts?

The facilitator guides a plenary discussion on applying key learnings on program planning to the context of RISE projects. The discussion identifies challenges, bureaucratic constraints, successes and opportunities for coordination according to HA/DA participants.

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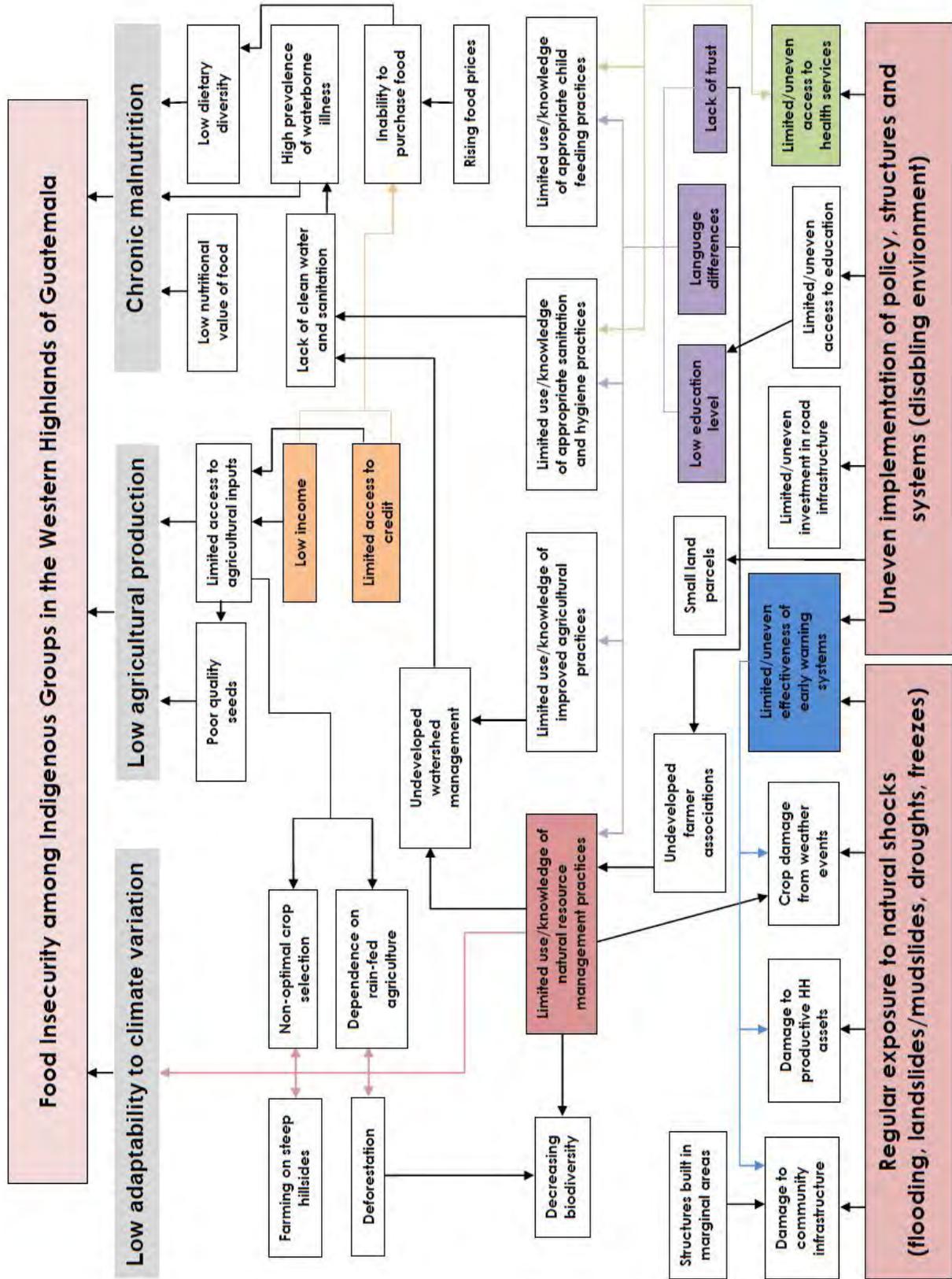
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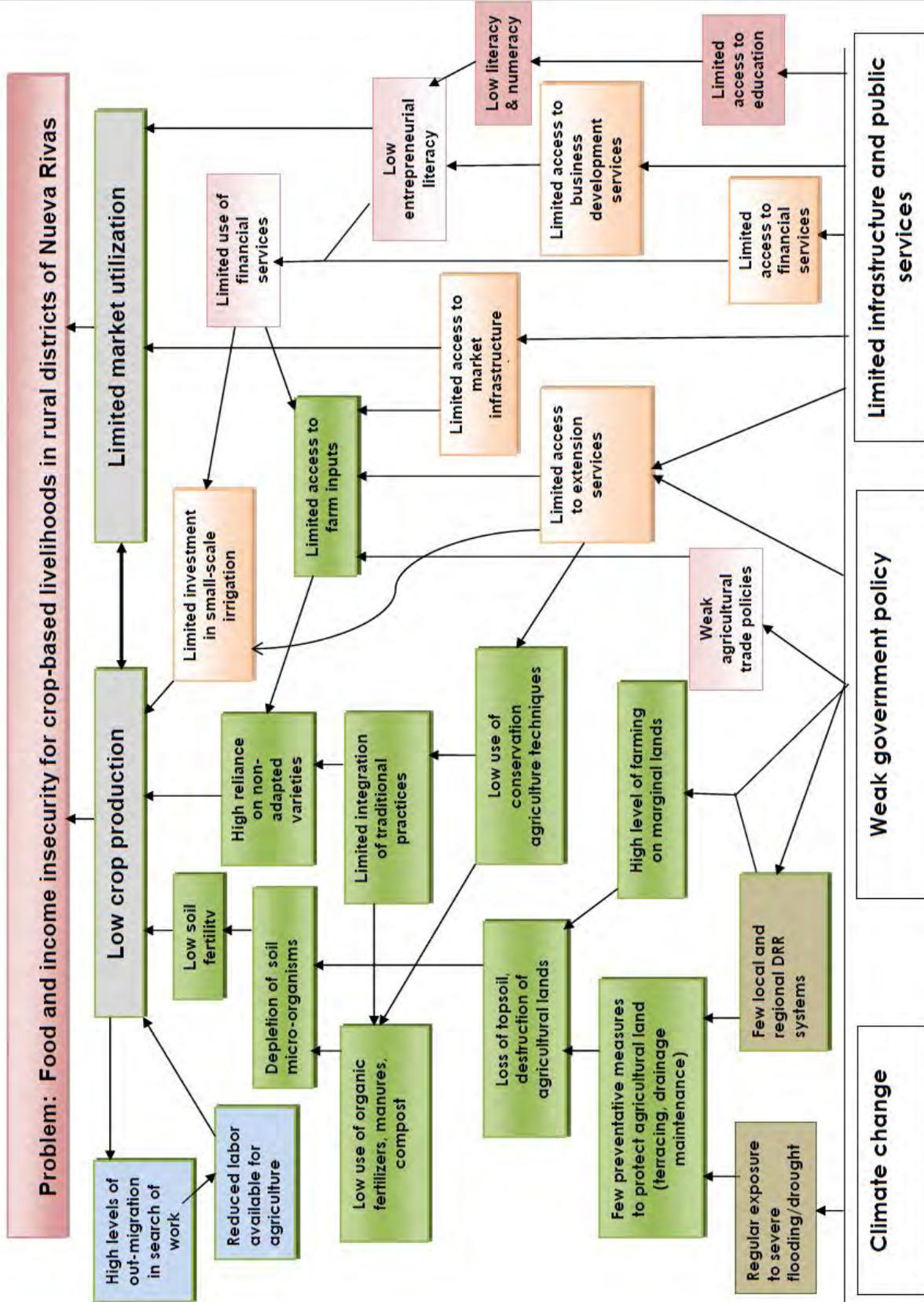
## **Module 2 Handouts**

- **Problem Tree 1**
- **Problem Tree 2**
- **Solution Tree 3**
- **Solution Tree 4**
- **BuRP Theory of Change Graphic**
- **BuRP Theory of Change Narrative**
- **Outcomes Matrix**

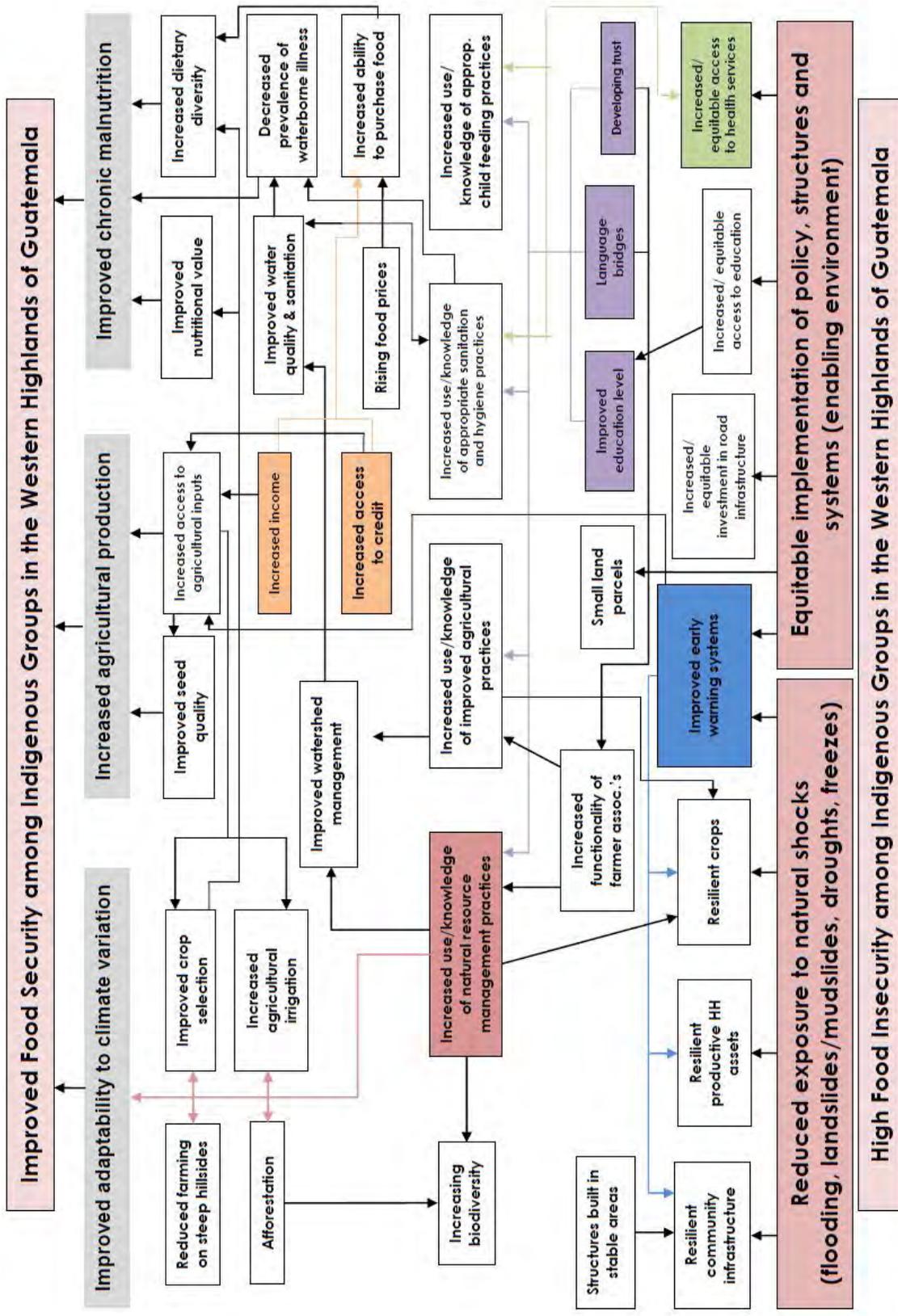
# Problem Tree 1



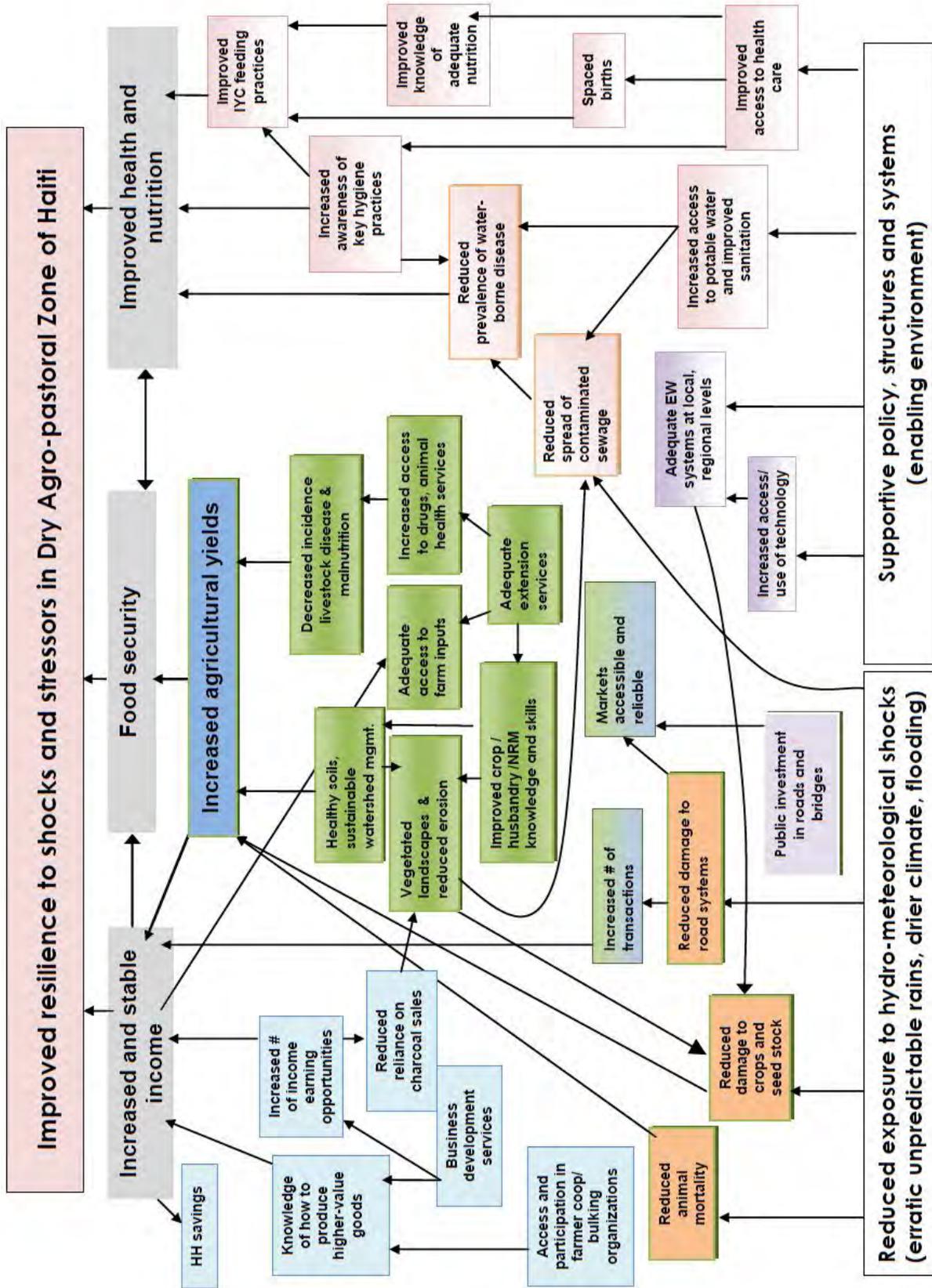
## Problem Tree 2



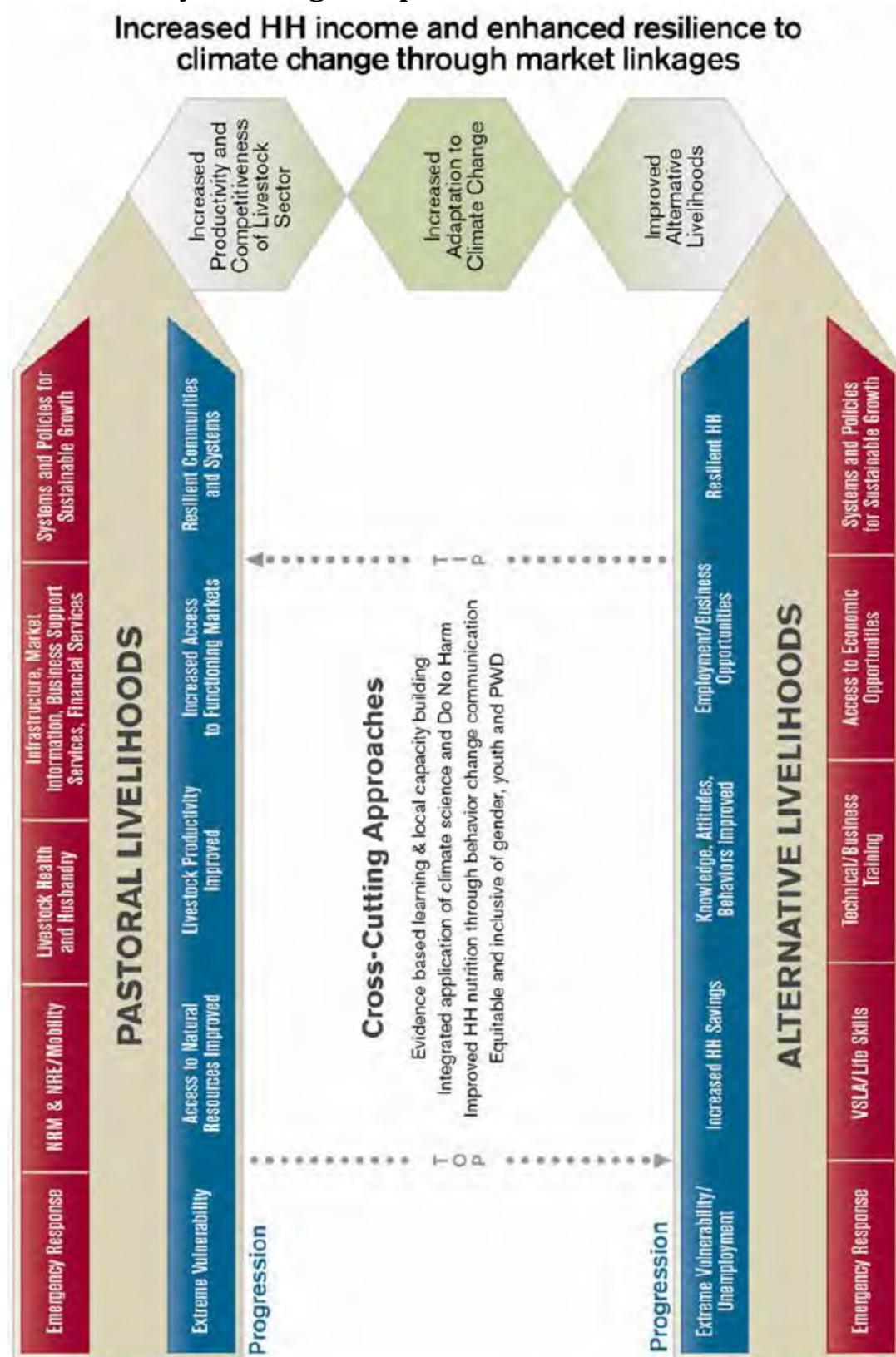
# Solution Tree 1



# Solution Tree 2



# BuRP Theory of Change Graphic



## **BuRP Theory of Change Narrative**

BuRP's strategy is predicated on the understanding that pastoral systems are complex, fragmented and endangered, yet also have the capacity to be adaptive and effective at using scarce resources. To sustainably increase resilience amongst pastoralists and those transitioning out of pastoralism, it is critical to address both the causes of vulnerability and the symptoms. All BuRP interventions will build upon the consortium's considerable success in improving resilience through the previous programs and will be grounded in thorough analysis of market system constraints and opportunities. Taking a systemic approach, BuRP will analyze the core market relationships and transactions, the supporting functions and the rules/regulations to identify the leverage points where targeted co-investment and market facilitation will drastically increase livestock productivity and competitiveness, capacity to adapt to climate change, and strengthen livelihood options for TOP households.

BuRP has been designed to have broad, long lasting impact. The consortium cannot achieve this scale or sustainability alone. To catalyze transformative change, BuRP will engage public and private-sector stakeholders who will play a central role in the development of pastoral areas. Cognizant of the risks and challenges involved, BuRP will encourage them to build pro-poor strategies and policies to stimulate competitive, inclusive markets. To ensure the acceptability and durability of our results, BuRP will select actors whose interests and incentives are aligned with program goals and leverage their resources, energy and influence to strengthen pro-poor markets. Recognizing that women lead different economic and social lives than men, and face additional barriers, BuRP's approach and activities will be tailored to accommodate their needs and promote their empowerment.

BuRP's theory of change model shows the principal livelihood strategies in pastoral Bulungi. Transitioning into pastoralism (TIP) and transitioning out of pastoralism (TOP) lines demonstrate how people in the dry lands actively move between livelihoods, responding to drivers of change (droughts and access to natural resources or markets), opportunities and risks. People have multiple priorities and do not always proceed to resilience in a linear fashion. Cognizant of the dynamism of pastoral areas, BuRP has tailored activities (shown in dark red below) to variations in level of vulnerability, market capacity and stage of the drought cycle. The activities will target different groups simultaneously, responding to needs, opportunities and conditions. Whichever combination of livelihood options households choose, BuRP activities will support them to increase incomes and resilience through the increased productivity and competitiveness of the livestock sector, increased adaptation to climate change and improved alternative livelihoods. Improved nutrition will be supported for all project households through behavioral change communication. It is also expected that many program activities will strengthen community resilience especially in the collective management of natural resources.

## Outcomes Matrix Template

<b>Goal: Improve crop and livestock production for rural households in Magdalena District</b>					
<b>Desired Outcomes (incremental)</b>	<b>Possible Interventions</b>	<b>Assumptions related to interventions</b>	<b>Risks related to interventions</b>	<b>Questions</b>	<b>Indicators</b>
<b>Improved soil structure and fertility</b>	<ul style="list-style-type: none"> <li>• Application of organic manures and fertilizers</li> <li>• Planting nitrogen fixing plants</li> <li>• Crop rotation/green manure</li> <li>• Intercropping</li> <li>• Grazing animals in crop stubble/temporary pens</li> <li>• Provision of extension services and farm inputs</li> </ul>	<ul style="list-style-type: none"> <li>• The population willing to adopt these practices</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Do we have a reliable source of nitrogen fixing plants (e.g., seeds, cuttings, nursery stock)?</li> <li>• Are adequate extension services available?</li> <li>• Are potential partners in place?</li> <li>• Are farmer “experts” available?</li> </ul>	<ul style="list-style-type: none"> <li>• Increased crop yields per unit of land</li> <li>• Better water-holding capacity of soil</li> <li>• Less crop damage from insects and diseases</li> </ul>
<b>Increased livestock production</b>	<ul style="list-style-type: none"> <li>• Stocking/re-stocking</li> <li>• Provision of extension services and farm inputs</li> <li>• Livestock nutrition (fodder &amp; supplements)</li> <li>• Disease control</li> <li>• Establish revolving funds for agro-vet products</li> </ul>	<ul style="list-style-type: none"> <li>• Govt. policies remain favorable</li> <li>• Community is receptive to new technologies</li> <li>• Households are willing to pay small fee for services.</li> <li>• The community will be able to sustainably support revolving funds.</li> </ul>	<ul style="list-style-type: none"> <li>• Market will be saturated during normal times/ or due to off-sell in crisis.</li> </ul>	<ul style="list-style-type: none"> <li>• Is there a reliable source of affordable breeding stock?</li> <li>• Are farm inputs available?</li> <li>• Are local partners available with experience improving livestock nutrition?</li> </ul>	<ul style="list-style-type: none"> <li>• % of livestock by type and breed</li> <li>• % of farmers keeping livestock</li> <li>• Livestock mortality rates</li> <li>• Prevalence of disease in livestock</li> <li>• # of CAHWs providing services</li> </ul>

**Worksheet**

**Goal:**

<b>Desired Outcomes (incremental)</b>	<b>Possible Interventions</b>	<b>Assumptions related to interventions</b>	<b>Risks</b>	<b>Key Questions</b>	<b>Indicators</b>

## Module 3: HA/DA Program Implementation and Crisis Modifier

**Participants will study humanitarian and development program implementation. In particular, participants will be faced with a situational hurdle that must be addressed and corrected for while maintaining a balance between protecting development gains and saving lives.**

### Session 3.1 Implementation When Crisis Hits

Even before a crisis hits there are challenges on the ground when it comes to integrated program implementation. As learned from the Revitalizing Agricultural/Pastoral Incomes and New Markets (RAIN) Program in Ethiopia, some of these challenges may include:

- Expertise silos, and lack of sharing data on humanitarian and market updates;
- Lack of communication both internal with staff and external with partners, including lack of dialogue about challenges or failures;
- Lack of clarity on roles and responsibilities as well as reporting structures;
- Budgets that are not flexible as well as support systems such as procurement and human resources processes that do not align with program strategies;
- Political dynamic, which means managing expectations of government partners especially regarding the short versus long-term results to be seen.<sup>25</sup>

These challenges can be further exacerbated when crisis hits.

One reason joint humanitarian and development training is vital for sustainable resilience programming can be seen during large disasters. Careful and deliberate program planning is a necessary component to anticipate disasters, manifested through shocks or stresses, in a way that reflects a long-term approach. This is the new normal. Coordination and collaboration across humanitarian and development practitioners is needed at all levels and phases. As Hillier from Oxfam states, “From an international perspective, we need to move away from standalone, quick in-and-out humanitarian interventions, which keep people alive but do little to protect livelihoods. We need to change our long-term programmes, and ensure that our humanitarian work is more preventative.”<sup>26</sup> From the development side, it’s crucial that crisis response and contingency plans are built into programs to avoid the diversion of development funds, or worse, loss of development gains.

### Case Study: Ebola

*How was crisis anticipated in the BuRP design from Module 2?*

**Description of the shock:** Ebola virus disease (EVD) cases are increasing in Bulungi’s neighbor country, Nigeria. Ebola is having not only a serious public health impact in Nigeria –it is placing at risk the livelihoods, food security, and nutrition of people throughout the region. Both the number of cases and the rate of spread of EVD within Nigeria can have substantial direct and indirect effect on millions of people.

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<sup>25</sup> MercyCorps. 2013.

<sup>26</sup> Hillier, D. (Oxfam). 2012.

Ebola's short-term and long-term impacts are manifested in a number of different realms, namely social, market, livelihood, and food security. Pre-crisis levels of key indicators, such as the Food Consumption Score (FCS), are necessary to determine EVD's impact.

Social disruption can be seen where some households have lost family members, and there are movement restrictions and fears of contagion.<sup>27</sup> In addition, the Bulungi-Nigeria border has been closed and some communities in Nigeria have been quarantined, leading to riots in affected communities. There is some "panic" food buying, which distorts normal market functioning and contributes to food shortages.<sup>28</sup>

Market and livelihood disruptions are occurring in both Nigeria and neighboring countries where food access has already been compromised in certain areas, causing food price increases and dysfunctional markets. Critical harvesting and planting activities may also be at risk. Food supply and demand are diminished due to quarantine measures and trade restrictions, with some market disruptions occurring from increased stigma and fear of the disease.<sup>29</sup> Households that are highly dependent on markets for obtaining their food can be severely impacted, particularly during seasonal volatility.<sup>30</sup> Restrictions on the movement of people, goods, and services, besides affecting the social and market dimensions, also disrupt livelihoods. Those households whose livelihood depends on the buying or selling of goods, for instance, will have limited alternative options during a time of crisis.

The combined effect of disrupted social, market, and livelihood channels has significant repercussions on the level of food security during and after a shock like EVD. In particular, areas that were previously considered food secure, such as urban areas and wealthier provinces, may be at a higher risk of becoming food insecure compared to those areas that have faced food insecurity for longer periods of time.<sup>31</sup>

### Case Study Exercise 3.1: Impacts of the crisis for the population and stakeholders

#### Part 1: Impacts of the crisis – affected population

**Objective:** To understand how the Ebola crisis could affect food and livelihood security in Bulungi

**Materials:** Previous case study exercises; flipchart paper and markers

**Instructions:** Groups brainstorm and discussion. Facilitator presents guiding questions; note taker records answers on flipchart paper.

**Guiding questions:**

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<sup>27</sup> Scenario adapted from: Ratliffe, D. 2014.

<sup>28</sup> Adapted from FAO. 2014.

<sup>29</sup> WFP. 2014b.

<sup>30</sup> WFP. 2014a.

<sup>31</sup> WFP. 2014a.

### *Effects on food security and livelihoods of the population*

- 1) What are the potential **short-term** (one – three months) effects of this shock on food security in Bulungi?
- 2) ...**medium-term** (four – six months) effects?
- 3) ...**long-term** (six months +) effects?
- 4) What are some potential differences or considerations in the effect of the crisis on:
  - ...women vs. men?
  - ...different livelihood groups? (pastoral, agro-pastoral, non-pastoral)
  - ...urban vs. rural?
  - ...youth?
  - ...vulnerable populations (e.g., PLWHA)?

### *Effects on programming*

- 5) What are some potential impacts on humanitarian programming?
- 6) What are some potential impacts on development programming?

## **Part 2: Impacts of the crisis – stakeholder perspectives**

Objective: To understand the needs, interests, strengths, and perspectives of different stakeholders in the face of the Ebola crisis as it impacts Bulungi

Materials: Flipchart paper and markers; stakeholder index cards

Instructions: Role play. Divide into groups of four people. Each group draws a card; each group will play the role of the stakeholder written on the card. Each group discusses the stakeholder perspective using the guiding questions, then elects one person to represent that stakeholder in a role play.

In plenary, the representatives for each stakeholder gather in a semicircle seating format in front of the room. Each briefly describes their interests, capacities, etc. (per the guiding questions) and proposed actions. Actors and the participants in the plenary should identify the opportunities and challenges to stakeholder collaboration.

## **Case Study: Additional context**

- Bulungi has a five-year DFAP, now in Year 2. It includes a food-for-work component and a pilot cash-for-work component; both focus on roads, latrine construction, and improved water sources. There is soil and water conservation work in some demonstration sites.

- Bill and Melinda Gates Foundation (BMGF) has a three-year dairy value chain project, now in Year 2.
- WFP has been present in Bulungi on and off for 12 years, primarily to provide humanitarian assistance to pastoralists and agro-pastoralists during severe drought. It has offices and warehouses in the capital city and in two regional centers.
- FAO has been working with agro-pastoralists for five years to introduce and train on improved seed varieties, improved agricultural practices, and post-harvest handling.

**Guiding questions (to be discussed in each small group with respect to the stakeholder[s] assigned to that group):**

- 1) What are this stakeholder's interests in participating in a collaborative effort to address the crisis? Is this stakeholder aware of the interest of other organizations? If not, what can be done to address communication barriers?
- 2) To whom is the stakeholder accountable? Who is the constituency?
- 3) What are the main funding instruments and mechanisms that this stakeholder offers/uses/works with? What opportunities and constraints to these instruments and mechanisms present that would lead towards or prevent layering, integrating and sequencing?
- 4) What resources/ capacities does this stakeholder offer to address the problem? How might this agency use these resources/capacities?
- 5) What specific actions does this stakeholder seek/plan to take with regard to the Ebola crisis? What other stakeholders does it need to accomplish this? What conditions/ mechanisms/ arrangements must be in place to be successful?

**Guiding questions (for plenary session):**

- 1) What are the main areas for collaboration among all or subgroups of these stakeholders?
- 2) Where are potential areas where stakeholders may encounter conflict, competition, and/or difference of approach?
- 3) Brainstorm some examples of specific short-term objectives that the stakeholders (or subgroups of stakeholders) can collaborate on in the next three months? How would they start and maintain this collaboration (e.g., regarding communication practices/ protocols, performance monitoring, data collection and sharing, funding arrangements)? What would be each stakeholder's role?

## Session 3.2 Crisis Modifier

Ideally, when a disaster such as a contagious disease outbreak like EVD strikes the humanitarian actors within the most affected country and in neighboring countries should have a contingency plan already in place. The idea is to manage the risk, not the crisis.<sup>32</sup> A *crisis modifier approach* allows resources to be reallocated from ongoing development activities to relief/humanitarian activities in the event of a shock. A crisis modifier mechanism built into a joint humanitarian and development program is a financially stable way to promote early detection and action in response to crises without affecting long-term development funding options.<sup>33</sup> Embedding a crisis modifier can therefore ensure the integration of humanitarian needs without sacrificing development gains.

### Presentation 3.2: Crisis modifier

This presentation describes three of the essential elements of a crisis modifier mechanism, including: 1) early warning data and analysis that prompt early response, described here as including trigger indicators and thresholds for action and an analytical framework; 2) flexible funding and risk financing mechanisms; and 3) contingency planning. The presentation also provides real-life examples of crisis modifiers and lessons learned.

**1) Early warning and response system:** An early warning system is a monitoring mechanism that measures certain livelihood, food security and nutrition indicators that help detect the onset of a potential crisis or shock. This early detection should then lead to early action of a response and the activation of the crisis modifier where it exists. Currently, the Famine Early Warning Systems Network (FEWS NET)<sup>34</sup> acts as the early warning information system for USAID, monitoring key food supply system indicators throughout sub-Saharan Africa, Central America and the Caribbean, and Central Asia. FEWS NET monitors agricultural production, climate, weather, markets, trade, and sociopolitical indicators. Of course there is often a national early warning system or network, though the coverage and quality should be assessed. The early warning monitoring plan can include data collection from primary and secondary sources.<sup>35</sup>

In 2008, Title II multi-year assistance programs (MYAPs) were encouraged to build early warning and response mechanisms (including trigger indicators) into their proposals, which was a significant shift to allow streamlined management processes and greater flexibility to respond to crises in their operational areas and with communities.<sup>36</sup>

**Trigger indicators and thresholds:** Pre-defined indicators and thresholds are necessary to activate the crisis modifier mechanism. These indicators need to be context-specific, clearly defined, and agreed upon ahead of time, based on the shocks of greatest local concern. All program partners should collaboratively

#### Definition of Trigger Indicator:

Indicator used to determine the threshold at which MYAPs need to shift activities and/or require additional resources for new activities in response to a slow-onset shock. Such an indicator helps direct program priorities in dynamic and often unpredictable operating environments.

-FFP

<sup>32</sup> Hillier, D. (Oxfam). 2012.

<sup>33</sup> USAID/Ethiopia. N.D.

<sup>34</sup> See: <http://earlywarning.usgs.gov/fews/index.php>

<sup>35</sup> Mathys, E. 2007.

<sup>36</sup> Mathys, E. 2007.

develop the early warning and threshold criteria through existing systems and community-based structures. The Food and Nutrition Technical Assistance (FANTA) project recommends that trigger indicator thresholds be set conservatively, yet, they should also be able to provide advance notice (one to six months) of a potentially serious deterioration in food security conditions. Further, the indicators and thresholds should be justified through the findings of the comprehensive assessment.<sup>37</sup> When these criteria are met, as determined through an analytical framework as described below, this triggers certain processes to be put into action.

See *Update of PRIME Trigger Indicators: October 20, 2014* handout at the end of this module for examples of trigger indicators monitoring.

**Analytical framework:** It is necessary to design a harmonized analytical framework or a criterion that triangulates early warning information from existing systems and food security data in order to determine the severity of food insecurity. The Integrated Food Security Phase Classification (IPC) system has been designed to do this, and to “inform decision makers and guide action and response within the region.”<sup>38</sup>

The World Food Programme (WFP) created an analytical framework specific to the Ebola crisis. The model is designed to help estimate how many people are food insecure as a direct result of Ebola (Figure 3.2a) and as an indirect result of the Ebola crisis (Figure 3.2b).<sup>39</sup> The model for estimating food insecurity in Ebola considers food security status prior to the Ebola crisis and calls for estimates based on low spread and high-spread scenarios. The model puts significantly more focus on people who are indirectly food insecure, based on assumptions that the outbreak will have negative effects on food and labor markets, lead to closing of borders and businesses, influence food prices, and increase fear of a wider outbreak. The effects in the ‘impact channels’ (social impact, market impact, livelihood impact) are cumulative. Each impact channel is also weighted. In this model, the weights are expressed in qualitative terms ranging from “very low” to “very high” and are somewhat subjective. In practice, the model has most value when current and pre-crisis data are as accurate and up-to-date as possible.

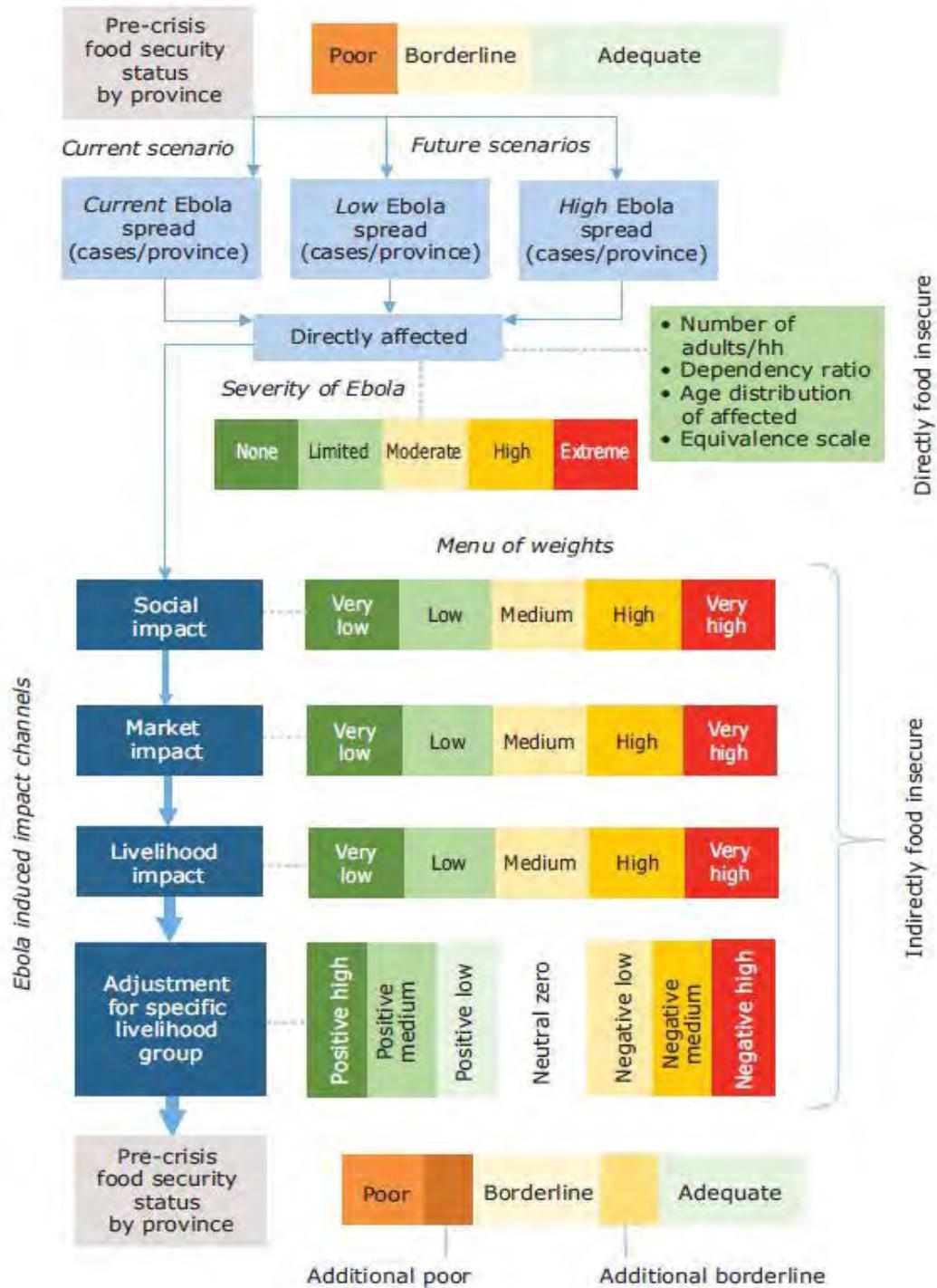
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<sup>37</sup> Mathys, E. 2007.

<sup>38</sup> See: <http://www.ipcinfo.org/ipcinfo-countries/western-africa/en/>

<sup>39</sup> WFP. 2014a.

**Figure 3.2a: Model for estimating food insecurity under Ebola**



Source: WFP. 2014a.

### Figure 3.2b: Estimating the indirectly food insecure from the Ebola crisis

The key components for estimating the number of indirectly food insecure people are described in the table below.

Driving Factors	Description	Purpose
Pre-crisis food insecurity	The pre-crisis food insecurity as determined by the Food Consumption Score (FCS). For the purpose of the analysis, those with <i>poor</i> (as opposed to <i>borderline</i> or <i>acceptable</i> ) FCS are defined as food insecure.	The model allows transitions of this variable from <i>FCS borderline</i> to <i>FCS poor</i> and from <i>FCS adequate</i> to <i>FCS borderline</i> because of the Ebola crisis.
Social impact	The social impact is quantified by the infection rate at province/district level.	This is the first impact channel in the model and captures risk stemming from socio-behavioural changes caused by Ebola. The weights for social risk are combined with a growth factor depending on the severity of Ebola in a given province. The infection rate in a province provides a proxy for this impact – the higher the infection rate, the higher the social disruption.
Market impact	The percentage of households dependent on the market for cassava: while rice is the main staple, households use gari (cassava flour) as a substitute. When households run out of cassava, they have to rely on the market for their main staples.	With this variable, we capture the market impact of Ebola. Market dependency on cassava indirectly also takes into account the development of price patterns. Households who are dependent on markets for their food consumption are more affected by market disruptions. Market dependency varies depending on the season. This is the second impact channel in the model. The weights for the market impact are combined with a growth factor depending on the severity of Ebola in a given province.
Livelihood impact	The livelihood profile of the household. Nine livelihood profiles are defined: <i>food crops</i> <i>cash crops</i> <i>fishing</i> <i>petty trade</i> <i>unskilled labour</i> <i>salary and skilled labour, handicrafts</i> <i>trading, commercial activities</i> <i>remittances and gifts</i> <i>other</i>	This gives the livelihood impact for specific livelihood groups and is the third impact channel in the model.

Source: WFP. 2014a.

**2) Flexible funding / risk financing mechanism:** Experience from slow-onset disasters has shown that buy-in from decision-makers and donors on funding conditions and processes at program planning stage is key to early action and timely, appropriate resourcing. To this end, flexible funding mechanisms and risk financing mechanisms (RFM) are important to embed in a crisis modifier; their purpose is to link the EWS to early action within a program in the face of a crisis.

The funding mechanism should include transparent crisis modifier fund guidelines that indicate the objectives and scope of the fund, its size and duration, membership roles and responsibilities, applicant eligibility, and priority interventions. It should clearly outline the processes for accessing funds and for leveraging additional funding from other sources. The host country, implementers, and donors must also ensure that the entire mechanism can be quickly scaled up as needed.<sup>40</sup>

When the pre-established thresholds and conditions in the crisis modifier mechanism are met, one of the actions triggered would be, via the RFM, to release emergency funds for response initiatives at a local program level. According to Mercy Corps' experience with RAIN, the funds should be accessible within 48 hours of the trigger and donors should set aside at least \$100,000 in contingency funding. In addition, the crisis modifier funding cycle should be able to shift beyond program cycles and office or agency boundaries where needed to leverage resilience outcomes and to help bridge relief-back-to-development.<sup>41</sup>

**3) Contingency planning:** An action framework for response implementation should also be agreed and developed for allocating and mobilizing program resources and staffing. This includes fast-track procurement or pre-positioning of goods, as well as other processes, in order to minimize the disruption of regular programming and expedite the initiation or shift of crisis-responsive activities. These plans are important, as the challenges with integrated resilience programming pre-shock may be otherwise be aggravated, as described at the beginning of this module.

Implementation plans should be participatory, guided by community structures, stakeholders and technical experts, to ensure relevance of response initiatives. The plans should include clear standards for rapid assessments, a process to orient partner staff on (OFDA) rules and regulations as well as the management structure/roles and responsibilities of the response, and guidance on participation in appropriate clusters and working groups in order to coordinate effectively with other agencies and initiatives.

### **Real examples of crisis modifiers:**

This discussion provides descriptions and key learnings from real-life crisis modifiers: Productive Safety Net Programme (PSNP) and Yaajende.

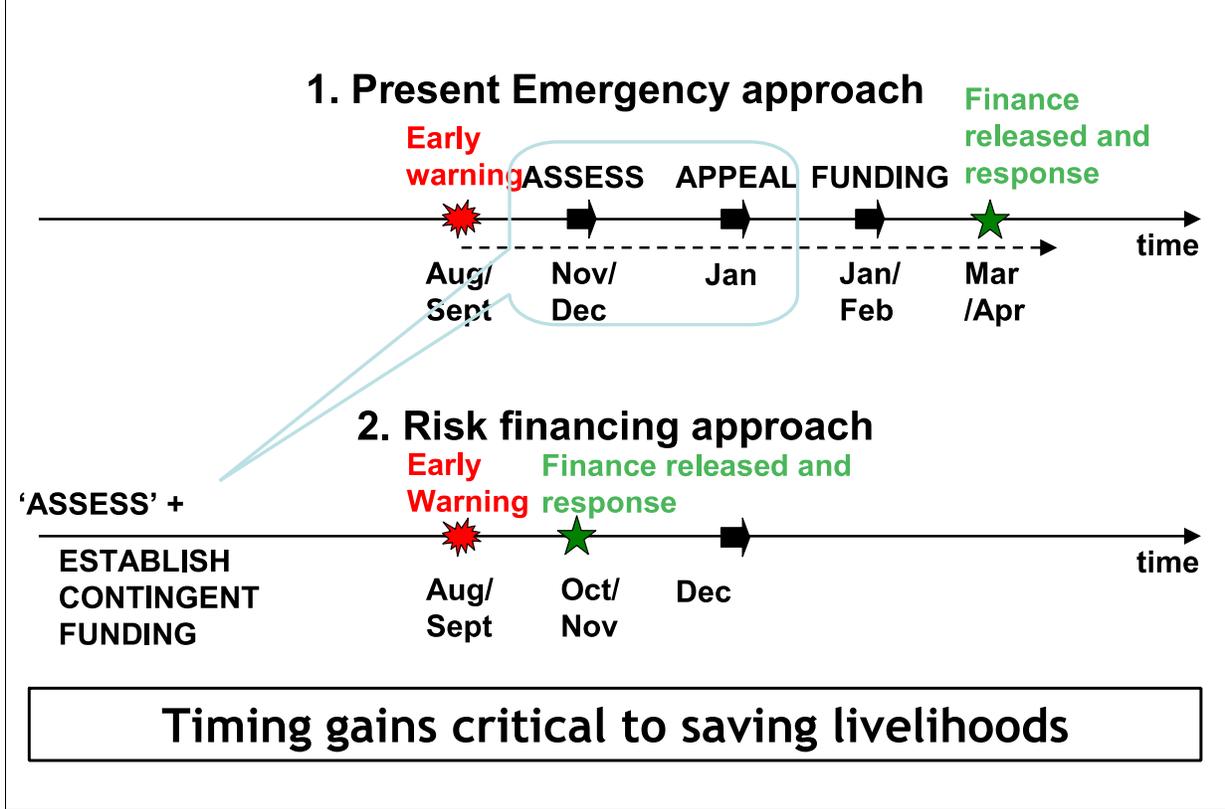
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<sup>40</sup> World Bank. 2013.

<sup>41</sup> Mercy Corps. 2013.

1. **PSNP:**<sup>42</sup> The emergency response component of Ethiopia’s PSNP embraced sequencing and early warning in a design that helped humanitarian response avoid large-scale food-based aid during a crisis. A certain amount of funds are available at local, regional and national levels and can be used quickly and flexibly per pre-established protocols. If a shock is large enough to exhaust contingency funds, a larger risk financing mechanism is triggered that provides further funds nationally to respond to a crisis. Figure 3.2c shows the gains in timeliness of the PSNP crisis modifier design: due to the built-in risk financing approach, funds may be available as many as six months earlier compared to traditional humanitarian approaches.

Figure 3.2c: PSNP contingency timeline



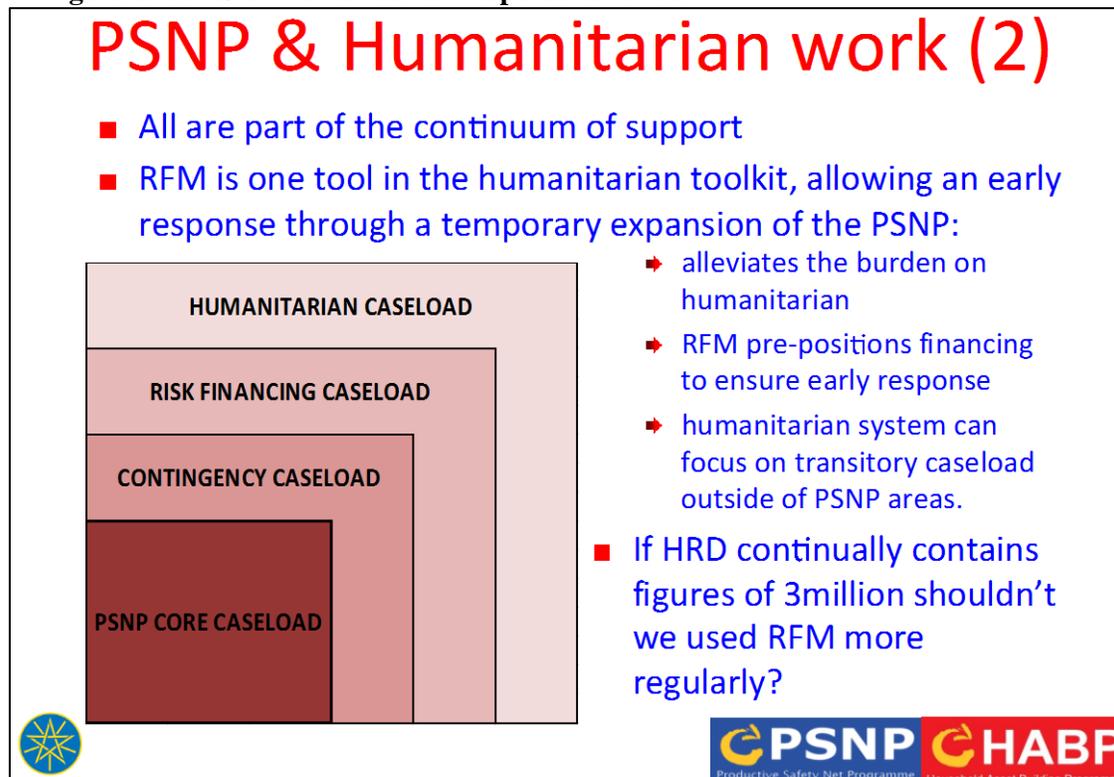
Source: Anderson, S. 2013.

Despite the innovative design and effective implementation of the PSNP during the 2011 drought crisis the relationship and harmonization of the program components (see Figure 3.2d) were confusing for some practitioners. At the local level, there has been the incorrect assumption that only PSNP beneficiaries are eligible for contingency funds, and at the regional level, contingency funds were not released as planned– partly because of bureaucratic constraints– making it less effective.<sup>43</sup>

<sup>42</sup> Anderson, S. 2013.

<sup>43</sup> Loveless, J. and D. Palacios. 2013.

Figure 3.2d: PSNP humanitarian response continuum



2. **Yaajende:**<sup>44</sup> On August 18, 2012, the Yaajende Project was modified to add \$600,000 as a crisis modifier to support poultry and small ruminant distributions (with later pass-on-the-gift secondary distributions) through Yaajende's Mother-to-Mother Support Groups (MTMSG) in areas of Matam identified as heavily affected by the 2012 Food Insecurity Crisis.

On November 13, 2012, during a field visit to Yaajende program locations, it was discovered that the humanitarian funded activities had not yet been completed, contrary to expectations. The original implementation plan presented to USAID/Senegal in Dakar indicated that procurement and distribution of livestock under the crisis modifier was completed or nearly so by November 2012. However, upon meeting with the team, USAID realized that the team was currently selecting beneficiaries, procurement to take place in November and December, and distributions would start around January. (To note: forage was highly available at that point in time and livestock in the region were all in good condition; by January this would no longer be the case, but Yaajende budgeted for initial feed rations.) In this case, activities should have concluded in February/March 2013 based on these November discussions.

<sup>44</sup> Full excerpt (edited) from: USAID/Senegal. N.D. Yaajende Crisis Modifier Briefing.

During a subsequent monitoring visit in March 2013, it was observed that implementation of activities was moving forward, though slow. About 40 percent of the projected number of goats had been procured and distributed. None of the poultry had as yet been procured or distributed, although it was expected that this would happen during March. When asked about the continued slow implementation rate of the program, Yaajende staff responded that the process had been long because the MTM groups involved in the activities hadn't worked with animals before and more preparation was required before the placement of animals.

Ten months later in December 2013 the crisis modifier placement activity with MTM groups in Matam was still in progress. During that first FY14 quarter, all funds had been expended but animals were still being procured and placed with beneficiaries. Placements were expected to be finalized in quarter two with approximately 2500 households receiving animals by the end of the activity. Passing on activities associated with these placements would commence in quarter two.

Challenges: It may be that the 'regular' livestock distributions under Yaajende were confused with the additional distributions to the more vulnerable households. Although Yaajende's modification included no strict time frame, the intent and spirit of the crisis modifier was discussed in November. Yaajende team expressed that livestock distributions are more of a recovery/resilience activity than emergency response and so it was not necessary to act very quickly. Also, it could be the case that the relatively small contribution (\$600,000 USD) within the overall program did not receive the attention that would be expected with a stand-alone response program.

### **Recommendations from Yaajende:**

- Maintain close communication between Mission-humanitarian experts and USAID/Senegal and office responsible for Yaajende.
- Improve communication and explanation to the partner on the purpose of a crisis modifier, which is to respond to additional, emergency-related needs, and the advantage of working through a modifier (instead of new programming) is that beneficiaries should already be identified, and the partner must be able to move quickly (on a humanitarian/emergency timeline).
- Provide an illustrative list of easily/quickly implemented, quick-impact emergency activities (as Yaajende noted that procuring and distributing 2,700 goats and 32,500 poultry necessarily will take several months). Depending on the nature of the crisis and the location, activities to suggest might include emergency seed or fodder vouchers; market-based or slaughter destocking; unconditional cash transfers. We may wish to discourage funding recovery-focused activities through the modifier.
- Require month-by-month timeline or implementation plan for each crisis-related modification. The current modification only refers to 'over the next year' so field staff may have missed USAID's desire for timely programming.
- Conclusion: While the Crisis Modifier appeared to be a useful tool for the USAID mission to have available to support the Yaajende program, it was not clear what the benefit to humanitarian programming was as a tool in the response kit. As a DRR or recovery tool/approach, it is arguably more appropriate.

### 3. Other Examples

*OFDA* – Funds crisis modifier for USAID’s Pastoralist Livelihoods Initiative II, led by Save the Children. Enable Drought Management Cycle, which includes four phases: normal development and preparedness, alert, emergency response, and recovery. Save the Children determined that continuing development operations during the implementation of a crisis modifier helped to provide complementary impact and continue to improve resilience of affected populations.<sup>45</sup>

*ECHO* – Included crisis modifier in DRR program in the Horn of Africa. In 2009, through its Regional Drought Decision, ECHO provided contingency funds in the face of drought “to provide income for households at risk of serious food insecurity.” Originally offered primarily in Kenya, contingency plans and crisis modifiers have taken a key role in DG ECHO (European Commission) programming and were highlighted in the organization’s Operational Guidance for Funding Proposals in Ethiopia in 2013.<sup>46 47</sup>

#### Plenary Discussion 3.2: Challenges with thresholds and triggers

Review the Module 3 handout *Update of PRIME Trigger Indicators: October 20, 2014*.

*Are there indicators that would be more/less feasible, relevant, and useful? Most challenging?*

#### Case Study: BuRP’s crisis modifier plan

The Bulungi Resilience Program (BuRP) built off the successes and learnings on the crisis modifier of the Yaajende project and others in the region. BuRP’s flexible funding mechanism is meant to enable the consortium to efficiently and effectively respond to rapid and slow onset emergencies in target areas. All partners work with USAID to establish a *Crisis Modifier Committee* and trigger criteria. When these criteria are triggered, partners will take action according to the following steps and timeline:

- Within 48 hours, the partner(s) working in the affected area flag the need and draft a concept note for response;
- The Crisis Modifier Committee reviews the concept note within 24 hours;
- Within 24 hours the principle organization submits the approved concept note and provisional budget to USAID for review and approval;
- Within 24 hours of USAID’s approval of the concept note, the principle organization notifies the partner to begin mobilizing resources to initiate rapid and appropriate response in line with the concept note and to develop a full proposal and implementation plan;
- Within one week, a full proposal and a detailed implementation plan is sent to USAID/OFDA;

<sup>45</sup> Oxfam and Save the Children, 2012.

<sup>46</sup> DG ECHO, 2009.

<sup>47</sup> DG ECHO, 2013.

- Upon receipt of USAID/OFDA approval for funding, partners are officially informed within 24 hours. Contract amendments for additional funding will be concluded within a maximum of one week.

### Case Study Exercise 3.2: Developing crisis modifier guidance

Objective: To develop crisis modifiers for programming in Bulungi in the Ebola crisis context

Materials: Review Figures 3.2a and 3.2b on estimating the directly and indirectly food insecure; Flipchart paper and markers

Instructions: Two parts:

- (Part 1): Group brainstorm and discussion based on table below: Estimating the indirectly food insecure. Facilitator presents guiding question to process in plenary session; note-taker records answers on flipchart paper.
- (Part 2): Small group work. Each small group selects 1-2 indicators brainstormed in Part 1 and discusses them using the questions provided. Reconvene to present and discuss in plenary.

#### Part 1: Group brainstorm and discussion

Guiding questions:<sup>48</sup>

- 1) After review of the driving factors causing food insecurity from the Ebola outbreak, what are some indicators that would be highly relevant to monitor in Bulungi's neighboring country/border region and in BuRP target areas?

#### Part 2: Small group work

Divide into small groups. Assign each group 1-2 indicators from 3.2a. For each indicator, discuss the following questions.

- 1) Is this information quantitative or qualitative?
- 2) Are the data available? What are the data sources? Who will be responsible for collecting and analyzing these data? With whom do we need to communicate to obtain these data?
- 3) At what intervals should these data be collected/ analyzed before and during crisis (daily, weekly, monthly, quarterly)?
- 4) How will we determine the threshold to set for this indicator?
- 5) How will we determine how long we need to monitor this indicator?

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<sup>48</sup> FEWS Net. 2014.

- 6) How long should the action triggered by the crisis modifier be in place? How will this be decided? Who will be involved in the decision? Has an implementation plan been clearly defined from the inception phase to address each modification?
- 7) Describe possible funding mechanisms for the action to be triggered by the crisis modifier.
- 8) What are the pros and cons of using this indicator?
- 9) What stakeholders and resources would you seek out to further the definition of indicators and thresholds?

### Session 3.3 Joint Shock Monitoring

This session demonstrates an example of the objectives, methods, analysis and application of joint shock monitoring,<sup>49</sup> followed by plenary discussion of current shock monitoring practices in the Sahel context.

#### Presentation 3.3: Joint shock monitoring

As discussed in Session 3.2, trigger values have been reached, activating timely follow-up data collection activities in the shock regions.

**Objectives:** Joint shock monitoring with real-time measurement of household and community responses to shocks is an innovative feature of resilience measurement and evaluation. The objective is to record real-time household responses to shocks and to understand how households utilize program interventions to cope with them. The monitoring data also contributes to the main research questions.

**Methods:** The research design for the recurrent monitoring employs mixed methods, using quantitative data (a panel survey of households) and community qualitative surveys. The research and evaluation team work together to select the sites based on FEWS NET delineation of shock exposure, both high and low intensity. The number of sites is large enough to represent the diversity of households exposed to risk, but is bounded by available time, logistics, and survey budgets. External monitoring by FEWSNET, for instance, records the onset, duration, geographic extent, and severity of various types of stressors and shocks. This external monitoring tracks factors that signal the onset of shocks threatening household and community food and livelihood security.

Types of early warning data monitored by FEWS Net include:

- Objectively verifiable meteorological data
- Changes in prices of main staples
- Incidence of livestock disease or pest infestations
- Closure of key trading routes
- Conflict
- Quarantines

Households for data collection and for focus groups are drawn from the list of households that were surveyed in the baseline making this a panel survey. In sum, the sample will be chosen using probability proportional to size (PPS) sampling, randomly selecting enumeration areas from each of the program strata. The sample can detect the following changes in the key outcome indicators: 40 percent in the Household Hunger Scale (HHS), a 20 percent change in the Household Food Insecurity Access Score (HFIAS), and an eight percent change in the Household Dietary Diversity Score (HDDS), over the six-month survey period with 90 percent confidence and 80 percent power.

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<sup>49</sup> Information for the presentation is drawn from the PRIME Resilience Impact Evaluation Recurrent Monitoring Phase briefing (internal document).

**Quantitative:** Panel surveys take place every month over a six-month period (for a total of six rounds). The interviews take approximately 20 minutes to complete and include the following modules from the baseline instrument:

- Household number
- Shocks and recovery
- Household productive assets
- Access to and use of services
- HHS and HDDS
- Coping strategies
- Confidence and risk tolerance.

**Qualitative:** Researchers collect information about resilience at the community level. Qualitative information is used to contextualize measurement dimensions, provide an understanding of local concepts and definitions of resilience, and enable a better understanding of the perceived significance of changes that are measured quantitatively.

Qualitative information is essential for understanding situational awareness of the drivers of resilience and providing a deeper understanding of the processes and interrelationships relevant to household and community resilience.

The qualitative tools examine:

- How social capital functions in the face of shocks, including unequal power relations and unequal access to resources and social capital
- Community-level structures and how well they hold up under shocks
- Relationships between community responses and household responses
- Gender differentiated impacts of shocks

**Utilizing the monitoring data: analysis and adaption:** This monitoring phase is key to the analysis of change between baseline and endline measures. It serves several functions (1) to collect data that is needed to control for potential confounding between the intervention groups and counterfactuals; (2) as formative research to identify the factors that precede (and therefore are early warning) to shocks and stressors; (3) to understand factors that restrict access to program interventions; and (4) to identify household and community conditions in which the interventions are most effective. Monitoring information can, therefore, be used by to make program adaptations and fine tune interventions—to be further discussed in Module 4.

**See Sample Shock Monitoring Instruments: Annex 7 (as needed)**

### **Plenary Discussion 3.3: How are monitoring data during shocks currently collected and used?**

Follow the facilitator’s guidance for discussion of the above guiding question.

### Session 3.4 Bringing it Home to RISE and Other Programs

This discussion provides a summary of the key learnings from the day and remaining questions, and allows time for application of joint assessment techniques to RISE projects.

#### Plenary Discussion 3.4: What are key challenges and opportunities for coordination in crisis modifier implementation?

The facilitator guides a plenary discussion on applying key learnings on joint implementation, crisis modifier implementation and shock monitoring to the context of RISE projects. The discussion identifies challenges, bureaucratic constraints, successes and opportunities for coordination according to HA/DA participants.

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## Module 3 Handouts



### Update of PRIME Trigger Indicators

Reporting Date: October 20, 2014

PRIME Trigger Indicators	Update	Warning Stage
<b>Rainfall</b>	<ul style="list-style-type: none"> <li>▪ Under normal circumstance in relation to the continuation of southward retreat of the Inter Tropical Convergent Zone (ITCZ), the rain producing systems lose their strength from the northern parts of Meher producing areas of the country while the southern and southeastern parts of the country will continue to get their second seasonal rainfall during the month of October. In accordance with NMA’s forecast in relation to better performance of rain producing systems some areas of southern half of the country including southern Somali and Borana will have better rainfall. On the other hand an occasional falls is anticipated over Afar.</li> <li>▪ Normal southward advance of rain-producing systems are expected to herald on-time beginning of second rainy season over the south and southeastern lowlands. The expected normal rainfall over south and southeastern parts of the country would also favor the availability of pasture and drinking water over pastoral areas. <a href="#">DRMFSS Early Warning Bulletin</a></li> <li>▪ From September to December, 30 to 70 percent of total annual rainfall falls in parts of Ethiopia. El Niño is anticipated to result in average to above-average rainfall over the eastern Horn. Subsequently, the October to December rains in the Eastern Horn of Africa are likely to be average to slightly above average in amount, including in southeastern Ethiopia. There is some risk for river flooding and flash floods in flood-prone areas of the eastern Horn. While rainfall in the eastern Horn is likely to be average to above-average, it may be poorly distributed over time and space. <a href="#">FEWS NET EAST AFRICA Assumptions for Quarterly Food Security Analysis October 2014</a></li> </ul>	Yellow
<b>Water Availability</b>	<ul style="list-style-type: none"> <li>▪ With the start of “Deyr” rain and “Hagaya” rain in Liben and Borana zone respectively, it is expected improved water availability.</li> <li>▪ The Kerma rain in zone three of Afar region and Keran rain northern Somali region has improved water availability to livestock.</li> </ul>	Yellow
<b>Pasture Condition</b>	<ul style="list-style-type: none"> <li>▪ As reported in last week update, if the Deyr rain in Liben zone and Hagaya rain in Borana zone performs well as predicted it is expected to improve the pasture but presently in these two zones shortage of pasture is a critical problem and fully worsened.</li> <li>▪ The outflow of Awash River has caused flooding in Amibara, Gewane and Bure Modaitu woredas in zone 3 of Afar region that affected also grazing land.</li> </ul>	Yellow
<b>Mobility Pattern</b>	<ul style="list-style-type: none"> <li>▪ Following the start of “Hagaya” rain in Borana zone livestock migrated out of the zone are expected to return to their location. Similar movements are expected in Liben zone.</li> </ul>	Yellow

<b>Milk Price</b>	<ul style="list-style-type: none"> <li>Despite the Karma/Karan rains, pasture has not fully recovered in most northern pastoral areas. Not yet having any increased livestock productivity, therefore, milk price stay at elevated level. The poor households will continue to rely on humanitarian assistance through December and beyond. <a href="#">FEWS NET Food Security Outlook update</a></li> </ul>	Yellow
<b>Basket of food</b>	<ul style="list-style-type: none"> <li>The country level overall inflation rate (annual change based on 12 months Moving Average) rose by 7.9 percent in September 2014 as compared to the one observed in a similar period a year ago. The country level food inflation increased by 5.9 percent as compared to the one observed a year ago. The country level Non-food inflation rate increased by 10.0 percent in September 2014 as compared to the one observed in September 2013. The 12 months moving average inflation rate shows the longer term inflationary situation.</li> <li>The September 2014 general year-on-year inflation has increased by 5.6 percent as compared to the one observed in September 2013. This increase was attributed to the rise in the indices of PRIME operational regions such as Dire Dawa 10.3 percent, Harari 7.3 percent, Oromia 8.3 percent, and Somali 9.4 percent. However, decline was observed in the index of Afar by 4.7 percent. The year-on-year Food inflation has increased by 3.6 percent in September 2014 as compared to the one observed in September 2013.</li> <li>The price index of Cereals in September 2014 has declined by 2.6 percent as compared to similar month last year which significantly contributed to the reduction in the magnitude of the indices of Food and the General Consumer Price Index. Moreover, the Non-Food inflation also increased i.e by 7.8 percent in September 2014 as compared to the one observed in September 2013. <a href="#">Central Statistical Agency Country and regional level consumer price indices For the month of September 2014</a></li> </ul>	Yellow
<b>Wage Rate</b>		
<b>Fodder Availability</b>	<ul style="list-style-type: none"> <li>PRIME fodder voucher intervention started 2<sup>nd</sup> round fodder/feed distribution in Borana. In addition, suppliers are transporting fodder/feed to Afar</li> </ul>	Yellow
<b>Terms of Trade (ToT)</b>	<ul style="list-style-type: none"> <li>In all clusters, with limited supply and high demand the grain prices show increments while due to poor body condition plus high supply to markets livestock price is declining making the Terms of Trade unfavorable to pastoralist community. Seasonality also contributed for what is observed in the market. <a href="#">Update from PRIME Field team</a></li> </ul>	Yellow
<b>Access to veterinary inputs</b>	<ul style="list-style-type: none"> <li>Similar with last week update <i>“There is shortage of essential livestock drugs in rural animal health posts and most of them are poorly equipped by equipment and understaffed (shortage of qualified staff) Woredas in Liben zone have limited financial and human resources capacity to implement regular livestock vaccination; therefore requesting support from PRIME. So far, southern cluster developed concept note to support Filtu woreda but similar support should extend to other woredas too.”</i></li> </ul>	Yellow
<b>Nutrition situation</b>	<ul style="list-style-type: none"> <li>TFP admissions at national level increased slightly in August compared to July level. Oromiya reported significant increase by 25 percent in August compared to July and was more pronounced in zones such as Borena that reported poor Belg production performance.</li> <li>The emergency surveys conducted in mid-August 2014 in woredas that experienced poor Belg rain and production performance in Borena( Diloworeda) cleared by the ENCU of the DRMFSS in terms of quality and the nutrition situation in Diloworeda was classified as poor with GAM of 8.6 percent. SAM prevalence was very low. Crude and under-five mortality rates were normal as per</li> </ul>	

	<p>national and sphere standards emergency thresholds. Given that Borena communities prioritize under-five during intra-household food distribution that prevent children from becoming malnourished compared to other communities, ENCU of the DRMFSS reviewed survey results in recent years in woreda to see if the 2014 poor Belg performance contributed to increase in malnutrition. The review shows that, the latest survey in Dilo woreda was conducted in May 2012 with GAM of 6.3 percent. Although the absolute GAM levels can be considered low in other contexts, the increase in GAM levels in Dilo in August 2014 as compared to May 2012 (period of peak hunger gap) partly reflects the effects of the poor Belg performance. <a href="#">DRMFSS Early Warning and Response Analysis October, 2014</a></p>	Yellow
<p><b>Unexpected natural shock</b></p>	<ul style="list-style-type: none"> <li>▪ Flood – one of the major natural hazards in Ethiopia – affects lives and livelihoods in parts of the country. In Afar heavy rainfall in the surrounding highlands of Amhara, Tigray and Oromia often result in overflow of the Awash River and its tributaries. The overflow of Awash River has created flooding in Amibara, Gewane and Bure Mudayto woredas. The flooding currently has affected over 40 000 people in 10 kebele displacing over 19,000 people.</li> <li>▪ The flood caused devastating damage over 7000 hectare of land (investors land, small scale agro-pastoralists, small businesses, cropland, grazing land, etc. highly affected. <a href="#">Update from PRIME Field Team and information from Amibara woreda pastoral office</a></li> </ul>	Red

1. Green (normal conditions, within normal seasonal variations), Yellow (when indicators are trending outside of normal seasonal variations; and/or multiple indicators are moving in a negative direction, but not yet outside of seasonal parameters), and Red (when indicators show outside normal seasonal variations, and/or multiple indicators indicating serious consequences for late responses)

## Module 4: Collaborative Learning and Adapting (CLA)

Participants will learn and apply systems thinking and collaborative management to decision-making for the achievement of RISE. They will learn how data and knowledge can help guide the process of layering, integrating and sequencing intervention strategies to achieve resilience.

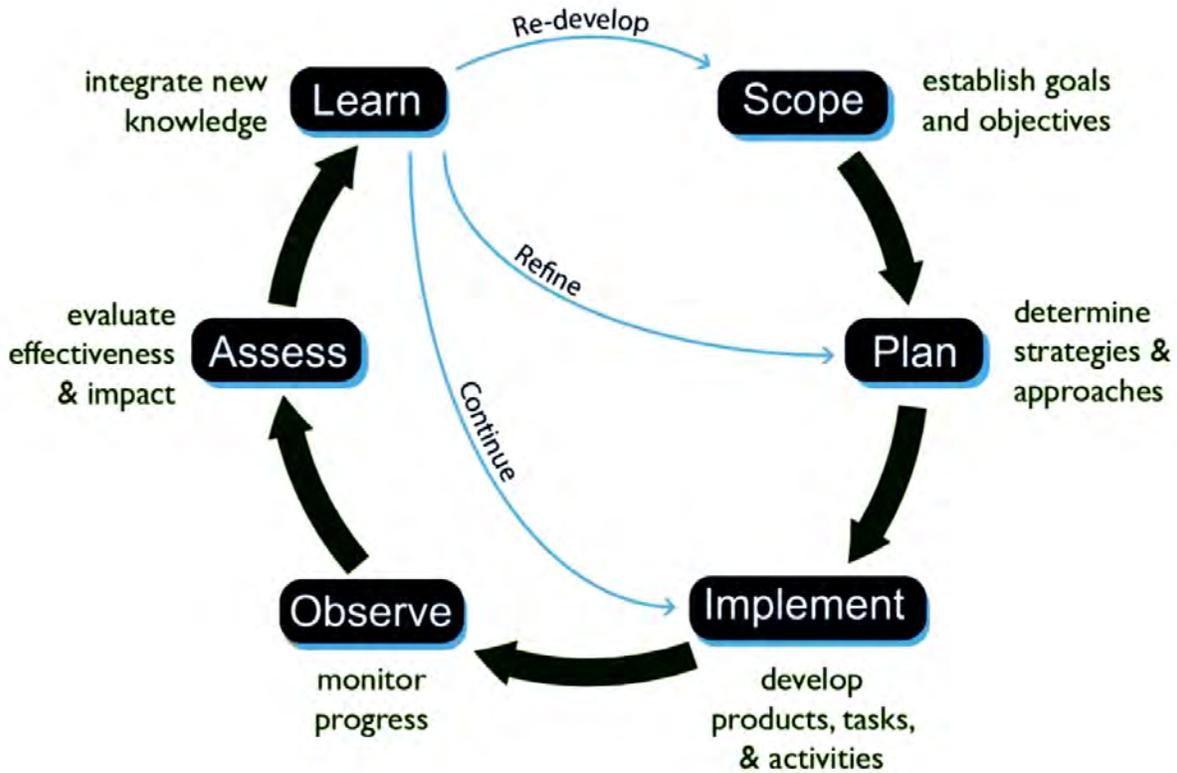
### Session 4.1: Resilience Data Model

This session explains the importance of CLA in the context of the resilience data model and resilience measurement techniques.

#### Presentation 4.1: CLA and the resilience data model

Monitoring risk and resilience measures allows learning and program adjustment. *Collaboration, Learning, and Adapting* is an approach to program management adopted by USAID, as shown in Figure 4.1a below. Continuous information is collected, digested and shared among key stakeholders for ongoing change/adaptation of program strategies. Program strategies are adapted in pursuit of resilience outcomes and the achievement of absorptive, adaptive and transformative capacities. CLA is an approach and methodological toolkit that can be used to facilitate resilience programming.

Figure 4.1a: Adaptive management approach



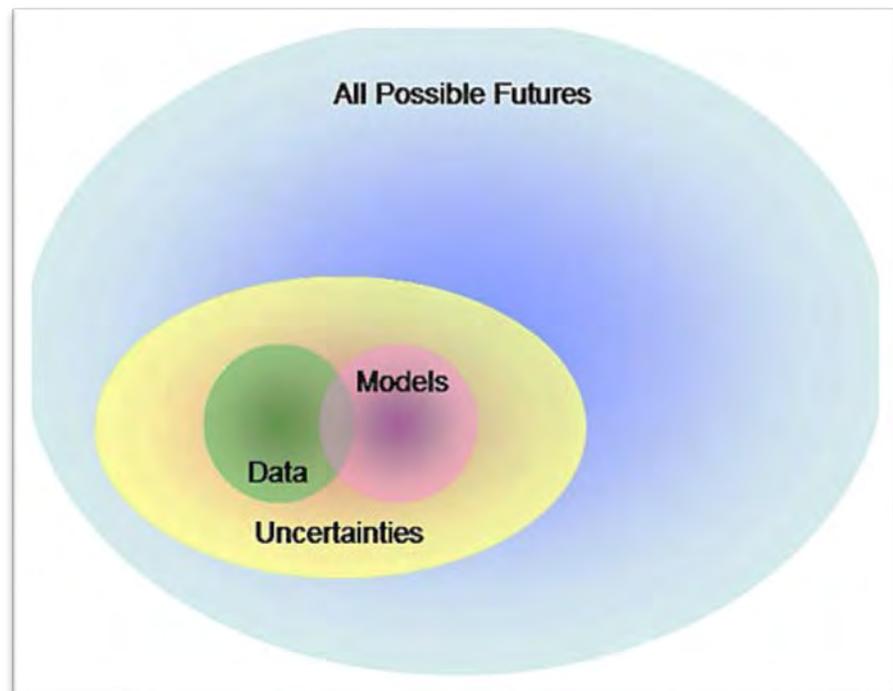
Source: USAID. 2013.

First, it is important to understand that the strategy of layering, sequencing and integrating intervention strategies builds upon a longer term movement to improve the integration of programming strategies and tools to improve the well-being of vulnerable populations. Beginning in the 1980s, a movement to link relief and development and various similar concepts became a pre-occupation of donors.<sup>50</sup>

“The technical basis for integrating resilience into programming involves three major steps. Firstly, donors will need to develop a *shared risk analysis*, followed by a shared analysis of what makes, or could make, different layers of society resilient to those risks, so as to help prioritise their programming decisions. Next, donors will need to *apply resilience building elements* to existing and new programming; standalone resilience projects or programmes are probably less useful in the long-term. Donors will also need to take care that resilience building in one layer of society, or in one sector, does not undermine the resilience of another layer or sector. Finally, *indicators to measure changes* in the components of the resilient systems will need to be developed, so that the overall impact of efforts to strengthen resilience can be measured.”

OECD. 2013.

Understanding the limitation of linear models of resilience measurement is important; as shown in the diagram to the right, there exist large areas of uncertainties and areas for possible expansion of measurement in the future, and the current data models that do exist show a small glimpse of the full picture.<sup>51</sup>

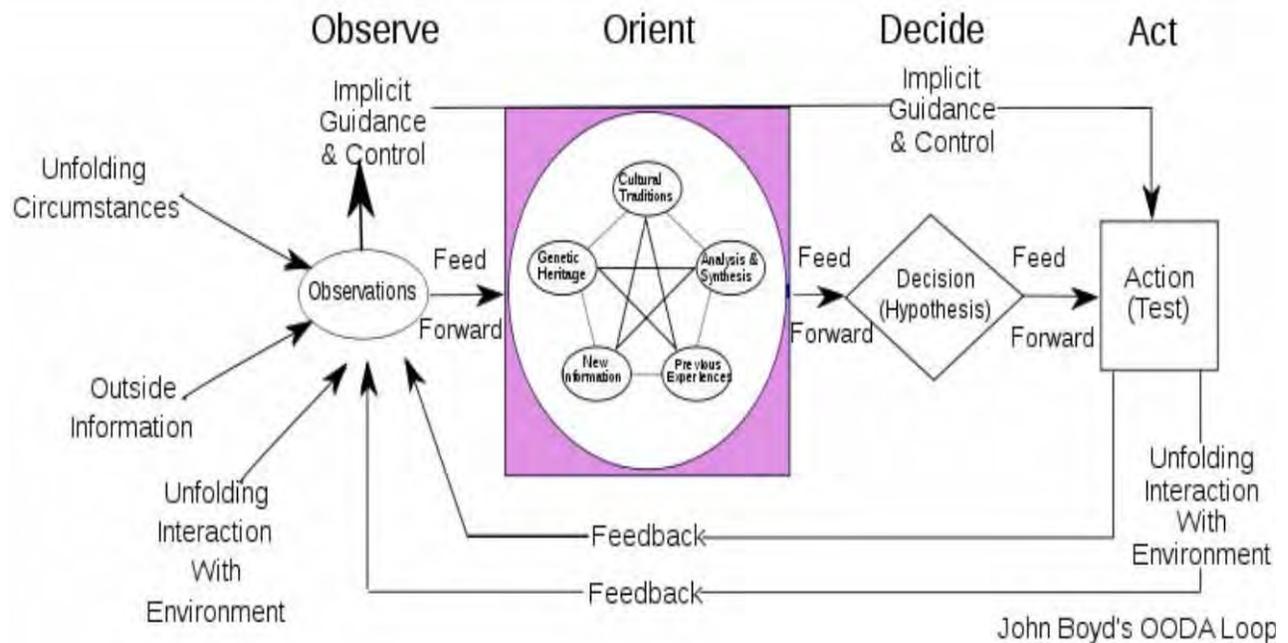


<sup>50</sup> IOB Study. 2013.

<sup>51</sup> Carpenter, Bennett and Peterson. 2006.

CLA is based on a systems thinking model of resilience. The key point is that the data we have is highly limited with respect to possible program options and resilience outcomes based upon historical information. Systems thinking, particularly Complex Adaptive Systems, takes in to account the emergence of new systems and states because of cross-scale and the role of unknown factors. Systems thinking views information as dynamic. The OODA loop model below (Figure 4.1b) characterizes the continuous learning perspective of information in the context of CLA.

**Figure 4.1b: OODA loop model**



Source: Boyd, J. 1976.

### Principles of CLA:<sup>52</sup>

- Development is the goal; knowledge management and learning can help us achieve the goal more effectively, but are not in and of themselves the purpose of our work.
- "Country-led development" has learning implications. We can help promote country ownership of development agendas and efforts by catalyzing learning among local development actors and building local capacity for analyzing development dynamics and devising solutions systemically.
- Tacit/experiential and local/contextual knowledge are crucial complements to research/evidence-based knowledge. All three should inform the development of our strategies and programs, and the ways we manage them adaptively.
- Knowledge and learning solutions should be based on what's needed to make a program stronger, more relevant to the context, and more locally driven. They can draw on general principles and established good practice, but they also need to be customized.

<sup>52</sup> See: <http://usaidlearninglab.org/>

- USAID is an extended organization — our implementing partners are central to our effectiveness, and our partnerships with other local and regional actors are key. All partners play a crucial role in collaborating, learning, and adapting for greater effectiveness.
- In establishing and building a learning-centric approach to development, Missions should consider building from things they already do and leveraging existing processes as much as possible. Instituting this approach will take time and should be considered as evolving and phased.
- Management approaches need to value learning by committing resources, building trust, testing new methods, acting on new evidence, and adapting to change.

Lane Pollack, Organizational Learning Advisor for USAID Uganda, explains how CLA is utilized within the Mission and how this has impacted their programming. The link to the video is here: <http://usaidlearninglab.org/media/collaborating-learning-and-adapting-uganda>

CLA lessons learned in Uganda include:

- Learning focused and field-based portfolio reviews
- Roundtable discussion with implementing partners
- Building M&E capacity with Mission staff and implementing partners
- Linking M&E processes to learning
- Focus on organizational development
- Room for interpretation
- Strong partner input, not just Mission mandate
- Slightly shift what you're already doing to make time for learning
- Plan for staff transitions
- Create a CLA brand
- Start with small changes to amplify what is already working

The objectives of the Strategic Learning Plan are to:

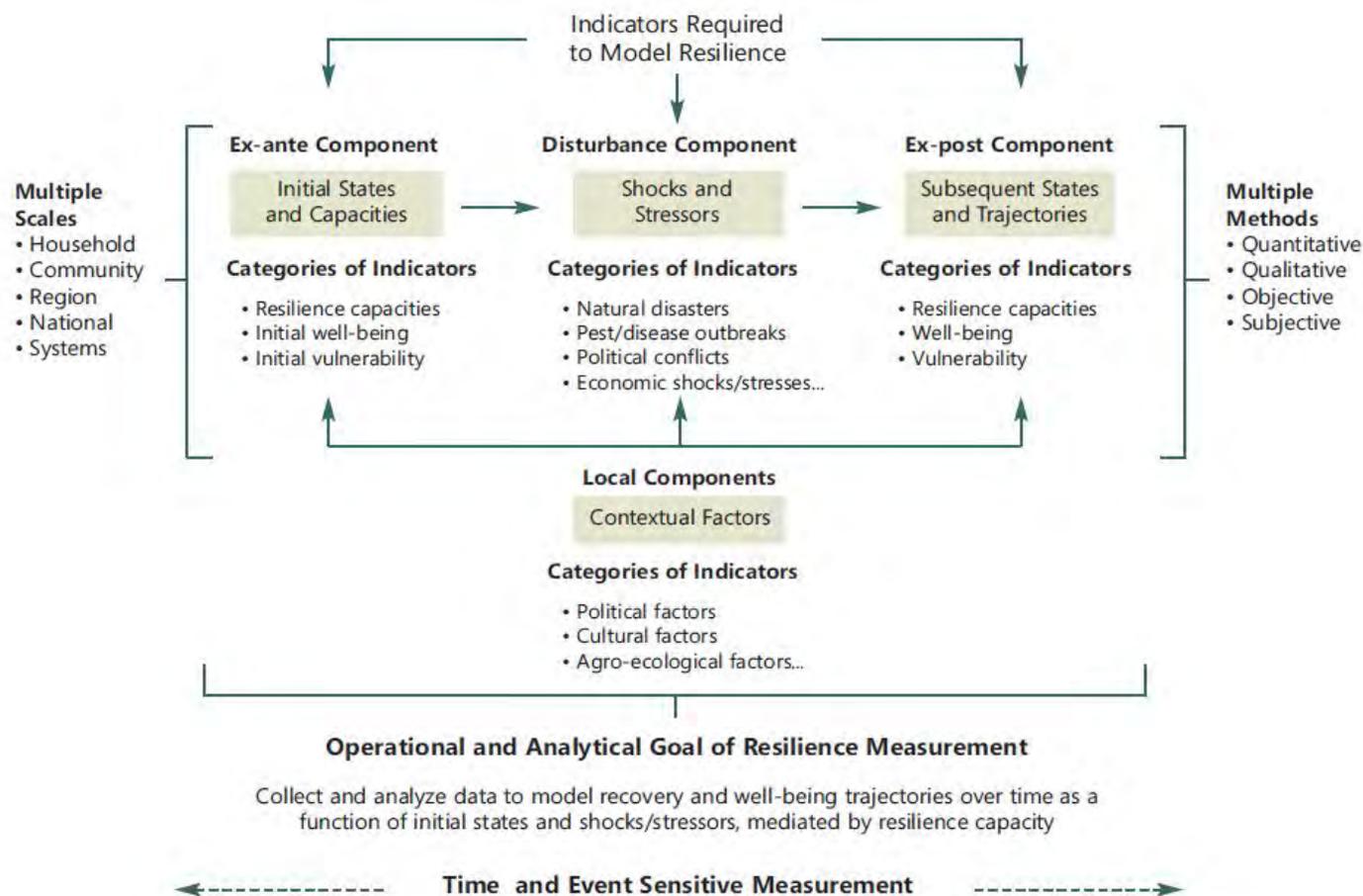
- Improve the quality and relevance of USAID's programming by grounding it in evidence and making it quickly adaptive to new learning and changing contexts;
- Extend USAID's influence and ability to leverage other actors' contributions;

Resilience programming success is challenged by three types of barriers, which we will consider throughout this module:

1. *Institutional*: the nature of donor funding instruments and organizational structures as well as the capacities and governance of implementing partners and stakeholders
2. *Programmatic*: the programming capacities and strategies required to achieve resilience
3. *Contextual*: the environmental constraints to financing and implementation

**Key to developing a learning strategy is to develop a data model of resilience.** What are the key data types and the measurement strategy required? Here we draw upon the Resilience Measurement Technical Working Group’s Technical Series 2 and a short inventory of data sources.<sup>53</sup>

**Figure 4.1c: Resilience Causal Framework**



<sup>53</sup> FSIN. 2014.

Temporal, geographic and institutional scales also need to be taken into account. To date we have also seen how information needs vary in relation to program decision making cycles: planning, implementation and attainment of results. We have seen, for example, how initial planning data differs from baseline data, which keys in to results monitoring and impact evaluation. Planning information also helps to identify key contextual factors that need to be monitored and threats/hazards as well as resilience capacities/vulnerabilities that need to be built in to the resilience data model. Data sources are described below:

Types of information	Sources
Planning	Secondary data (hazards, household survey data, price series), document review, key informant, community participatory assessments
Baseline	Mixed method assessment: probability household survey +key systems level measurements, facility surveys, community assessments
Monitoring	Hazards monitoring systems, project monitoring systems
Impact	Follow up or panel survey data based upon baseline, includes measurement of implementation and potential contextual factors

The goal of RISE requires systems thinking and analysis, recognizing that resilience is a complex multi-sectoral and multi-layer dynamic problem requiring multi-criteria and multi-stakeholder assessment and monitoring. The USAID Learning Lab has a repository of useful methods and tools for initial assessment. A key element of resilience programming is joint stakeholder risk assessment. The OECD outlines the roll of and importance of risk assessment for resilience programming. Data sources for risk assessment include FEWS NET and hazards data sets, Post Disaster Needs Assessment surveys, various coping and perception measures, and Living Standards Measurement Surveys. Qualitative and case study methods also are important for learning. We will review examples from the DFID BRACED project<sup>54</sup> on how planning was based upon a systematic assessment.

**Risk assessment** is an analysis that shows an organization's vulnerabilities and the estimated cost of recovery in the event of damage. It also summarizes defensive measures and associated costs based on the amount of risk the organization is willing to accept (the risk tolerance).

<sup>54</sup> United Kingdom Department for International Development's Building Resilience and Adaptation to Climate Extremes and Disasters Programme

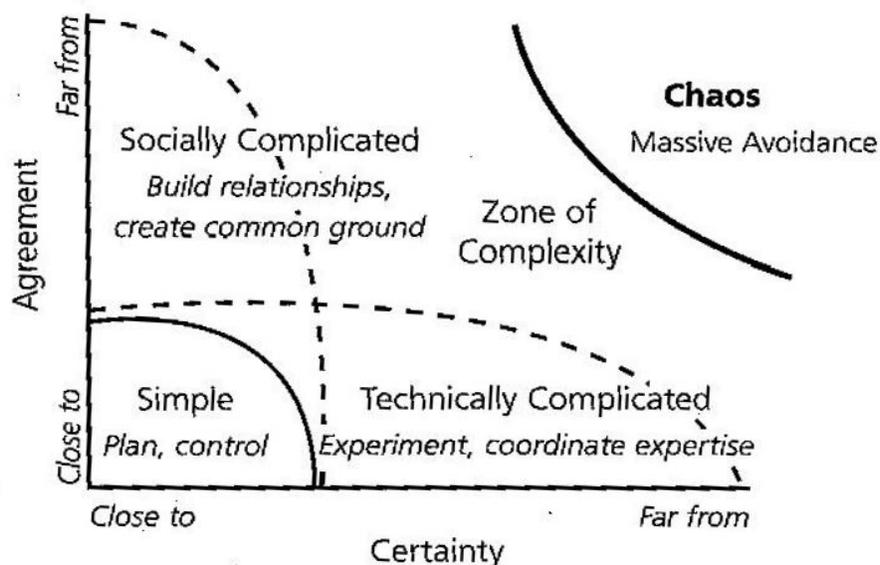
## Complexity-Aware Monitoring<sup>55</sup>

Complexity-aware monitoring may be differentiated from performance monitoring of USAID, and it is meant to be complementary. The three main principles of Complexity-Aware Monitoring are:

1. Synchronize monitoring with the pace of change
2. Attend to performance monitoring's three blind spots
  - broader range of outcomes
  - alternative causes
  - full range of non-linear pathways of contribution
3. Consider relationships, perspectives, and boundaries (three key systems concepts)
  - the structures, processes, and exchanges linking actors and factors within a system
  - different perspectives within a system
  - what is in and what is outside the system

Complexity-aware monitoring is relevant for components of strategies or projects in which the causal relationships are not well understood, thus, the solutions and detailed implementation plans are also difficult to develop (note: some aspects of a project may be simple or complicated, while others are complex). Figure 4.1d shows that complex situations are distinct from simple and complicated situations by the degree of both low certainty and low agreement (with stakeholders) on how to solve the problem.

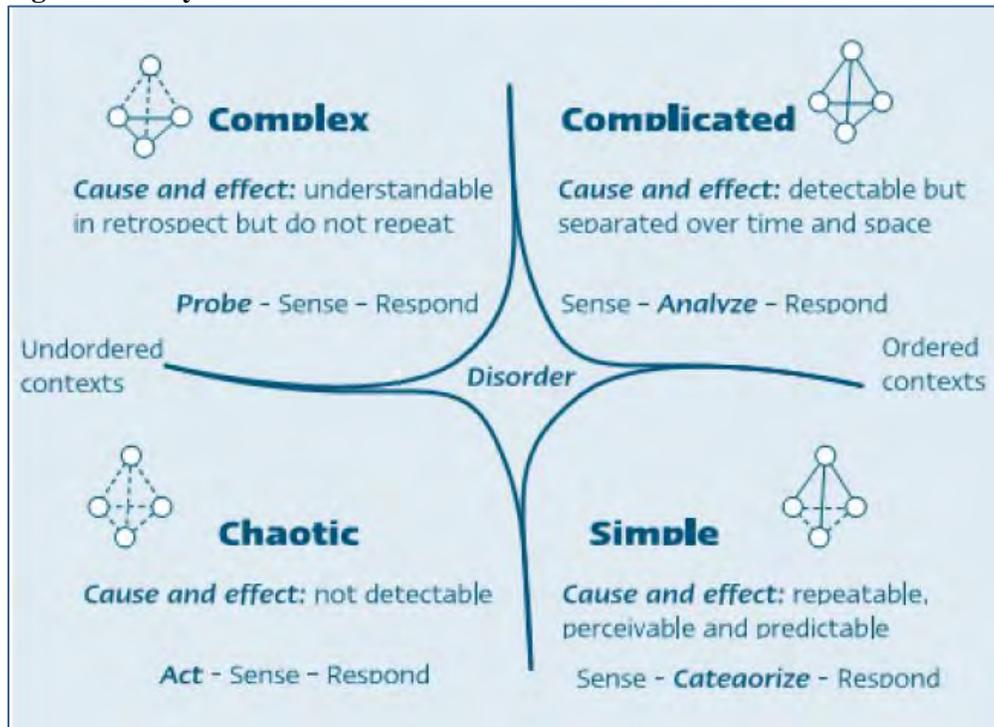
**Figure 4.1d: Agreement and certainty matrix**



<sup>55</sup> All text and graphics in this sub-section are drawn from: Britt, H. (USAID). 2013.

In addition, the Cynefin framework (Figure 4.1e) demonstrates that complexity entails unanticipated interactions that may change the original understandings or assumptions and even lead to a new reality. Complexity fits well with “probe-sense-respond” management approaches, in which practitioners experiment, collect information, and then take action.

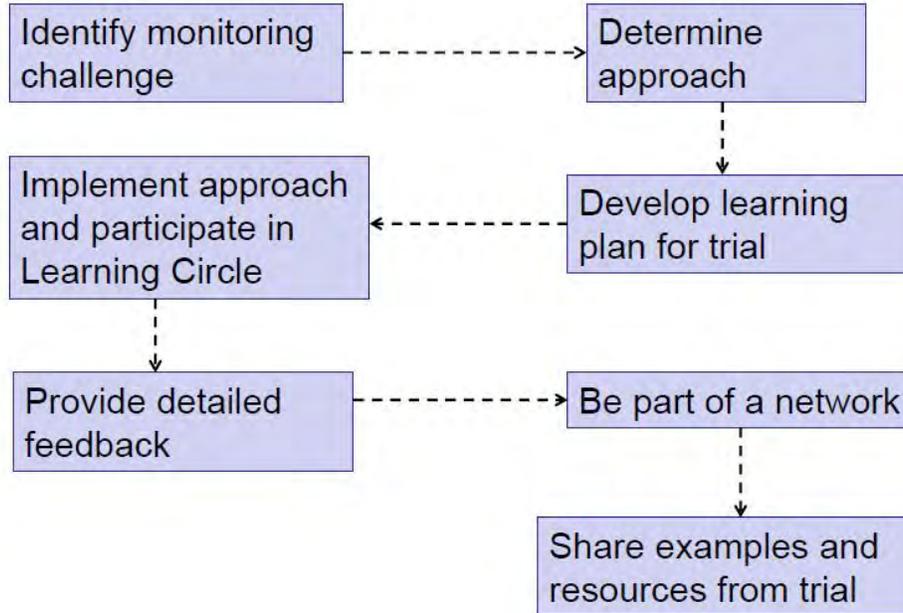
**Figure 4.1e: Cynefin framework**



**Five Recommended Approaches and Trial Roadmap** (Figure 4.1f)

1. Sentinel Indicators: Proxy for the system that signals the need for further investigation (example: stock-outs)
2. Stakeholder Feedback: Seeks diverse perspectives of partners, beneficiaries or those excluded from a project
3. Process Monitoring of Impacts: Tracks predicted & emergent processes transforming outputs to results
4. Most Significant Change: Captures broad range results and makes diverse perspectives explicit
5. Outcome Harvesting: Captures broad range results and works backward to describe & verify contribution

**Figure 4.1f: Complexity-aware monitoring trial roadmap**



**Plenary Discussion 4.1: What are the pros and cons to different resilience measurement approaches?**

Follow the facilitator’s prompts guided by the question:

*What are the pros and cons of different resilience measurement techniques and approaches?*

## Session 4.2 CLA and Decision Analysis Tools

This session discusses CLA as it relates to decision analysis tools and decision support.

### Presentation 4.2: CLA and decision analysis tools

**Decision analysis**, a term coined by Ronald Howard (1964), may be defined as a systematic, quantitative and visual approach to addressing and evaluating important choices confronted by leaders. Decision analysis utilizes a variety of tools to evaluate all relevant information to aid in the decision making process.

**Information system (IS)** is any combination of information technology and people's activities using that technology to support operations, management, and decision-making. In a very broad sense, the term IS is frequently used to refer to the interaction between people, algorithmic processes, data and technology.

**Decision support system (DSS)** is a computer-based IS that supports business or organizational decision making activities. DSS serve the management, operations and planning levels of an organization and help to make decisions, which may be rapidly changing and not easily specified in advance.

Decision support is an approach that harnesses data and information for the purpose of decision making. Decision support involves evaluation of the factors influencing decision making and then strategically formulates information products and services around key decision making points. Decision support commonly employs decision analysis tools. These include multi-criteria decision analysis, decision trees, and various simulations and forecasting techniques to aid decision makers use data for decision making.

While these methods are useful for thinking about how data might be analyzed to provide decision makers with information for evaluating alternative interventions, given the relatively limited ability to actually identify needed inputs for these models, they serve a more heuristic function at this time. That is, they provide a framework for analyzing data as opposed to a data analysis tool. Currently, with respect to resilience, there are a few key principles for improving the utility of data for decision making:

- Keep it simple and graphical
- Make sure information is available when key program cycles need it
- Aim towards continuous real time information streams on key aspects of the resilience data model (threats/hazards, contextual factors, capacity and vulnerability factors, outcomes and program processes).

### Coping with uncertainties<sup>56</sup>

Probability assessment is nothing more than the quantification of uncertainty. In other words, quantification of uncertainty allows for the communication of uncertainty between persons. There can be uncertainties regarding events, states of the world, beliefs, and so on. Probability is the tool for both communicating uncertainty and managing it (taming chance).

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<sup>56</sup> Excerpt from: <http://home.ubalt.edu/ntsbarsh/business-stat/opre/partIX.htm#rhowuncertain>

There are different types of decision models that help to analyze the different scenarios. Depending on the amount and degree of knowledge we have, the three most widely used types are:

- Decision-making under pure uncertainty
- Decision-making under risk
- Decision-making by buying information (pushing the problem towards the deterministic "pole")

In decision-making under pure uncertainty, the decision maker has absolutely no knowledge, not even about the likelihood of occurrence for any state of nature. In such situations, the decision-maker's behavior is purely based on his/her *attitude toward the unknown*. Some of these behaviors are optimistic, pessimistic, and least regret, among others. The most optimistic person I ever met was undoubtedly a young artist in Paris who, without a franc in his pocket, went into a swanky restaurant and ate dozens of oysters in hopes of finding a pearl to pay the bill.

Optimist: The glass is half-full.

Pessimist: The glass is half-empty.

Manager: The glass is twice as large as it needs to be.

Or, as in the following metaphor of a captain in a rough sea:

The pessimist complains about the wind;  
the optimist expects it to change;  
the realist adjusts the sails.

Optimists are right; so are the pessimists. It is up to you to choose which you will be. The optimist sees opportunity in every problem; the pessimist sees problem in every opportunity.

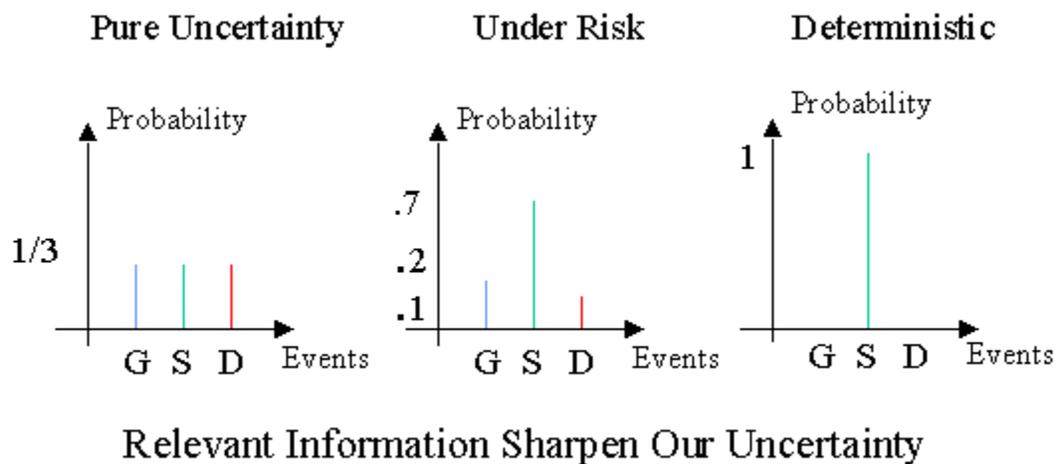
Both optimists and pessimists contribute to our society. The optimist invents the airplane and the pessimist the parachute.

Whenever the decision maker has some knowledge regarding the states of nature, he/she may be able to assign *subjective probability* for the occurrence of each state of nature. By doing so, the problem is then classified as decision making under risk.

In many cases, the decision-maker may need an expert's judgment to sharpen his/her uncertainties with respect to the likelihood of each state of nature. In such a case, the decision-maker may buy the expert's relevant knowledge in order to make a better decision. The procedure used to *incorporate the expert's advice* with the decision maker's probabilities assessment is known as the Bayesian approach.

For example, in an investment decision-making situation, one is faced with the following question: What will the state of the economy be next year? Suppose we limit the possibilities to Growth (G), Same (S), or Decline (D). Then, a typical representation of our uncertainty could be depicted as follows:

Figure 4.2a: Decision analysis and uncertainty



#### Plenary Discussion 4.2: What is CLA and adaptive decision making in the context of RISE and other programs?

In this discussion, we look again at three case studies that have come up previously, but this time with the focus of learning about how to better link relief and development through CLA. The **first** uses qualitative methods to distill lessons from the RAIN project, an OFDA funded project in Ethiopia.<sup>57</sup> RAIN was able to develop an innovative program prototype that led to a longer term program. The lessons learned from this program are highly instructive about how layering, integrating and sequencing might work. The **second** case study picks up from the discussion in Module 3<sup>58</sup> on lessons learned from the Yaajende Crisis Modifier project: what went wrong and why? This is an example of a failed learning approach. We will step through the lessons learned and the implications for resilience program design. The **third** example draws from the more recent PSNP safety net program design in Ethiopia. Though successful, this program has a number of potential areas of improvement. How do these real-life examples and the lessons learned translate to RISE?

#### Case Study Exercise 4.2: Adaptive monitoring in the face of shock

**Objective:** Based on the case study findings of the joint shock monitoring, participants will investigate adaptations and challenges to interventions in the face of a shock.

**Materials:** Research questions and data from Module 1; program design resources from Module 2; crisis modifier and trigger indicator resources from Module 3; CLA concepts from Module 4; Annex 7: Sample Shock Monitoring Instruments.

<sup>57</sup> Mercy Corps, 2013.

<sup>58</sup> See Presentation 3.2.

Instruction: In small groups, participants review the Sample Shock Monitoring Instruments (Annex 7) and discuss the guiding questions below:

*Considering the potential real-time data collected from shock monitoring, how might this data be put into a decision making framework? What are the real-time signals, even unintended effects that may activate adaptations to future monitoring or implementation? What partner or government sensitivities should be taken into consideration?*

*If BuRP assumptions change based on the findings from joint shock monitoring, how will the interventions adapt? What are the constraints to adaptation?*

## Session 4.3 Knowledge Management (KM) Strategies

This session will provide an overview of methods used to capture knowledge and information and will draw from multi-media resources from the USAID Learning Lab<sup>59</sup> web site. The discussion that follows will include an overview of KM projects relevant to resilience programming. Discussion will elicit participants experience and preferences related to these methods and how to build strong learning communities among key stakeholder groups.

### Presentation 4.3: Knowledge management strategies

**Knowledge management (KM)** comprises a range of practices used in an organization to identify, create, represent, distribute and enable adoption of insights and experiences. Such insights and experiences comprise knowledge, either embodied in individuals or embedded in organizational processes or practice.

#### Basic types of knowledge:

Explicit knowledge is knowledge that has been or can be articulated, codified, and stored in certain media. It can be readily transmitted to others. The information contained in encyclopedias (even Wikipedia!) are good examples of explicit knowledge.

Tacit knowledge refers to knowledge possessed only by an individual and difficult to communicate to others via words and symbols (e.g., ‘gut’ reaction).

#### KM strategies

The Knowledge Management Toolkit describes numerous methods and strategies, a few of which are listed below:<sup>60</sup>

- Communities of Practice (CoP)
- Web portals or networks
- After Action Review
- Lessons Learnt
- Peer Review
- Knowledge Map

### Plenary Discussion 4.3: What are current strategies for managing and organizing information?

Follow facilitator instruction for discussion on the guiding question:

*What are current strategies for managing and organizing information? What are constraints to KM?*

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<sup>59</sup> See: <http://usaidlearninglab.org/>

<sup>60</sup> SDC. 2009.

## Session 4.4 Bringing it Home to RISE and Other Programs

This discussion provides a summary of the key learnings from the day and remaining questions, and allows time for application of CLA for RISE projects.

### Plenary Discussion 4.4: What are key challenges and opportunities for coordinated learning and adapting?

The facilitator guides a plenary discussion on applying key learnings on CLA to the context of RISE projects. The discussion identifies challenges, bureaucratic constraints, successes and opportunities for coordination according to HA/DA participants.

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## Module 5: Transition Strategies and RISE Action Plan

Participants will use the knowledge and skills from previous training days to draft a common road map and action plan for RISE achievements and transition strategy.

### Session 5.1 Transition Strategies

In this section, concepts around transition strategies will be explored in depth, providing participants with the tools to think critically about the transition strategies and action plans they will pursue within their RISE programs. Although there is little empirical evidence to guide implementing agencies as to the most effective transition strategies for sustaining resilience over time, the tools for developing a transition strategy across development programs are cross-cutting.

#### **Key terms:**<sup>61</sup>

- “**Exit**” refers to the withdrawal of externally provided resources from an area. “**Exit strategy**” or “**sustainability plan**” is the plan developed to guide the withdrawal from a region while maintaining the sustainability of the program’s impacts, activities, and progress.
- “**Graduation**” refers to when a program site or beneficiary achieves the targeted level for indicator(s), thus triggering the site’s/beneficiary’s exit from the program, and the cessation of program services or resources for that site or beneficiary.
- “**Phase Down**” refers to the intentional and gradual reduction of program inputs and is the preliminary phase of phase out or phase over.
- “**Phase Out**” refers to the withdrawal of program inputs without making arrangements for the inputs or activities to be continued by another organization.
- “**Phase Over**” or “**Transition**” refers to the transfer of responsibility of program activities to another entity; it can also refer to shifting approaches or strategies, such as from relief to development.

### Presentation 5.1: Transition strategies

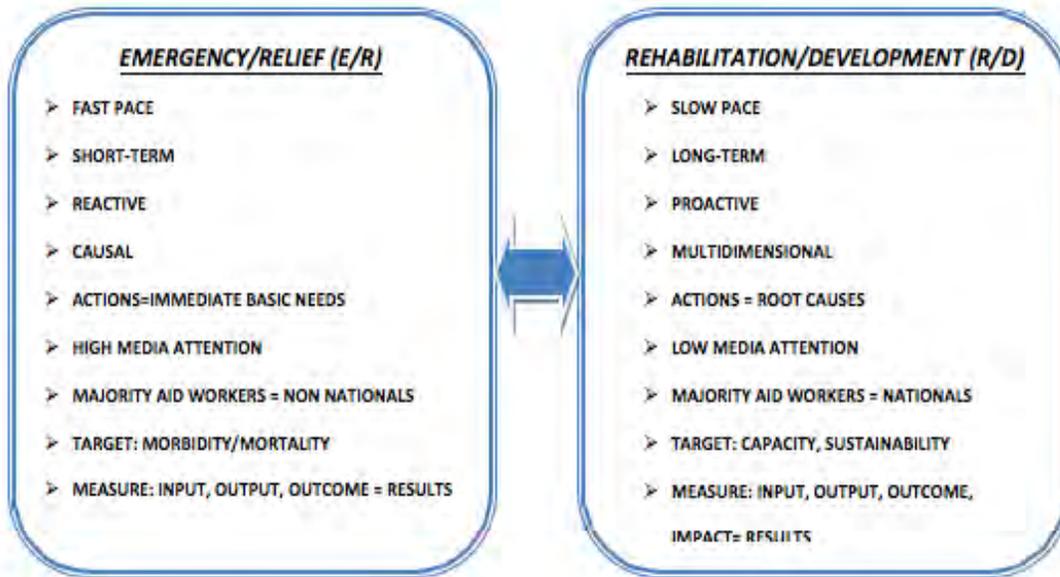
Although both humanitarian and development actors work to improve the lives of vulnerable people, their objectives may not always align. Humanitarian actors provide assistance to the most vulnerable populations in crisis situations while development actors engage different stakeholders for more long-term livelihood sustainability. Likewise, development programs tend to focus their efforts in areas of high productivity that are more stable, secure and have a greater potential for economic growth; meanwhile, while humanitarian assistance tends to work in areas of low productivity with less accessibility to social and economic opportunities.<sup>62</sup> Figure 5.1a shows a few other key differences between relief and development work.<sup>63</sup>

<sup>61</sup> Rogers, B.L. and K.E. Macias. 2004.

<sup>62</sup> InterAction. 2013.

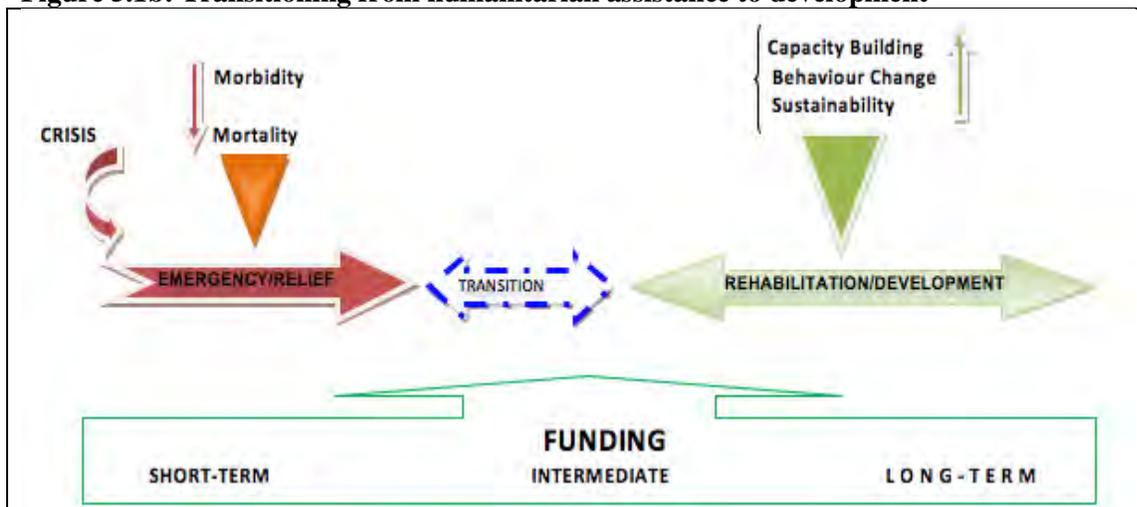
<sup>63</sup> Kopinak, J. K. 2013.

**Figure 5.1a: Key differences between humanitarian assistance and development**



**Importance of transition HA to DA:** Although relief and development actors work in seemingly different capacities, linking their efforts can smooth the transition to building the resilience capacity for crisis-affected people to withstand future shocks. Using the post-emergency transition and recovery efforts as the foundation for longer-term development programs may help to build long-term sustainability of these communities and populations. Thus, aid should be structured such that it promotes a smooth transition that not only enhances performance, but delivers quality services and reduces cost. The diagram below (Figure 5.1b) demonstrates this idea.<sup>64</sup>

**Figure 5.1b: Transitioning from humanitarian assistance to development**



<sup>64</sup> Kopinak, J. K. 2013.

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## USAID guidelines for transition strategies<sup>65</sup>

Transition strategies must describe:

- Desired end state or milestone for transitioning away from USAID/OFDA funding
- What conditions will ensure the sustainability of program achievement
- What measurable progress will be made toward future sustainability
- Transition strategies must describe:
  - Planned transition of activities
  - Beneficiary involved, as applicable
  - Further actions required to ultimately ensure sustainability
  - Within what time frame
  - By whom
  - Steps planned to communicate transition to all relevant stakeholders
  - Steps planned to continue the program after USAID/OFDA funding ends

**Phase out or phase over?** Transition strategies consist of either a “phase out” or “phase over” approach. Phase out refers to the withdrawal of program inputs without making arrangements for the inputs or activities to be continued by another organization while phase over (or transition) refers to the transfer of responsibility of program activities to another entity, such as to community based organizations or government.<sup>66</sup> Questions to consider for community phase over include:<sup>67</sup>

- How strong is the community’s sense of ownership/commitment to continue program activities?
- To what extent does the community value program activities? What is the level of demand for the “phased over” services?
- Do community members, groups and service providers have the knowledge and skills needed to implement the program activities?
- Do the local organizations implementing the phased over activities have sufficient institutional and human resource capacity?
- Are the organizations responsible for implementing phased over programs resilient to shocks and changes in the political and social environment?
- Is there a viable plan to generate the consumable supplies (such as the food or agricultural inputs) that are required to implement activities?

By having a clear understanding of the overall program’s direction, implementers are better able to develop action plans to ensure the successful transition of program responsibilities. Refer to the following diagrams<sup>68</sup> (Figures 5.1c and 5.1d) for pathways to accomplishing a successful phase over. Additionally, participants will explore how to successfully phase over from short-term humanitarian efforts to long-term development programming.

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<sup>65</sup> USAID. 2012.

<sup>66</sup> Rogers, B.L. and K.E. Macias. 2004.

<sup>67</sup> Gardner, A., K. Greenblott, and E. Joubert. 2005.

<sup>68</sup> PCI. 2014.

Figure 5.1c: Transition strategies diagram

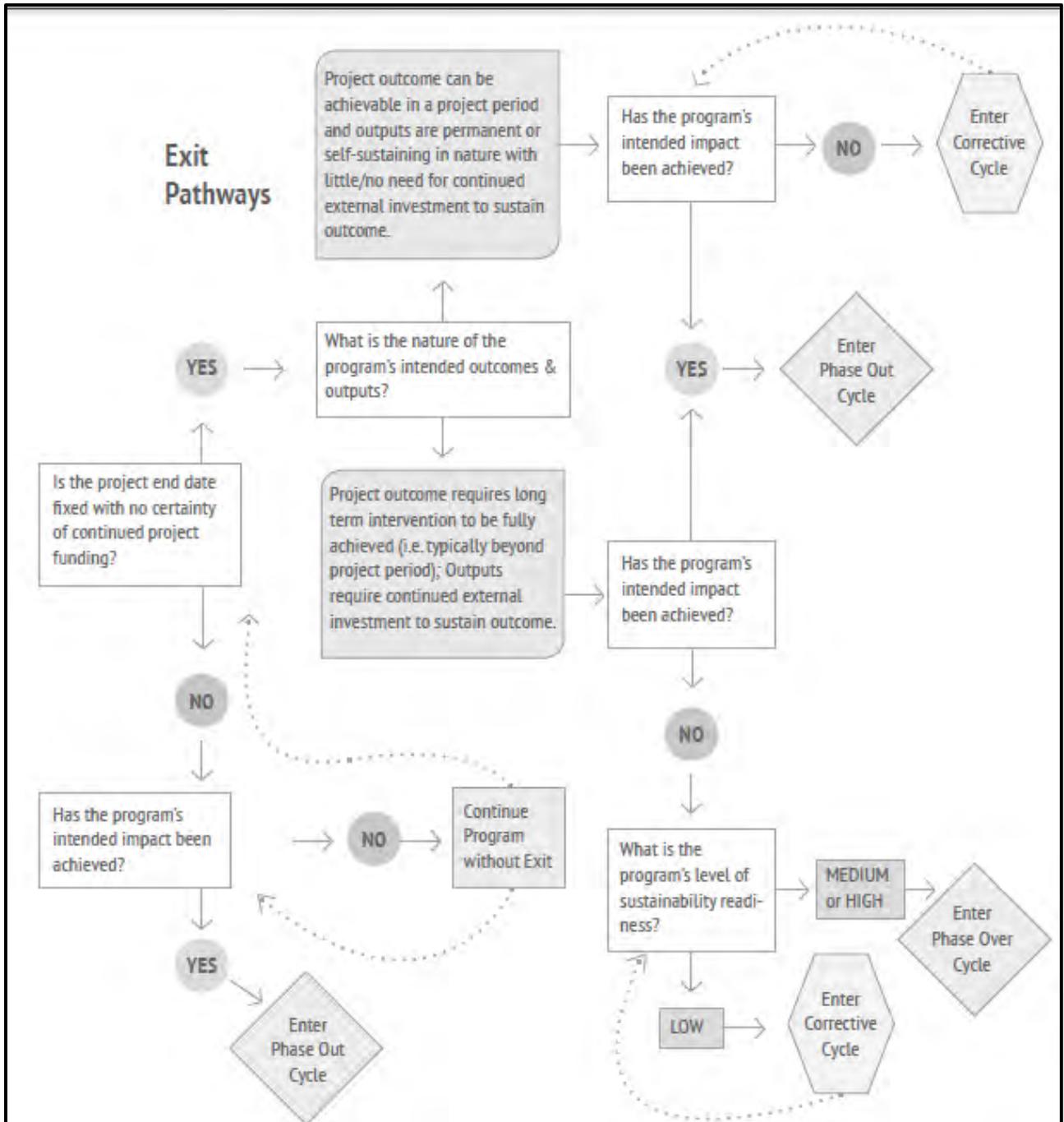
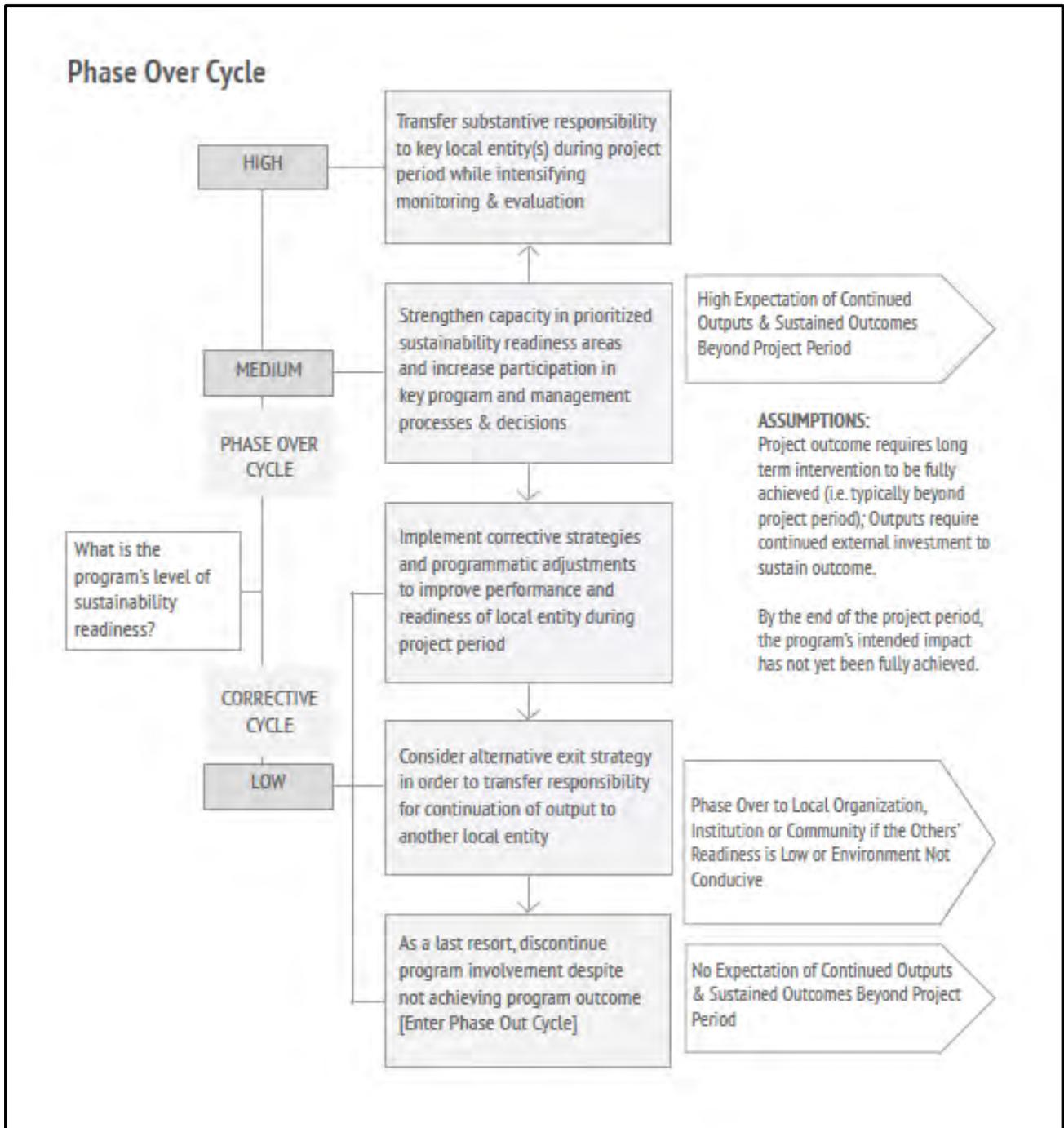
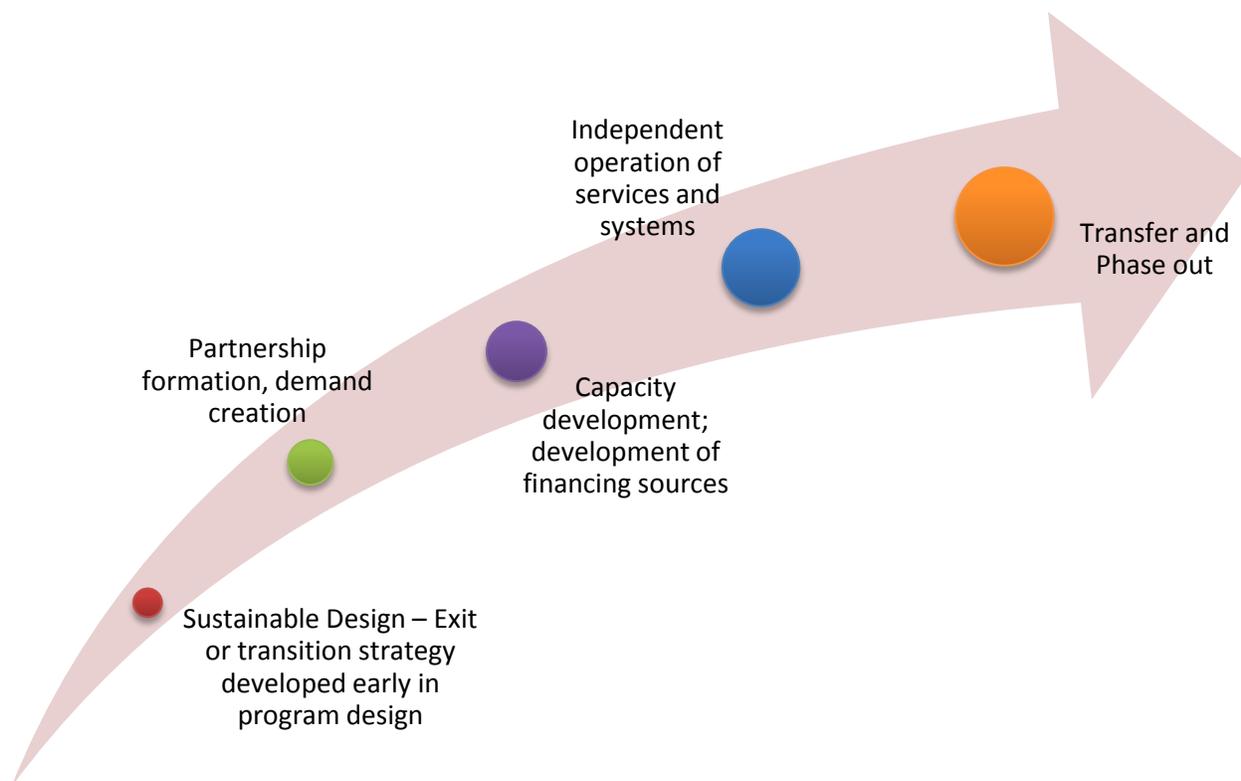


Figure 5.1d: Phase over cycle diagram



**Sustainability throughout program cycle:** It is important to build in sustainability for resilience building throughout the project cycle (see diagram below).<sup>69</sup>



**Transition gap:** Several challenges must be overcome or addressed in order to ensure a smooth transition and prevent a “transition gap”. Here are a number of factors that may contribute to the difficulty of transitioning between humanitarian and development programs:

- Chronic underfunding of DRR activities
- Lack of quick response from development programs
- Lack of flexibility to respond to situations that fluctuate between emergency and recovery
- Lack of layering of project areas
- Inability of governments to take over program activities (lack of capacity and/or resources)
- Lack of coordination between humanitarian and development actors
- Funding silos

**Ensuring a smooth transition:** These challenges, in addition to the varying definitions, objectives and concepts between humanitarian and development programs, must be overcome or addressed in order to ensure a smooth transition. Consider the following recommendations when coordinating and assessing efforts:

- Build in a flexible transition model to account for changing situations on the ground.<sup>70</sup>

<sup>69</sup> PCI. 2014.

<sup>70</sup>Kopinak, J. K. 2013.

- Ensure strategies to transition from relief to development are well-coordinated and have general consensus among stakeholders.
- Begin collaborative efforts between humanitarian and development actors as early as possible.
- Develop concrete indicators for transition and/or achievement of durable solutions in partnership with stakeholders. Regularly monitor and take corrective action if the intended impact is not achieved.
- Assess resilience capacities to identify gaps when transitioning.
- Include a post-handover monitoring period of at least six months to ensure programs continue to run as planned.<sup>71</sup>

Overall, a smooth transition relies on these four principles: *communication, coordination, collaboration, and cooperation*. As simple as they may seem, these are perhaps the most difficult aspects of ensuring progress toward objectives. Additionally, both humanitarian and development actors should incorporate these key principles in their interactions not only with each other, but with local stakeholders before, during, and after the transition process. The failure to support and generally include local stakeholders may result in activities that are not sustainable and/or a duplication of services. Their input is needed to ensure a smooth transition and that exit strategies are met. Thus, “coordinators must be well trained in management and facilitation techniques and be action- rather than process-oriented.”<sup>72</sup>

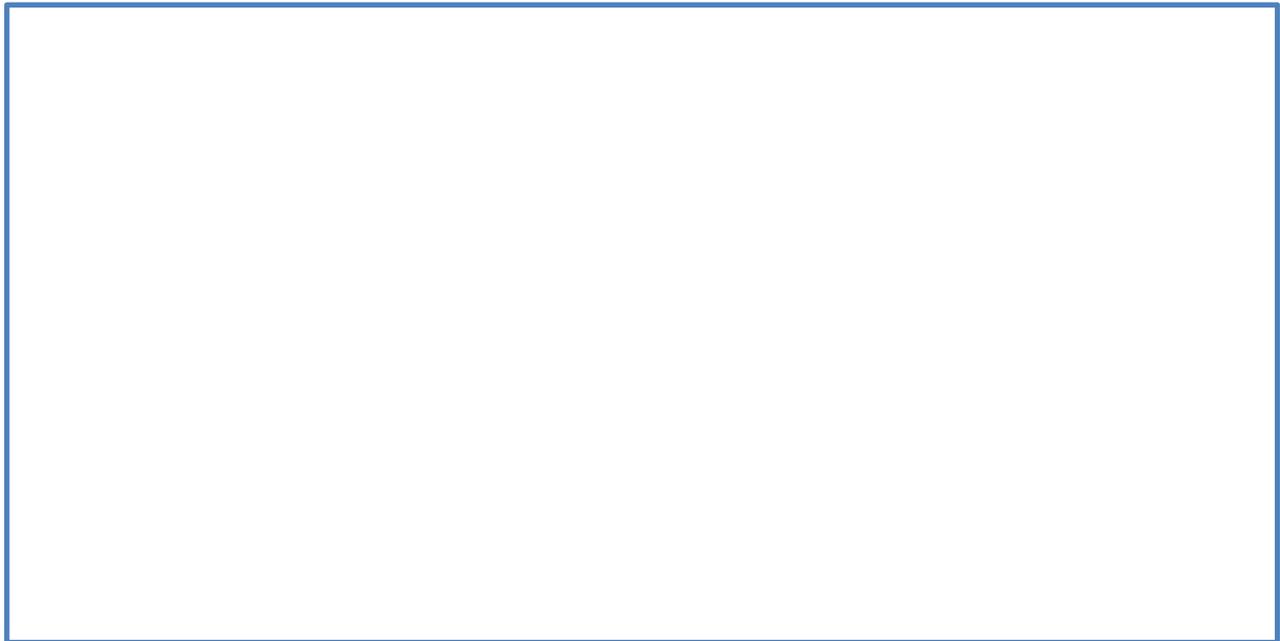
**And most importantly, transitioning in resilience programming must keep in mind that resilience is a long-term strategy!**

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<sup>71</sup> InterAction. 2013.

<sup>72</sup> Kopinak, J. K. 2013

## Plenary Discussion 5.1: How to effectively transition? Examples from real life.



**Guiding Questions:** Using the Horn of Africa 2011 drought crisis as an example, think about how to effectively transition or phase over humanitarian aid and development work. Consider the following questions:<sup>75</sup>

- What *approaches* can most effectively coordinate food assistance and long-term approaches to food security (and livelihoods) in chronically food insecure countries?
- What are the *enabling conditions* required to transition from food assistance to long-term food security and sustainable livelihoods? What can we do to help build those conditions during or after a crisis?
- How can humanitarian actors best *leverage existing development programs*, or national safety net / social protection programs, to promote best humanitarian outcomes?

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<sup>73</sup> See: <http://www.usaid.gov/crisis/horn-africa>.

<sup>74</sup> IASC. 2012.

<sup>75</sup> Humanitarian Coalition. 2012.



**Guiding question:** Using the South Sudan transition strategy example above, how can a transition strategy consider the possibility of relapse in fragile contexts?

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<sup>76</sup> USAID. 2011.

<sup>77</sup> USAID. 2011.

## RISE Exercise 5.1: Developing a transition strategy

Purpose: Under the framework of RISE, the participants will utilize the tools provided in the presentation to design and plan for transition strategies.

Materials: Exercise 5.1: Transition Strategy Matrix (below); Flipchart and markers

### Instructions:

1. Review Exercise 5.1: Transition Strategy Matrix using the following questions as a guide:<sup>78</sup>
  - a. What should the strategy achieve? (What are the objectives?)
  - b. What transition strategy do you propose for this program or specific components of your program?
  - c. What will be your overall criteria for phasing over or out? What are the indicators?
  - d. What transition activities (different from program activities) need to be implemented to meet the criteria of the Transition Strategy and to achieve the objectives?
  - e. Specify who (partners, other stakeholders, etc.) should do what activity and when. What are the vertical and horizontal linkages?
  - f. What are benchmarks for measuring the implementation and results of each transition activity?
  - g. What is the timeline to accomplish these activities?
  - h. What resources are available to implement each activity?
  - i. Who should monitor each benchmark? When should they be monitored?
2. At the facilitator's instruction, separate into project groups. Each group will use the matrix on the following page (RISE Exercise 5.1: Transition Strategy Matrix) to map out its strategies for transitioning.
3. At the end of the exercise, the facilitators will reconvene the participants and ask them to share some of the transition strategy activities they identified. The facilitator may compile these answers on the flipchart.

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<sup>78</sup> Gardner, A., K. Greenblott, and E. Joubert. 2005.

## RISE Exercise 5.1: Transition Strategy Matrix

**Phasing Over** – Transfer of responsibility for activities aimed at accomplishing program goals<sup>79</sup>

Transition Activity	Transfer of Responsibility <sup>80</sup>		Timeline	Capacity building (in what areas)	Resources	Indicators	Status to date
	Vertical Linkages	Horizontal Linkages					

<sup>79</sup> Adapted from PCI Exit Strategy Plan 2014.

<sup>80</sup> Vertical linkages refers to assistance from governmental or other organizations at a higher level; horizontal linkages refers to the network of similar groups in neighboring communities.

## Session 5.2 Action Planning for RISE

Building upon the last exercise, this session will summarize key areas for application to RISE using information gathered from daily evaluations and notes.

### Presentation 5.2: Action planning for RISE

This section of the workshop focuses on action planning for RISE and is based on the final discussion of each day and challenges identified previously. As a starting point, consider the following challenges.



### RISE Exercise 5.2: Action plan for applying lessons

Objective: Participants discuss in detail the challenges they have faced under RISE and develop action plans to address those challenges.

Materials: Part 1: RISE Challenges; Part 2: RISE Action Planning; Flip chart and markers

Instructions:

1. Participants will expand upon their current project status. Using **Part 1: RISE Challenges worksheet**, small groups answer the following questions as they relate to their role in RISE.
  - a. How have you engaged and coordinated with partners? What challenges have you faced?
  - b. What is the level of understanding of resilience programming among CBOs/communities, government entities, and partners?
    - i. How have you integrated resilience in your project?
    - ii. What challenges have you faced?

- c. How are you promoting capacity building among CBOs/communities, government entities, and partner organizations in your project? What challenges have you faced?
  - d. What are the bureaucratic challenges you have faced? Have you made any progress under the bureaucratic systems you work with?
2. When the facilitator instructs, the entire group will come together. Using the flip charts, divide up each sheet with the following titles: *partner coordination*, *understanding resilience*, *capacity building* and *bureaucracy*. Each group writes on each sheet the different challenges they have faced as it relates to the specified title.
    - a. Each small group will have the opportunity to review their challenges with the entire group. Participants should discuss how these challenges have affected their projects.
  3. After discussing in plenary, each group will be assigned one of the four categories (*partner coordination*, *understanding resilience*, *capacity building* and *bureaucracy*). With a greater understanding of the challenges faced under these categories, each small group is responsible for creating an action plan to address the specific challenges in that category using **Part 2: RISE Action Planning worksheet**.
    - a. Participants should begin by addressing the challenges that are most relevant to the previous discussion. If time allows, move on to other challenges.
    - b. During this exercise, consider the following questions:
      - i. What action or change will occur?
      - ii. What steps need to be taken to accomplish this action?
      - iii. Who will be responsible for carrying out the action?
      - iv. When will the action be completed (how long will it take)?
      - v. What resources are available? What resources are needed (financial, human, political, other)?
      - vi. What are the potential barriers?
      - vii. What individuals and organizations should be informed about/involved with these actions?
  4. When the facilitator instructs, reconvene to share some of the action steps your small group has identified for these categories.
  5. At the end of this exercise, the facilitator will ask participants how they can use these action plans in their own projects.

**Note:** The handouts may not have enough space for participants to write out their answers/action plans. Participants are not limited to the space provided.

## Part 1: RISE Challenges worksheet

*Several challenges have arisen while working under RISE including coordinating with partners, understanding resilience, building capacity and working with bureaucratic systems. In groups, answer the following questions as they relate to RISE.*

<b>Partner Coordination</b>	<p><b>How have you engaged and coordinated with partners?</b></p> <p><b>What challenges have you faced?</b></p>
<b>Understanding Resilience</b>	<p><b>What is the level of understanding of resilience among CBOs/communities, government entities, and partner organizations?</b></p> <p><b>How have you integrated resilience in your project?</b></p> <p><b>What challenges have you faced?</b></p>
<b>Capacity Building</b>	<p><b>How are you promoting capacity building among CBOs/communities, government entities, and partner organizations in your project?</b></p> <p><b>What challenges have you faced?</b></p>
<b>Bureaucracy</b>	<p><b>What are the bureaucratic challenges you have faced?</b></p> <p><b>Have you made any progress under the bureaucratic systems you work with?</b></p>

**Part 2: RISE Action Planning worksheet<sup>81</sup>**

<b>Challenge: (Circle one)</b>						
Partner Coordination		Understanding Resilience		Capacity Building		Bureaucracy
Action	By Whom	By When	Resources and Support		Potential Barriers or Resistance	Communication Plan for Implementation
			Available	Needed		

<sup>81</sup> Adapted from the University of Kansas Work Group on Community Health and Development. 2014

## Session 5.3 Bringing it Home

This session provides opportunity for final summary, questions, and wrap-up for the workshop.

### Plenary Discussion 5.3: Where to go from here?

The facilitator guides a plenary discussion on lessons learned from the workshop and how participants intend to apply lessons.

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## End of Module 5. End of Training.

## Commonly Used Acronyms

BuRP	Bulungi Resilience Program (case study)
CBO	Community Based Organizations
CLA	Collaborative Learning and Adapting
DRR	Disaster Risk Reduction
EVD	Ebola Virus Disease
FANTA	Food and Nutrition Technical Assistance
FAO	Food and Agriculture Organization
FCS	Food Consumption Score
FEWS Net	Famine Early Warning Systems Network
HABP	Household Asset Building Program
HA/DA	Humanitarian Assistance/Development Assistance
HFIAS	Household Food Insecurity Access Score
HHS	Household Hunger Scale
HDDS	Household Dietary Diversity Score
IPC	Integrated Food Security Phase Classification
JPC	Joint Planning Cells
KM	Knowledge Management
OECD	Organisation for Economic Co-operation and Development
OFDA	Office of Foreign Disaster Assistance
PRIME	Pastoralist Areas Resilience Improvement and Market Expansion
PSNP	Productive Safety Nets Program
RAIN	Revitalizing Agricultural/Pastoral Incomes and New Markets
RFM	Risk Financing Mechanisms
RISE	Resilience in the Sahel Enhanced
TANGO	Technical Assistance to Non-Governmental Organizations International
USAID	United States Agency for International Development
WFP	World Food Programme
ZOI	Zones of Influence

# Case Study Exercise 1.3 Joint Problem Analysis

## Comprehensive Assessment – Qualitative Data

### Food Security and Nutrition

Female FG participants reported that during food shortages, portion sizes of meals are reduced and if they persist or get worse, certain household members are given priority. In the worst cases, older children and adults will only eat once a day or once every other day depending on the food available in the house. Regarding borrowing food from a relative or neighbor, FGDs are suggestive that there are strong cultural norms to help the less fortunate, whether by providing food, grain, labor, wood or money as “gifts” or by sharing cattle, plows, or labor to prepare fields or reconstruct houses destroyed by floods, etc. One female FG participant claimed that “hunger is no longer common” in their community, even during drought. Rather than “sitting and waiting for help,” they might collect firewood from the mountains in order to sell in the city, seek wage labor as maids, or even purchase chat for resale. In other words, these women reported taking proactive steps to mitigate the effects of food shortages when possible.

FG participants indicated that children as a group tend to be one of the most vulnerable to food insecurity. According to KIIs with health extension workers, nutrition screening typically occurs during vaccination campaigns, but the campaigns are severely understaffed and under-resourced. Interviewees also reported that there is often little or no supplementary/therapeutic foods available, even for those children diagnosed as malnourished. When children are diagnosed as severely malnourished, they are referred to a community health clinic. Lack of adequate transportation and road infrastructure are major issues preventing health extension workers from accessing remote and scattered rural communities. Malnutrition may be exacerbated when families migrate, as finding food becomes even more challenging under such stressful conditions. Health workers also suggest that polygamy, and cultural reluctance to use family planning, contribute to malnutrition, in particular as it can be difficult for men to provide for his children from multiple wives.

**Table 1: Household hunger scale and prevalence of hunger**

Indicator	All	Pastoralist status		
		Pastor- alist	Agro- pastor alist	Non- pastor alist
<b>Household food insecurity access scale</b>				
Mean	7.2	6.9 <sup>a</sup>	7.0 <sup>b</sup>	8.2 <sup>ab</sup>
<b>Food security groups (percent)</b>				
Food secure	26.9	24.7	26.5	31.0
Mildly food insecure	3.8	4.0	3.4	4.0
Moderately food insecure	33.9	39.3 <sup>a</sup>	37.3 <sup>b</sup>	19.7 <sup>ab</sup>
Severely food insecure	35.4	32.0 <sup>a</sup>	32.8 <sup>b</sup>	45.2 <sup>ab</sup>
<b>Hunger</b>				
Household hunger scale	0.66	0.55 <sup>a</sup>	0.55 <sup>b</sup>	1.0 <sup>ab</sup>
Hunger (percent)	18.8	15.2 <sup>a</sup>	16.2 <sup>b</sup>	28.6 <sup>ab</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 2: Child malnutrition - Wasting among children under 5**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
Percent wasted	12.2	13.5 <sup>a</sup>	13.2 <sup>b</sup>	8.1 <sup>ab</sup>
Percent severely wasted	5.4	6.4 <sup>a</sup>	5.8 <sup>b</sup>	3.0 <sup>ab</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level.

Comparisons are across columns.

## Shock Exposure, Coping Strategies, and Recovery

Importantly, according to the qualitative data, it is the increased threat of severe, recurrent drought, accompanied in recent years by heavy flooding, that people perceive as the biggest threat they face on a continuing basis. The combination of alternating droughts and flooding have increased the frequency of shocks experienced by households, and the dual nature of the shocks have increased stress on crop and livestock production. Focus group discussions reveal that people have moved from considering drought to be a normal cyclical phenomenon that they were able to cope with to a more frequent disturbance that disrupts household stability and community life. Shocks underlie an increase in localized conflict between different groups that live in close proximity to each other. Conflict over pasture and water is a long-standing issue, but is exacerbated during severe or sustained drought. Because of the need to avoid conflict, pastoralist households lose flexibility in their ability to make the best migration decisions to ensure the survival of their animals.

*“Due to shortage of rainfall ....farming is limited. There is serious food shortage as a result: there is nothing to eat.”* –Female FGD participant;

Resilience is a set of capacities that enable households and communities to effectively function in the face of shocks and stresses and still meet a set of well-being outcomes.

**Ability to Recover and Coping Strategies.** Households’ subjective reports of their ability to recover from actual shocks they experience is a key source of information on the strength of their resilience. Most quantitative survey households reported that they had not recovered from the shocks they had experienced in the previous year. From the qualitative data, nearly all focus group participants stated that shocks are becoming more frequent and are severely straining traditional coping strategies. These heightened shocks have motivated communities to undertake more cooperative activities to mitigate their effects, though people acknowledge that the scale of some shocks exceed their capacities. Pastoralists in particular, according to focus groups, are better able to recover from economic shocks than agro-pastoralist or non-pastoralists. Pastoralists are also better able to cope with climate shocks through migration, though this often brings them into conflict with other groups.

Households use a narrow range of coping strategies in response to shocks, the most common ones being selling off livestock assets, reducing food consumption, and relying on family members for loans. Taking children out of school is avoided as a coping strategy, and permanent migration is not viewed as desirable unless there is little other choice. A substantial minority of households rely on access to food-for-work or cash-for-work schemes of government or NGOs.

**Social Capital.** The quantity and quality of social networks and access to larger institutions in society are critical resources that people need both to survive and to improve their livelihoods. Social interactions and networks are complex, with many traditional mechanisms for community cooperation and control. Informal support from relatives, neighbors or friends, such as loans, gifts or remittances, is received far more often than formal support from government or NGOs (e.g., food rations and food- or cash-for-work).

FG participants stated that there is strong community belief in helping those who have little; priority is given to those who have the least or have the biggest problem. They explained that elders and the disabled come first in the culture; then religious and community leaders. They do not work to solve problems based on family and clan level, rather they try to solve problems as a community: “Community leaders and elders advise us and make us help each other at the time of shocks. They tell us to give half of what we have to the one who is in need and to do things together as a group when the time is bad.”

*“If your neighbor doesn’t have a cow to be milked you have a responsibility to give one for him from yours. For example, I didn’t grow that much this year so I went to my neighbors and tell them I couldn’t survive the summer with the food I have so they gave me food and seed to grow for the next winter.”* –Female FGD participant

**Aspirations and Confidence to Adapt.** Aspirations and confidence to adapt are psychosocial capabilities that are thought to give people greater resilience in the face of shocks. They are examined in this report using three indicators--absence of fatalism, belief in individual power to enact change, and exposure to alternatives to the status quo--combined into an overall index. The index shows little or no difference in this aspect of resilience across the pastoralist status groups. However there are some notable differences in the index components across groups. Pastoralists are more likely to believe in individual power to enact change, but also more likely to have fatalistic attitudes. Exposure to alternatives to the status quo is very low among all groups. The qualitative data show that the high degree of fatalism among households is countered by an equally strong belief in individual power to enact change. This duality mirrors opinions expressed in focus groups, that while there are factors outside of individuals’ control, like drought and flood, households and communities that work hard and take measures to protect their assets will have better outcomes.

**Table 3: Percent of households experiencing various shocks in the last year**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Climate shocks</b>				
Too little rain/drought	43.6	46.2	41.9	42.4
Livestock/crop disease	47.0	48.3 <sup>a</sup>	50.3 <sup>b</sup>	39.0 <sup>ab</sup>
Very bad harvest	40.3	37.1 <sup>a</sup>	45.7 <sup>ab</sup>	35.6 <sup>b</sup>
Excessive rains	14.9	13.3 <sup>a</sup>	13.6 <sup>b</sup>	19.7 <sup>ab</sup>
Landslides/erosion	14.4	13.9	15.6	13.1
<b>Conflict shocks</b>				
Theft of money	1.9	2.3	1.5	2.1
Theft of crops	1.5	1.3	2.0	0.8
Theft or destruction of assets	1.4	1.3	1.0	2.2
Theft of livestock	3.1	4.3 <sup>a</sup>	2.8	2.0 <sup>a</sup>
Destruction or damage of house due to raids	0.4	0.5	0.2	0.5
Loss of land due to conflict	1.1	1.2	0.9	1.2
Violence against household members	0.5	0.2 <sup>a</sup>	0.5	1.0 <sup>a</sup>
<b>Economic shocks</b>				
Sharp food price increases	63.5	65.7	61.7	63.2
Unavailability of agricultural or livestock inputs	23.0	21.7	24.0	23.3
No demand for agricultural or livestock products	16.6	15.9	18.0	14.9
Increase in price of agricultural or livestock inputs	38.7	40.1	39.2	35.6
Drop in price of agricultural or livestock products	23.5	24.2	23.7	21.9
Death of household member	4.2	2.7 <sup>ab</sup>	4.4 <sup>a</sup>	6.1 <sup>b</sup>
<b>Any shock in the last year</b>	<b>86.8</b>	<b>87.0</b>	<b>87.8</b>	<b>84.7</b>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

## Assets and Consumption Expenditures

The main challenges to livestock rearing are animal disease, land degradation due to invasive plant species, predators, drought and overgrazing. Participation in livestock markets is widespread, but not universal: about 60 percent of all households either purchased or sold an animal in the year prior to the survey. Travel distances to markets, in addition to lack of information and means of communication, are factors limiting market participation. The commodities produced from livestock—meat, milk and hides—are a vital part of the livestock production and marketing system. Households consume most of the meat, milk and hides that they produce: subsistence production dominates.

Livelihood diversification is important for resilience because it allows flexibility, reducing households' vulnerability in the face of shocks. Among the pastoralist status groups, agro-pastoralists have the widest diversity of livelihoods, followed by pastoralists and non-pastoralists. Ownership of productive assets, access to markets, services, infrastructure and information are equally important factors determining households' resilience (see next section). In general, conditions in this dimension of resilience are better for pastoralists than agro- and non-pastoralists.

FGDs relevant to livelihood diversification provide some information about women's contribution to such diversification. FG participants in a pastoral area said that women who live near roads can engage in petty trade. Other women have started raising chickens, which are the only property they have full authority over without involvement of their husbands. One FGD suggested that widows tend to be more "prosperous" because they are more free to engage in livelihood activities and sometimes qualify for targeted support. In one community, the identified "positive deviant" was a widow. She explained that the culture makes women dependent on men but when widowed,

women are forced to work hard and exercise their own initiative. An example of a positive change for widowed women is that they can sell livestock, while married women cannot because they don't have the authority to make household decisions.

**Table 4: Productive assets**

Indicator	All	Pastoralist status		
		Pastor- alist	Agro- pastro ralist	Non- pastro ralist
Agricultural productive assets (percent HHs owning)				
Plough yoke	66.6	66.7 <sup>a</sup>	78.0 <sup>a</sup>	46.0 <sup>a</sup>
Plough beam	64.4	65.7 <sup>a</sup>	76.8 <sup>a</sup>	40.5 <sup>a</sup>
Plough lever	64.3	65.6 <sup>a</sup>	76.8 <sup>a</sup>	40.1 <sup>a</sup>
Pair of plough blade	63.7	65.1 <sup>a</sup>	76.0 <sup>a</sup>	39.6 <sup>a</sup>
Leather tie for plough	59.7	59.6 <sup>a</sup>	71.9 <sup>a</sup>	38.1 <sup>a</sup>
Metal-plough	58.5	61.2 <sup>a</sup>	69.7 <sup>a</sup>	34.4 <sup>a</sup>
Sickle	56.3	52.7 <sup>a</sup>	68.4 <sup>a</sup>	40.3 <sup>a</sup>
Pick axe	45.3	47.1 <sup>a</sup>	50.4 <sup>b</sup>	33.6 <sup>ab</sup>
Axe	76.3	82.1 <sup>a</sup>	79.2 <sup>b</sup>	62.3 <sup>ab</sup>
Pruning/cutting shears	7.6	5.2 <sup>ab</sup>	8.4 <sup>a</sup>	9.8 <sup>a</sup>
Hoe	42.5	43.6 <sup>a</sup>	46.8 <sup>b</sup>	33.3 <sup>ab</sup>
Spade or shovel	43.0	47.7 <sup>a</sup>	46.1 <sup>b</sup>	30.4 <sup>ab</sup>
Whip (leather)	45.6	50.0 <sup>a</sup>	53.9 <sup>b</sup>	24.4 <sup>ab</sup>
Traditional beehive	13.4	15.6 <sup>a</sup>	14.9 <sup>b</sup>	7.7 <sup>ab</sup>
Modern beehive	1.1	0.7	1.2	1.3
Knapsack chemical sprayer	1.5	1.1	1.7	2.0
Mechanical water pump	0.6	0.4	0.6	1.0
Motorized water pump	0.6	0.2 <sup>a</sup>	0.7	1.1 <sup>a</sup>
Stone grain mill	19.1	14.7 <sup>a</sup>	23.1 <sup>a</sup>	18.7
Motorized grain mill	0.8	0.4	1.2	0.5
Broad bed maker	2.4	1.7	3.1	2.2
Small tractor	0.4	0.0 <sup>ab</sup>	0.5 <sup>a</sup>	0.8 <sup>b</sup>
Hand-held motorized tiller	2.3	1.2 <sup>a</sup>	3.5 <sup>a</sup>	1.9
Index of agricultural productive assets <sup>c/</sup>	8.1	8.2 <sup>a</sup>	9.4 <sup>a</sup>	5.7 <sup>a</sup>
Animals (TLUs owned) <sup>d/</sup>	6.4	10.1 <sup>a</sup>	5.5 <sup>a</sup>	2.5 <sup>a</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>c/</sup> This index is the sum of assets owned with three sets grouped together into one category: Traditional beehive and modern beehive, Mechanical water pump and Motorized water pump, and Stone grain mill and motorized grain mill. The index ranges from 0 to 21.

<sup>d/</sup> Tropical livestock units (see Section 3.5).

**Table 5: Livestock assets**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
Percent of households owning various animals				
<b>Cattle</b>				
Oxen	49.2	55.8 <sup>a</sup>	56.3 <sup>b</sup>	26.4 <sup>ab</sup>
Bulls	11.8	18.7 <sup>a</sup>	10.0 <sup>a</sup>	4.8 <sup>a</sup>
Young bulls	23.8	32.3 <sup>a</sup>	25.3 <sup>a</sup>	8.6 <sup>a</sup>
Exotic bulls	0.3	0.3	0.2	0.3
Local cows	82.0	94.6 <sup>a</sup>	88.3 <sup>a</sup>	51.5 <sup>a</sup>
Crossbred cows	0.4	0.3	0.5	0.4
Exotic cows	0.3	0.4	0.2	0.3
Local heifers	32.4	44.9 <sup>a</sup>	32.4 <sup>a</sup>	13.4 <sup>a</sup>
Crossbred heifers	0.1	0.0	0.1	0.3
Exotic heifers	0.2	0.2	0.3	0.1
Local calves	68.3	87.1 <sup>a</sup>	72.0 <sup>a</sup>	33.7 <sup>a</sup>
Crossbred calves	0.2	0.4	0.1	0.0
Exotic calves	0.1	0.0	0.1	0.0
<b>Poultry</b>				
Poultry	32.7	34.2 <sup>a</sup>	37.9 <sup>b</sup>	21.2 <sup>ab</sup>
<b>Sheep/goats</b>				
Sheep	55.5	64.4 <sup>a</sup>	60.0 <sup>b</sup>	33.9 <sup>ab</sup>
Goats	72.2	82.9 <sup>a</sup>	76.1 <sup>a</sup>	49.3 <sup>a</sup>
<b>Other</b>				
Donkeys	34.7	37.9 <sup>a</sup>	38.1 <sup>b</sup>	23.8 <sup>ab</sup>
Horses	0.2	0.4 <sup>a</sup>	0.0 <sup>a</sup>	0.1
Mules	0.7	1.9 <sup>ab</sup>	0.2 <sup>a</sup>	0.00 <sup>b</sup>
Camels	16.4	26.4 <sup>a</sup>	13.1 <sup>a</sup>	7.3 <sup>a</sup>
<b>Summary by category of animal (percent)</b>				
Cattle (excluding oxen)	85.5	96.0 <sup>a</sup>	92.4 <sup>a</sup>	57.4 <sup>a</sup>
Oxen	49.2	55.8 <sup>a</sup>	56.3 <sup>b</sup>	26.4 <sup>ab</sup>
Poultry	32.7	34.2 <sup>a</sup>	37.9 <sup>b</sup>	21.2 <sup>ab</sup>
Sheep/goats	79.1	88.5 <sup>a</sup>	83.5 <sup>a</sup>	56.8 <sup>a</sup>
Other	43.7	52.3 <sup>a</sup>	45.0 <sup>a</sup>	28.6 <sup>a</sup>

<sup>a, b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

### Access to Markets, Services, and Information

Male FGDs in multiple communities claimed that the community has no information about markets and prices, though there is access to markets. The sources of information about market prices are typically traders and individual visits to the market place prior to making a decision to sell. They are not in a position to make contact with traders due to limited road and telephone infrastructure. As a result, they are often persuaded to sell livestock to brokers below fair market prices. FG participants talked about the multiple negative consequences of limited access to roads, particularly on women's health and on market access. In one region, men mentioned that lack of transportation limits access to emergency services, health services (especially for pregnant women), purchase of food and implementation of development activities.

*“The health post, school and veterinary clinic are not prepared with professionals or equipment. We travel to the main city for medical support. Even pregnant and bleeding mothers travel too far for treatment.”* –Male FGD participant

In terms of disaster planning, some communities report that they receive warning from NGOs and government that rainfall is declining and a dry period is coming, and they need to sell their animals before losing them. Others claim they have little or no advance information from the government or any other agency related to impending drought. Instead, respondents in some male FGs say they obtain information from elders with special talents who make forecasts. “The information they provide is sometimes true and sometimes not true.”

Female FGD respondents in agro-pastoral areas say that community members cooperate to prevent and recover from damage caused by flooding. During the last flood, the community came together to prevent flood waters from entering the community center to protect the community school exercise books from being damaged. Female FG participants in another community had a similar response – they come together to decide on a course of action for approaching government with requests for assistance. They also reportedly work collectively to prepare sandbags and other flood mitigation activities aimed at preventing damage to farm land.

### **Resilience Capacities Indices**

**Absorptive capacity.** FG participants gave many examples of how they now take preventive measures based on what they have learned from previous shocks. Female FG participants provided examples of how they have adapted to the threat of floods by building terraces on agricultural land and creating drainage canals for flood water. Other women have built a water reservoir for their cattle, and now will now take animals to the to the animal health post when they are sick. The female FG participants further discussed how previously, they migrated in response to drought, but now they work together to protect their farm and animals from drought and flood. Other women say that households in their community organize into groups of five to 10 households to plough fields together. Additionally, a group of women started saving but claim that thus far it has not been effective as follow up and support was not there. The women said that there were many of them when starting the saving, but now there are only about nine who keep on saving even though they do not know what to do with the savings.

Male FG participants in agro-pastoral areas report that the community came together to plan a course of action in response to unpredictable rainfall and drought. They decided irrigation was the best solution and dug about 15 wells. However, they lack pumps to get the water to the crops or cement to line the wells. In a pastoral area, communities try to develop traditional water wells during droughts, and they are reportedly increasingly willing to involve elders and government to solve conflicts.

**Adaptive capacity:** FG discussions with community members showed that people are taking action to adapt to changing economic and environmental conditions. Female FGD participants claim that in the past they engaged in small-scale agriculture on their own lands and had no other livelihood strategies. Now, they’ve begun to sell cattle and rent additional parcels of land that they cultivate simultaneously in case the crop on their own land is insufficient or lost. They also claim that hunger is no longer common in their community, even during periods of drought. Rather than “sitting and waiting for help” during drought, they are more likely to go to the mountains to collect firewood which they then sell in the city. Alternatively, they might work as maids in the city. The men observed that when drought comes some people are better able to cope in drought seasons and

times of hardship because they have diversified their livelihoods and they are flexible in responding to the shocks.

Men in one community reported having better access to cattle and grain prices via brokers on mobile phones compared to without mobile phones. They said that access to mobile phones is increasing but there is currently no government or NGO involvement in boosting access.

Several FGD participants (male and female) identified greater willingness to support school attendance and other trainings as an important means of adaptation to changing economic and environmental conditions. Female FGD participants also said in addition to greater support for children's education, women are prepared to seek out educational opportunities for themselves. Doing so makes them feel better prepared to directly address problems in society.

**Transformative capacity:** According to FG participants in an agro-pastoral area, government officials (teachers, extension agents, health extension workers, district administrators) and NGOs are often the facilitators of collective community actions that can bring about the system-level changes that underlie transformative capacity. Collective action is coordinated by tribal leaders as well as government structures at various levels, and the leaders of groups of households, who convey various messages about collective action as well as emergency warnings. Many communities say they have good links with government. When a need arises, communities report to the government and if government can't offer support, it will link them to NGOs. Government representatives have also worked to formally facilitate women's empowerment by raising awareness of their rights to equality and ownership of assets. Women also participate in trainings both from NGOs and government, and some women have organized in groups to save and borrow money, though inclusivity of such groups is reportedly a challenge.

FG respondents in a pastoral area also report that relations with the government have gone from very little contact to what is now a "useful" relationship in terms of social protection and conflict mitigation. Women in one community say that the government has supported them by providing farm inputs and information, and advice on which vaccinations to obtain for their animals. However, male FGD participants talked about their dissatisfaction with a water reservoir under construction whose design will not meet the water needs of the community.

# Session 2.3 Sample Baseline Instruments

## Annex 2: Household Questionnaire

	<b>Humanitarian to Development Resilience Collaboration Training</b> <b>USAID/Senegal 2014</b>  <b>Joint Assessment: Household Questionnaire</b>
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This questionnaire is meant to provide information about pastoralist, agro-pastoralist and marginal farming households in case study areas.

### Household Identification Cover Sheet

Date of Survey | \_\_\_\_\_ |

Record ID	101: Region	102: Zone	103: District	104: City	104sp: Specify Commu	105: EA Code	106: GPS UNIT (UTM reading)				107: Enumerator Code	108: Supervisor Code	
							106g_acc Accuracy	106g Elev	106g_lat Lat	106g_long Long			

Interview Status (through Module 21)		Interview status comments:
1	Completed	
2	HH present, no adult respondent available	
3	HH absent	
4	Postponed	
5	Refused	
6	Dwelling vacant	
7	Dwelling destroyed	
8	Dwelling not found	
9	Other	

Please have the survey supervisor provide a quality rating for the survey and certify that the data were collected in accordance with the survey design and guidance.

SQ1. The quality of this completed questionnaire is:  
 Poor       Average       Excellent

SQ2 Did you back check this survey? 1. Yes 2. No  
 “I certify that this questionnaire has been collected in accordance with the survey design and survey guidance.”

Survey Supervisor Name (please print): \_\_\_\_\_  
 Date of Verification: \_\_\_\_\_

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# Household Demographics

## MODULE 1.0 Household Identification and Informed Consent

Thank you for the opportunity to speak with you. We are from the United States Agency for International Development Mission in Bulungi. We are conducting a survey to learn about agriculture, food security, food consumption, nutrition and wellbeing of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as your family background, dwelling characteristics, household expenditures and assets, household food consumption and nutrition of children. The survey includes questions about the household generally, and questions about individuals within your household, if applicable. These questions in total will take approximately one and half hours to complete and your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or to skip any questions you do not want to answer. Your answers will be completely confidential; we will not share information that identifies you with anyone.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey and the interview, or concerns or complaints we welcome you to contact the USAID/Bulungi Mission. We will leave one copy of this form for you so that you will have record of this contact information and about the study.

-PLACEHOLDER FOR SIGNATURE TABLE-

## MODULE 2.0 Household Roster and Demographics

201	202	203	204	205	206	207	208	209	210	211	212	213
Household member name (Start with household head)	[name]'s Age in completed years  Enter '00' for less than 1 year	[name]'s Sex 1 Male 2 Female -8 DK -9 Refused	[name]'s Relationship to household head  Enter codes from list	[name]'s Disability  Enter from list	For ages 5 years and above			For ages 10 years and above			Identification of children 0-59 months old and caregiver	
					[name]'s Max education completed  Enter from list	Can [name] read or write? 1 Yes 2 No -8 DK -9 Refused	Can [name] read or write English? 1 Yes 2 No -8 DK -9 Refused	[name]'s Marital status  Enter from list	[name]'s Primary Occupation  Enter from list	[name]'s Ethnic Group  Enter from list	Child under 6? (Calculated automatically)	ID of caregiver of [name] (Enter)
01											01	<input type="checkbox"/> <input type="checkbox"/>
02											02	<input type="checkbox"/> <input type="checkbox"/>
03											03	<input type="checkbox"/> <input type="checkbox"/>
04											04	<input type="checkbox"/> <input type="checkbox"/>
05											05	<input type="checkbox"/> <input type="checkbox"/>
06											06	<input type="checkbox"/> <input type="checkbox"/>
07											07	<input type="checkbox"/> <input type="checkbox"/>
08											08	<input type="checkbox"/> <input type="checkbox"/>
09											09	<input type="checkbox"/> <input type="checkbox"/>
10											10	<input type="checkbox"/> <input type="checkbox"/>
11											11	<input type="checkbox"/> <input type="checkbox"/>
12											12	<input type="checkbox"/> <input type="checkbox"/>
13											13	<input type="checkbox"/> <input type="checkbox"/>
14											14	<input type="checkbox"/> <input type="checkbox"/>
15											15	<input type="checkbox"/> <input type="checkbox"/>

## Household Roster and Demographics Code List

204 Relationship Type		206 Education		210 Occupation		211 Ethnic Group	
01	Head	01	Never Attended	01	Labour on own farm ( <u>unpaid</u> )	01	A
02	Spouse	02	1 <sup>st</sup> Grade	02	Labour on other farms ( <u>paid</u> )	02	B
03	Son/daughter of head and	03	2 <sup>nd</sup> Grade	03	Livestock rearing ( <u>unpaid</u> )	03	C
04	Son /daughter of head	04	3 <sup>rd</sup> Grade	04	Livestock rearing ( <u>paid</u> )	04	D
05	Son/daughter of spouse	05	4 <sup>th</sup> Grade	05	Casual off-farm labour ( <u>paid</u> )	05	E
06	Mother/father of head/ spouse	06	5 <sup>th</sup> Grade	06	Household/domestic/housewife ( <u>unpaid</u> )	06	F
07	Sister/brother of head/spouse	07	6 <sup>th</sup> Grade	07	Childcare/domestic work ( <u>paid</u> )	07	G
08	Foster child	08	7 <sup>th</sup> Grade	08	Rope making	08	H
09	God child	09	8 <sup>th</sup> Grade	09	Civil service/official	09	I
10	Grand child	10	9 <sup>th</sup> Grade	10	School teacher	10	J
11	Other relatives	11	10 <sup>th</sup> Grade	11	Trading/business	11	K
12	Non-relatives	12	11 <sup>th</sup> Grade	12	Chief/village elder	12	L
-8	DK	13	12 <sup>th</sup> Grade	13	Unable to work due to illness	13	Other (specify)
-9	Refused	14	Incomplete higher education	14	Retired/elderly	-8	DK
<b>205 Disability</b>		15	Completed higher education	15	Child/student	-9	Refused
00	None	16	Adult literacy program	16	Other (specify)		
01	Partial visual impairment	17	Other literacy program	-8	DK		
02	Total visual impairment	18	Some church/mosque	-9	Refused		
03	Partial hearing impairment	-8	DK				
04	Total hearing impairment	-9	Refused				
05	Mobility and orthopedic	<b>209 Marital status</b>					
06	Other (Specify)	01	Married				
-8	DK	02	Single				
-9	Refused	03	Divorced/separated				
		04	Widowed				
		-8	DK				
		-9	Refused				

# Food Security and Nutrition

## MODULE 3.0 Household Dietary Diversity

Ask these questions of whoever is most knowledgeable about the food consumption of household members.

Now I would like to ask you about the types of foods that you or anyone else in your household ate yesterday during the day and at night.

Please include all food eaten both at your home or away from home.

Read the list of foods. Choose “yes” if anyone in the household ate the food in question. Choose “no” if no one in the household ate the food.

301	Any bread, rice, pasta, biscuits, or other foods made from teff, barley, millet, sorghum, maize, rice, wheat?	1. Yes 2. No -8 DK -9 Refused
302	Any foods made with potatoes, yams, sweet potatoes, irish potatoes, manioc, cassava, kocho, godere, anchote, amicho, boina and boye,or bula?	1. Yes 2. No -8 DK -9 Refused
303	Any food made with vegetables such as onions, cabbage, green leafy vegetables, gathered wild green leaves, tomato, cucumber, pumpkin, mushroom, kale, leak, green pepper, beet root, garlic, or carrots?	1. Yes 2. No -8 DK -9 Refused
304	Any food or fruit juices made from fruits such as mango, banana, oranges, pineapple, papaya, guava, avocado, wild fruit, or apple?	1. Yes 2. No -8 DK -9 Refused
305	Any food made from beef, lamb, goat, wild game, chicken, or other birds, other meats?	1. Yes 2. No -8 DK -9 Refused
306	Any eggs?	1. Yes 2. No -8 DK -9 Refused
307	Any fresh fish, smoked fish, fish soup/sauce or dried fish or shellfish?	1. Yes 2. No -8 DK -9 Refused

308	Any foods made from beans (white, brown, horse), peas, lentils, chick peas, rape seed, linseed, sesame, sunflower, vetch soybean flour or nuts (groundnuts, groundnut flour)?	1. Yes 2. No -8 DK -9 Refused
309	Any cheese, yogurt, milk, powder milk, butter milk or other milk products?	1. Yes 2. No -8 DK -9 Refused
310	Any foods made with oil, margarine, fat, or butter?	1. Yes 2. No -8 DK -9 Refused
311	Any sugar, sugar cane, or honey?	1. Yes 2. No -8 DK -9 Refused
312	Any other foods, such as condiments, traditional beer, beer, wine, coffee or tea?	1. Yes 2. No -8 DK -9 Refused

## MODULE 4.0 Household Hunger

Ask these questions of whoever is most knowledgeable about the food consumption of household members.

401	In the past four weeks, did worry that your household would not have enough food?	1. Yes 2. No <b>(Skip to q402)</b> -8 DK -9 Refused
401a	How often did you worry that your household would not have enough food?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused
402	In the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	1. Yes 2. No <b>(Skip to q403)</b> -8 DK -9 Refused
402a	How often were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused
403	In the past four weeks, did you or any household member have to eat a limited variety of foods due to a lack of resources?	1. Yes 2. No <b>(Skip to q404)</b> -8 DK -9 Refused
403a	How often did you or any household member have to eat a limited variety of foods due to a lack of resources?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused
404	In the past four weeks, did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	1. Yes 2. No <b>(Skip to q405)</b> -8 DK -9 Refused
404a	How often did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused
405	In the past four weeks, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	1. Yes 2. No <b>(Skip to q406)</b> -8 DK -9 Refused

405a	How often did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused
406	In the past four weeks, did you or any other household member have to eat fewer meals in a day because there was not enough food?	1. Yes 2. No <b>(Skip to q407)</b> -8 DK -9 Refused
406a	How often did you or any other household member have to eat fewer meals in a day because there was not enough food?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused
407	In the past four weeks, was there ever no food to eat of any kind in your household because of lack of resources to get food?	1. Yes 2. No <b>(Skip to q408)</b> -8 DK -9 Refused
407a	How often was there ever no food to eat of any kind in your household because of lack of resources to get food?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused
408	In the past four weeks, did you or any household member go to sleep at night hungry because there was not enough food?	1. Yes 2. No <b>(Skip to q409)</b> -8 DK -9 Refused
408a	How often did you or any household member go to sleep at night hungry because there was not enough food?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused
409	In the past four weeks, did you or any household member go a whole day and night without eating anything because there was not enough food?	1. Yes 2. No <b>(Skip to next module)</b> -8 DK -9 Refused
409a	How often did you or any household member go a whole day and night without eating anything because there was not enough food?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks) -8 DK -9 Refused

## MODULE 5.0 Child Anthropometry and Animal Milk Consumption

Ask these questions of the primary caregiver of each child aged 0–59 months in the household, as identified in Module 2. Check to see if EACH caregiver has given consent to be interviewed in Module 1. If a caregiver has not yet given consent, return to Module 1 and gain caregiver consent before proceeding.

Fill in the information for q501-q503 for all of the children circled in q212 of Module 2.

			Child 1	Child 2	Child 3	Child 4	Child 5
501	Record caregiver's ID code from Module 2						
502	Record child's ID code from Module 2						
	Record child's first name						
503	What is child's sex?	1 Male 2 Female -8 DK -9 Refused					
<b>AGE OF CHILD</b>							
504	I would like to ask you some questions about [child's name].						
	In what month and year was [child's name] born?		<input type="text"/> Day				
	What is [his/her] birthday?						
			<input type="text"/> Month				
	<b>If the respondent does not know the exact birthdate ask:</b>						
			<input type="text"/> Year				
	Does [child's name] have a health/vaccination card with the birth date recorded?						
	<b>If the health/vaccination card is shown and the respondent confirms the information is correct, record the date of birth as documented on the card.</b>						

			Child 1	Child 2	Child 3	Child 4	Child 5
505	How old was [child's name] at [his/her] last birthday? <b>Record age in completed years.</b>						
			Years	Years	Years	Years	Years
506	How many months old is [child's name]? <b>Record age in completed months.</b>		Months	Months	Months	Months	Months
507	<b>Age verification</b> Check q504, q505, and q506 to verify consistency.						
	a) Is the year recorded in q504 [year] consistent with the age in years recorded in q505 [age]?	1 Yes 2 No					
	b) Are year and month of birth recorded in q504 [year]/[month] consistent with age in months recorded in q506 [age_months]?	1 Yes 2 No -8 DK -9 Refused					
	If the answer to a) or b) is "no", resolve any inconsistencies. If the birthdate was recorded on a health card, this may be used as the correct data source.						

508	Check q506. Is the child under 60 months [age_months]?	1 Yes 2 No >> Next child or end module -8 DK -9 Refused >> Next child or end module					
<b>WEIGHT OF CHILD</b>			<b>Child 1</b>	<b>Child 2</b>	<b>Child 3</b>	<b>Child 4</b>	<b>Child 5</b>
509	Does child have edema? (observe if swelling on the feet)	1 Yes 2 No -8 DK -9 Refused					
510	Weight in kilograms:		Kg	Kg	Kg	Kg	Kg
	<b>Weigh the child</b>						
<b>HEIGHT OF CHILD</b>							
511	Children under 24 months should be measured lying down; Children 24 months or older should be measured standing up.						
	Height in centimeters:						
	<b>Measure the child</b>						
			cm	cm	cm	cm	cm

ANIMAL MILK CONSUMPTION OF CHILD (for children ages 6 months and older in q2206)							
512	Do you give [child's name] cow milk to drink?	1 Yes 2 No <b>(Skip to q516)</b> -8 DK -9 Refused					
513	Where did this milk come from? <b>(Multiple responses possible)</b>	1 Own animals 2 Relative's animals 3 Bought 4 Other -8 DK -9 Refused					
514	How do you give your child cow milk? <b>(Multiple responses possible)</b>	1. pure milk to drink 2. with tea 3. with food 4. as yoghurt 5. Other -8 DK -9 Refused					
			<b>Child 1</b>	<b>Child 2</b>	<b>Child 3</b>	<b>Child 4</b>	<b>Child 5</b>
515	How much cow milk did your child take in the last week? (cups) <b>Show respondent cup and ask her to estimate the amount.</b>	__  -8 DK -9 Refused					
516	Do you give [child's name] goat milk to drink?	1 Yes 2 No <b>(Skip to q520)</b> -8 DK -9 Refused					
517	Where did this milk come from? <b>(Multiple responses possible)</b>	1 Own animals 2 Relative's animals 3 Bought 4 Other -8 DK -9 Refused					

518	How do you give your child goat milk? <b>(Multiple responses possible)</b>	1. pure milk to drink 2. with tea 3. with food 4. as yoghurt 5. Other -8 DK -9 Refused					
519	How much goat milk did your child take in the last week? (cups) <b>Show respondent cup and ask her to estimate the amount.</b>	__  -8 DK -9 Refused					
520	Do you give [child's name] camel milk to drink?	1 Yes 2 No ( <b>next module</b> ) -8 DK -9 Refused					
521	Where did this milk come from? <b>(Multiple responses possible)</b>	1 Own animals 2 Relative's animals 3 Bought 4 Other -8 DK -9 Refused					
522	How do you give your child camel milk? <b>(Multiple responses possible)</b>	1. pure milk to drink 2. with tea 3. with food 4. as yoghurt 5. Other -8 DK -9 Refused					
523	How much camel milk did your child take in the last week? (cups) <b>Show respondent cup and ask her to estimate the amount.</b>	__  -8 DK -9 Refused					

# Shock Exposure, Coping Strategies, and Recovery

## MODULE 6.0 Shocks

	601	602	603	604
	During the past <b>five</b> years (since 2008) did your household experience any [shock]? 1 Yes 2 No -8 DK -9 Refused <b>&gt;&gt;Next event</b>	How many times did you experience [shock] in the last five years?	During the past <b>one</b> year did your household experience any [shock]? 1 Yes 2 No -8 DK -9 Refused <b>&gt;&gt;Next event</b>	How many times did you experience [shock] in the last year?
<b>Climatic shocks</b>				
a. Excessive rains				
b. Too little rain/drought				
c. Livestock/crop disease				
d. Very bad harvest				
e. Landslides/erosion				
<b>Conflict shocks</b>				
f. Theft of money				
g. Theft of crops				
h. Theft or destruction of assets				
i. Theft of livestock (raids)				
j. Destruction or damage of house due to violence				
k. Loss of land due to conflict				
l. Violence against household members				
<b>Economic shocks</b>				
m. Sharp food price increase				
n. Unavailability of agricultural or livestock inputs				
o. No demand for agricultural or livestock products				
p. Increase in price of agricultural or livestock inputs				
q. Drop in price of agricultural or livestock products				
r. Death of household member				

## MODULE 6.1 Perceived Severity of Shocks and Ability to Recover

	605	606
	How severe was the impact on your income and food consumption?  <b>Enter code from list</b>	To what extent were you and your household able to recover?  <b>Enter code from list</b>
<b>Climatic shocks</b>		
a. Excessive rains		
b. Too little rain/drought		
c. Livestock/crop disease		
d. Very bad harvest		
e. Landslides/erosion		
<b>Conflict shocks</b>		
f. Theft of money		
g. Theft of crops		
h. Theft or destruction of assets		
i. Theft of livestock (raids)		
j. Destruction or damage of house due to violence		
k. Loss of land due to conflict		
l. Violence against household members		
<b>Economic shocks</b>		
m. Sharp food price increase		
n. Unavailability of agricultural or livestock inputs		
o. No demand for agricultural or livestock products		
p. Increase in price of agricultural or livestock inputs		
q. Drop in price of agricultural or livestock products		
r. Death of household member		

## Shocks Code List

605	606
Severity of impact	Ability to recover
1. None	1. Did not recover
2. Slight impact	2. Recovered some, but worse off than before [event]
3. Moderate impact	3. Recovered to same level as before [event]
4. Strong impact	4. Recovered and better off
5. Worst ever happened	5. Not affected by [event]
-8 DK	-8 DK
-9 Refused	-9 Refused

## MODULE 6.2 Coping Strategies in Response to Shocks

Only ask if household experienced a stressful event in the last year (Q603=1 for at least one event).

607. How did you cope with the stressful events you experienced in the last year? Did you....	YES	NO		YES	NO
<b>LIVESTOCK AND LAND HOLDINGS</b>				<b>COPING STRATEGIES TO GET MORE FOOD OR MONEY</b>	
a. Send livestock in search of pasture				k. Take up new wage labor	
b. Sell livestock				l. Sell household items (e.g., radio, bed)	
c. Slaughter livestock				m. Sell productive assets (e.g., plough, water pump)	
d. Lease out land				n. Take out a loan from an NGO	
<b>MIGRATION</b>				o. Take out an loan from a bank	
e. Migrate (only some family members)				p. Take out a loan from a money lender	
f. Migrate (the whole family)				q. Take out a loan from friends or relatives	
g. Send children or an adult to stay with relatives				r. Send children to work for money (e.g., domestic service)	
<b>COPING STRATEGIES TO REDUCE CURRENT</b>				s. Receive money or food from family members	
h. Take children out of school				t. Receive food aid from the government	
i. Move to less expensive housing				u. Receive food aid from an NGO	
j. Reduce food consumption				v. Participate in food-for-work or cash-for-work	
				w. Use money from savings	
				x. Get money from a relative that migrated (remittances)	

			y. Other (specify)		
--	--	--	--------------------	--	--

## MODULE 7.0 Livelihood Activities and Strategies

	701	703	704	705
	<p>What were the sources of your household's food/income over the whole last 12 months?</p> <p><b>Read each source and check those indicated by respondent.</b></p>	<p>Rank these sources based on the proportion of food/income they provide for your household</p> <p><b>Rank from 1 (highest proportion of food/income) to the number in q702.</b></p>	<p>Is this food/income source available in the dry season only, wet season only, or all year?</p> <p>1 Dry season only 2 Wet season only 3 Both -8 DK -9 Refused</p>	<p>Do you only rely on this source during times of stress?</p> <p>1 Yes 2 No -8 DK -9 Refused</p>
a. Farming/crop production and sales				
b. Livestock production and sales				
c. Wage labor (local)				
d. Salaried work				
e. Sale of wild/bush products (including charcoal)				
f. Other self-employment/own business				
g. Sale of other non-livestock assets/rental of land				
h. Remittances				
i. Gifts/inheritance				
j. Other (specify)				
k. Other (specify)				
l. Other (specify)				
	<b>702</b>			
	Total number of sources <b>(Calculated automatically)</b>			

## MODULE 8.0 Migration Patterns

801	How long has your household been living in this location?	<ul style="list-style-type: none"> <li>1. 0-2 Years</li> <li>2. &gt;2 years and ≤5 years</li> <li>3. &gt;5 years and ≤10 years</li> <li>4. Over 10 years</li> <li>-8 DK</li> <li>-9 Refused</li> </ul> <p style="text-align: right;">} → <b>Skip to q803</b></p>
802	If you have been here for two years or less, where were you before?	<ul style="list-style-type: none"> <li>1. Urban</li> <li>2. Rural</li> <li>3. Peri-urban</li> <li>4. Abroad</li> <li>-8 DK</li> <li>-9 Refused</li> </ul>
803	Do you have current plans to move location of your household?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>3. Not sure</li> <li>-8 DK</li> <li>-9 Refused</li> </ul> <p style="text-align: right;">} → <b>Skip to q806</b></p>
804	If yes: Where are you moving to?	<ul style="list-style-type: none"> <li>1. Urban</li> <li>2. Rural</li> <li>3. Peri-urban</li> <li>4. Abroad</li> <li>-8 DK</li> <li>-9 Refused</li> </ul>
805	Why (main reason)?	<ul style="list-style-type: none"> <li>1. Water/graze land/farm land;</li> <li>2. Security reasons</li> <li>3. Marriage</li> <li>4. Death of a family member</li> <li>5. Government resettlement</li> <li>6. Other (specify)</li> <li>-8 DK</li> <li>-9 Refused</li> </ul>
806	Has anyone who was living in your household migrated in the past two years?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No → <b>Skip to next module</b></li> <li>-8 DK</li> <li>-9 Refused</li> </ul>

		807	808	809	810	811
		Where did the person migrate to?  1. Urban 2. Rural 3. Peri-urban 4. Abroad -8 DK -9 Refused	Main reason for migration?  1. Education 2. Search for alternative source of income 3. Marriage 4. Conflict 5. Cultural outcast 6. Take livestock to pasture/water 7. Other (specify) -8 DK -9 Refused	How long ago did the person migrate?  1. 1-2 Months 2. 3-5 Months 3. 6-8 Months 4. 9-12 Months 5. Over a year -8 DK -9 Refused	Did the person ever send back money to your family?  1. Yes 2. No -8 DK -9 Refused	Did the person ever return?  1. Yes 2. No -8 DK -9 Refused
1	Person 1					
2	Person 2					
3	Person 3					
4	Person 4					
5	Person 5					

## MODULE 9.0 Food Insecurity Coping Strategies

	901
In the past 7 days, there have been times when you did not have enough food or money to buy food, how many days has your household had to:	Number of days out of the past seven  Use 0 – 7 to answer number of days.  -8 DK -9 Refused
a. Rely on less preferred and less expensive foods?	
b. Borrow food, or rely on help from a friend or relative?	
c. Purchase food on credit?	
d. Gather wild food, hunt, or harvest immature crops?	
e. Consume seed stock held for next season?	
f. Send household members to eat elsewhere?	
g. Limit portion size at mealtimes?	
h. Restrict consumption by adults in order for small children to eat?	
i. Feed working members of HH at the expense of non-working members?	
j. Reduce number of meals eaten in a day?	
k. Skip entire days without eating?	

## MODULE 10.0 Social Capital and Capacity-Building Support

FORMAL SOURCES OF SOCIAL SUPPORT		
1001	Has your household received any kind of support from the government, an NGO or religious organization during the last year?	1. Yes 2. No <b>(Skip to q1004a)</b> -8 DK -9 Refused
1002	Who provided the support? <b>(Multiple response)</b>	1. Government 2. NGOs 3. Religious organization 4. Other (specify) -8 DK -9 Refused
1003	What types of support were received? <b>(Read list)</b>	1. Food ration 2. Food-for-work/Cash-for-work 3. Housing materials 4. Installed water points 5. Install latrine 6. School for children 7. Cash transfer 8. Other (specify) -8 DK -9 Refused
INFORMAL SOURCES OF SOCIAL SUPPORT		
1004a	Has your household received any kind of support from relatives, neighbors or friends in the past 12 months?)	1 Yes 2 No <b>(Skip to q1005)</b> -8 DK -9 Refused
1004b	What types of assistance has your household received from relatives, neighbors or friends in the past 12 months? <b>(Read list)</b>	1. Zakat 2. Remittances 3. Gifts/Quaadhan (donation of cash/animals to disaster stricken people) 4. Loans (cash, labor, seeds, animals) 5. Xoolo goony (restocking of poorer relatives) 6. Sadaqa 7. Other (specify) -8 DK -9 Refused

1005	If your household had a problem and needed <i>money or food</i> urgently, would you be able to get it from relatives living in this community?	1. Yes 2. No -8 DK -9 Refused
1006	If your household had a problem and needed money or food urgently, would you be able to get it from relatives living elsewhere?	1. Yes 2. No -8 DK -9 Refused
1007	If your household had a problem and needed money or food urgently, would you be able to get it from people in your community who are not your relatives?	1. Yes 2. No -8 DK -9 Refused
1008	If your household had a problem and needed money or food urgently, would you be able to get it from people living elsewhere who are not your relatives?	1. Yes 2. No -8 DK -9 Refused
1009	Compared to one year ago has your ability to get this type of assistance:	1. Increased 2. Stayed the same 3. Decreased -8 DK -9 Refused
1010	If someone in your household fell ill or was injured, and you needed <i>help with work</i> , would you be able to get it from people in your community or from relatives?	1. Yes 2. No -8 DK -9 Refused
1011	If your household had a problem and needed <i>help with work</i> , would you be able to get it from relatives living elsewhere?	1. Yes 2. No -8 DK -9 Refused
1012	If your household had a problem and needed help with work, would you be able to get it from people in your community who are not your relatives?	1. Yes 2. No -8 DK -9 Refused
1013	If your household had a problem and needed help with work, would you be able to get it from people living elsewhere who are not your relatives?	1. Yes 2. No -8 DK -9 Refused
1014	Compared to one year ago has the number of people you think you could ask for help with work:	1. Increased 2. Stayed the same 3. Decreased -8 DK -9 Refused

1015a	Has your household given assistance to relatives, neighbors or friends in the past 12 months?	1 Yes 2 No ( <b>Skip to q1016</b> ) -8 DK -9 Refused
1015b	What types of assistance has your household <i>given</i> to relatives, neighbors or friends in the past 12 months?	1. Zakat 2. Remittances 3. Gifts/Quaadhan (donation of cash/animals to disaster stricken people) 4. Loans (cash, labor, seeds, animals) 5. Xoolo goony (restocking of poorer relatives) 6. Sadaqa 7. Other (specify) -8 DK -9 Refused
1016	If a relative in this community had a problem and needed <i>money or food</i> urgently, would you be able to give money or food?	1. Yes 2. No -8 DK -9 Refused
1017	If a relative outside of this community had a problem and needed money or food urgently, would you be able give money or food?	1. Yes 2. No -8 DK -9 Refused
1018	If someone who is not your relative, but lives in this community had a problem and needed money or food urgently, would you be able to give money or food?	1. Yes 2. No -8 DK -9 Refused
1019	If someone who is not your relative and lives someplace else needed money or food urgently, would you be able to give money or food?	1. Yes 2. No -8 DK -9 Refused
1020	Compared to one year ago has your ability to give this type of assistance:	1. Increased 2. Stayed the same 3. Decreased -8 DK -9 Refused
1021	If a relative in this community had a problem and needed <i>help with work</i> , would you be able to give money or food?	1. Yes 2. No -8 DK -9 Refused
1022	If a relative outside of this community had a problem and needed help with work, would you be able give money or food?	1. Yes 2. No -8 DK -9 Refused

1023	If someone who is not your relative, but lives in this community had a problem and needed help with work, would you be able to give money or food?	1. Yes 2. No -8 DK -9 Refused
1024	If someone who is not your relative and lives someplace else needed help with work, would you be able to give money or food?	1. Yes 2. No -8 DK -9 Refused
1025	Compared to one year ago has your ability to give this type of assistance:	1. Increased 2. Stayed the same 3. Decreased -8 DK -9 Refused
<b>CAPACITY-BUILDING SUPPORT</b>		
1026	Have you or anyone in your household ever received any vocational (job) or skill training?	1. Yes 2. No <b>(Skip to q1028)</b> -8 DK -9 Refused
1027	Who provided the vocational skills training?	1. Government 2. NGO 3. Private sector -8 DK -9 Refused
1028	Have you or anyone in your household ever received any business development training?	1. Yes 2. No <b>(Skip to q1030)</b> -8 DK -9 Refused
1029	Who provided the business development training?	1. Government 2. NGO 3. Private sector -8 DK -9 Refused
1030	Have you or anyone in your household ever received any early warning training?	1. Yes 2. No <b>(Skip to q1032)</b> -8 DK -9 Refused
1031	Who provided the early warning training?	1. Government 2. NGO 3. Private sector -8 DK -9 Refused

1032	Have you or anyone in your household ever received any natural resource management training?	1. Yes 2. No <b>(Skip to q1034)</b> -8 DK -9 Refused
1033	Who provided the natural resource management training?	1. Government 2. NGO 3. Private sector -8 DK -9 Refused
1034	Have you or anyone in your household ever received seed packets/starter packets from the government or NGOs?	1. Yes 2. No <b>(Skip to q1036)</b> -8 DK -9 Refused
1035	Who did you receive them from?	1. Government 2. NGO -8 DK -9 Refused
1036	Have you or anyone in your household ever received adult education (literacy or numeracy or financial education)?	1. Yes 2. No <b>(Skip to q1038)</b> -8 DK -9 Refused
1037	Who did you receive the seed packets/starter packets from?	1. Government 2. NGO -8 DK -9 Refused
1038	Have you or anyone in your household ever received training in how to use your cell phone to get market information like prices?	1. Yes 2. No <b>(Skip to next module)</b> -8 DK -9 Refused
1039	Who did you receive training on how to use your cell phone to get market information like prices from?	1. Government 2. NGO -8 DK -9 Refused

## MODULE 11.0 Aspirations and Confidence to Adapt

1101	Please tell me which one of these two views you most agree with.	1. "Each person is primarily responsible for his/her success or failure in life". 2. "One's success or failure in life is a matter of his/her destiny". -8 DK -9 Refused
1102	Please tell me which one of these two views you most agree with.	1. "To be successful, above all one needs to work very hard". 2. "To be successful, above all one needs to be lucky". -8 DK -9 Refused
1103	Are you willing to move somewhere else to improve your life?	1. Yes 2. No -8 DK -9 Refused
1104	Do you agree that one should always follow the advice of the elders?	1. Yes 2. No -8 DK -9 Refused
1105	Do you communicate regularly with at least one person outside the village?	1. Yes 2. No -8 DK -9 Refused
1106	During the past week, have you engaged in any economic activities with members of other clans? For example, farming, trading, employment, borrowing or lending money.	1. Yes 2. No -8 DK -9 Refused
1107	How many times in the past month have you got together with people to have food or drinks, either in their home or in a public place?	____   -8 DK -9 Refused
1108	How many times in the past month have you attended a church/mosque or other religious service?	____   -8 DK -9 Refused
1109	In the last year, how many times have you stayed more than 2 days outside this ward?	____   -8 DK -9 Refused

Below is a series of statements that you may agree or disagree with. Using the scales below indicate your agreement with each item.

		Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	DK	Re-fused
1110	I feel like what happens in my life is mostly determined by powerful peoples.	1	2	3	4	5	6	-8	-9
1111	My experience in my life has been that what is going to happen will happen.	1	2	3	4	5	6	-8	-9
1112	My life is chiefly controlled by other powerful people.	1	2	3	4	5	6	-8	-9
1113	It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.	1	2	3	4	5	6	-8	-9
1114	I can mostly determine what will happen in my life.	1	2	3	4	5	6	-8	-9
1115	When I get what I want, It is usually because I worked hard for it.	1	2	3	4	5	6	-8	-9
1116	My life is determined by my own actions.	1	2	3	4	5	6	-8	-9
1117	Most people are basically honest.	1	2	3	4	5	6	-8	-9
1118	Most people can be trusted.	1	2	3	4	5	6	-8	-9
1119	I trust my neighbors to look after my house if I am away.	1	2	3	4	5	6	-8	-9

## Assets and Consumption Expenditures (Poverty)

### MODULE 12.0 Housing Characteristics

1201	What type of dwelling do you have?	<ol style="list-style-type: none"> <li>1. House (brick, cement or adobe)</li> <li>2. Thatched hut</li> <li>3. Tent</li> <li>4. Other (specify)</li> </ol>
1202	What materials have been used to construct the roof of the dwelling?	<ol style="list-style-type: none"> <li>1. Corrugated iron</li> <li>2. Cement</li> <li>3. Thatch</li> <li>4. Wood &amp; mud</li> <li>5. Reed/bamboo</li> <li>6. Plastic sheeting</li> <li>7. Cloth</li> <li>8. Other</li> </ol>
1203	What materials have been used to construct the floor of the dwelling?	<ol style="list-style-type: none"> <li>1. Earth</li> <li>2. Cow dung</li> <li>3. Concrete/stone/cement</li> <li>4. Tile/bricks</li> <li>5. Other (specify)</li> </ol>
1204	How many rooms are in the dwelling?	____   (number of rooms)
1205	Latrine type	<ol style="list-style-type: none"> <li>1. Has no toilet</li> <li>2. Flush toilet , private</li> <li>3. Flush toilet, shared</li> <li>4. Pit, private</li> <li>5. Pit, shared</li> </ol>
1206	What is the main source of drinking water for your household?	<ol style="list-style-type: none"> <li>1. Pond</li> <li>2. Hand dug well</li> <li>3. Shallow tube well</li> <li>4. Deep tube well</li> <li>5. Borehole</li> <li>6. Underground tank</li> <li>7. River</li> <li>8. Water trucked to settlements with permanent water source</li> <li>9. Other (specify)</li> </ol>
1207	How long does it take you to fetch water for household use (round trip)?	____   Minutes

## MODULE 13.0 Assets (Excluding Livestock)

### Module 13.1 Consumption Assets

	1301	1302	1303	1304	1305
	Number owned now -8 DK -9 Refused	Number owned a year ago -8 DK -9 Refused	Number owned two years ago -8 DK -9 Refused	Did you purchase or pay for any of these [ITEMS] in the last 12 months? 1 Yes 2 No <b>(Skip to next item)</b> -8 DK -9 Refused	How much did you pay for all these [ITEM] all together (total) in the last 12 months? (BIRR)  -8 DK -9 Refused
c1. Improved charcoal/wood stove					
c2. Kerosene stove					
c3. Sofa					
c4. Leather bed					
c5. Wooden bed					
c6. Metal bed					
c7. Telephone apparatus					
c8. Radio					
c9. Tape player					
c10. Television					
c11. Jewelry, gold					
c12. Jewelry, silver					
c13. Jewelry, wristwatches					
c14. Firearms					
c15. Modern Chair					
c16. Modern Table					
c17. Wheelbarrow					
c18. Bicycle					
c19. Cart (animal drawn)					
c20. Passenger car or truck					
c21. Generator					
c22. Solar lamp					
c23. Micro-energy (Solar, Hydro, etc.)					

## MODULE 13.2 Productive Assets

	1306	1307	1308
	Number owned now -8 DK -9 Refused	Number owned a year ago -8 DK -9 Refused	Number owned two years ago -8 DK -9 Refused
p1. Plough yoke			
p2. Plough beam			
p3. Plough lever			
p4. Pair of plough blade			
p5. Leather tie for plough			
p6. Metal-Plough			
p7. Sickle			
p8. Pick axe			
p9. Axe			
p10. Pruning/Cutting shears			
p11. Hoe			
p12. Spade or shovel			
p13. Whip (leather)			
p14. Traditional beehive			
p15. Modern Beehive			
p16. Knapsack chemical sprayer			
p17. Mechanical water pump			
p18. Motorized water pump p(diesel)			
p19. Stone grain mill			
p20. Motorized grain mill (diesel)			
p21. Broad bed maker (oxen-pulled)			
p22. Small tractor			
p23. Hand-held motorized tiller			
P24. Agricultural land (hectares)			



	1401	1402	1403	1404		1405	1406	1407	1408	1409	1410
Type of Livestock	Total [livestock type] owned one year ago (opening stock) -8 DK -9 Refused	Total [livestock type] owned now (closing stock) <b>(if q1401=0 and q1402=0 skip to next row)</b> -8 DK -9 Refused	Total [livestock type] born in the last 12 months -8 DK -9 Refused	Total [livestock type] died in the last 12 months -8 DK -9 Refused		Total [livestock type] purchased in the last 12 months -8 DK -9 Refused <b>If none, skip to q1407</b>	Primary place of [livestock type] purchase <b>Enter from list</b>	Total [livestock type] sold in the last 12 months -8 DK -9 Refused <b>If none, skip to q1410</b>	Primary place of [livestock type] sale <b>Enter from list</b>	What influenced [livestock type] sale <b>Enter from list</b>	If you would sell an average one of the [livestock type] today, how much would you receive from the sale? -8 DK -9 Refused
p. Donkeys											
q. Horses											
r. Mules											
s. Camels											
t. Poultry											
u. Other											

### Livestock Assets Code List

1406 and 1408		1409	
Primary place of purchase or sale		What influenced the sale	
1.	This village	1.	Encouraged by development agents/extension agents
2.	Another village	2.	Encouraged by friends, neighbors or family members
3.	Local market town	3.	Noticed profitability by observing other adopters
4.	District town	4.	Noticed that these fetched good price in market
5.A	Zonal town	5.	Encouraged/helped by NGO
6.	Regional town	6.	Other
7.	Abattoir/slaughterhouse	-8	DK
8.	Capital city	-9	Refused
9.	Other (specify)		
-8	DK		
-9	Refused		



## MODULE 16.0 Fodder and Water Availability

Ask these questions only if the household owns livestock (check Module 14, q1402).

1601	What is the main source of fodder/pasture for the livestock owned?	<ol style="list-style-type: none"> <li>1. Communal pasture browse</li> <li>2. Private pasture browse (on pasture you yourself own)</li> <li>3. Green fodder</li> <li>4. Crop residue</li> <li>5. Improved feed</li> <li>6. Hay</li> <li>7. Bi-product</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>
1602	How long in hours and minutes walking do you travel to get fodder/pasture for your livestock?	<p>  _____   Hours   _____   Minutes</p> <p>-8 DK</p> <p>-9 Refused</p>
1603	Where do you get the fodder?	<ol style="list-style-type: none"> <li>1. Market</li> <li>2. Own field (grown)</li> <li>3. Neighbors</li> <li>4. Livestock feed service</li> <li>5. Community field</li> <li>6. Other</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>
1604	What is the fodder/feed availability compared to this time last year	<ol style="list-style-type: none"> <li>1. less available than last year</li> <li>2. about the same as last year</li> <li>3. better than last year</li> <li>4. not in the same location as last year</li> <li>-8 DK</li> <li>-9 Refused</li> </ol> <p style="text-align: right;">} → <b>(Skip to q1606)</b></p>
1605	Why is fodder is less available than last year?	<ol style="list-style-type: none"> <li>1. Prolonged drought</li> <li>2. Pests</li> <li>3. Unpalatable pasture</li> <li>4. Overgrazed</li> <li>5. Other</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>
1606	What is the fodder/feed quality compared to this time last year	<ol style="list-style-type: none"> <li>1. Low quality</li> <li>2. Quality is the same</li> <li>3. High quality</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>

1607	Where do you get the water for your animals?	<ol style="list-style-type: none"> <li>1. River</li> <li>2. Stream</li> <li>3. Spring</li> <li>4. Pond</li> <li>5. Borehole well</li> <li>6. Hand dug well</li> <li>7. Delivered by water tanker</li> <li>8. Other (specify)</li> </ol> <p>-8 DK -9 Refused</p>
1608	Water availability compared to this time last year	<ol style="list-style-type: none"> <li>1. less available than last year</li> <li>2. about the same as last year</li> <li>3. better than last year</li> <li>4. not in the same location as last year</li> </ol> <p>-8 DK -9 Refused</p> 
1609	Why is water less available than last year?	<ol style="list-style-type: none"> <li>1. Drought</li> <li>2. Conflict</li> <li>3. No money to buy</li> <li>4. Other</li> </ol>













Over the past one week (7 days), did you or others in your household eat any [food]?  INCLUDE FOOD BOTH EATEN COMMUNALLY IN THE HOUSEHOLD AND SEPARATELY BY INDIVIDUAL HOUSEHOLD MEMBERS, BOTH INSIDE AND OUTSIDE THE HOME	Item Code	1 Yes 2 No >>Next item  -8 DK -9 Refused	How much [food] in total did your household eat in the past week?  -8 DK -9 Refused		How much [food] came from purchases?  -8 DK -9 Refused		How much did you spend on what [food] was eaten last week? <b>If family ate part but not all of something they purchased, estimate only cost of what was consumed</b>  -8 DK -9 Refused	How much [food] came from own- production?  -8 DK -9 Refused		How much [food] came from gifts and other sources?  -8 DK -9 Refused	
	E1.01	E1.02	E1.03a Quantity	E1.03b Unit	E1.04a Quantity	E1.04b Unit	E1.05	E1.06a Quantity	E1.06b Unit	E1.07a Quantity	E1.07b Unit
Spirits (whiskey, gin,	9.6										
Chat	9.7										
Other (specify)	9.8										
<b>Spices &amp; miscellaneous</b>											
Salt/pepper	10.1										
Sweets, candies, chocolate	10.2										
Other (specify)	10.3										
<b>Prepared foods from</b>											
Alcoholic beverages	11.1										
Other beverages (soft drinks, etc.)	11.2										
Meal eaten at restaurant	11.3										
Other (specify)	11.4										

**Note: Quantities are often reported in local units of measure. Any unit listed must be able to be converted to a standardized unit.**

**This conversion will happen during data analysis. It should not be done in the field by the enumerator.**

### Units of measure code list

## MODULE 17.2 Non-Food Expenditures Over Past 7 Days

	Item code	Yes=1 No=2>>Next item	How much did you pay (how much did [item] cost) in total?
<b>ONE WEEK RECALL</b>	<b>E2.01</b>	<b>E2.02</b>	<b>E2.03</b>
Over the past <u>one week (7 days)</u> , did your household use or buy any [item]?			
Charcoal or other fuel for cooking	12.1		
Firewood	12.2		
Paraffin or kerosene	12.3		
Cigarettes, tobacco	12.4		
Candles	12.5		
Matches	12.6		
Transport	12.7		

## Access to Markets, Services and Information

### MODULE 18.0 Access to Markets

Ask these questions only if the household owns livestock (check Module 14, q1409).

1801	Where do you normally sell your livestock and animal products? (Identify the most frequently used location for these sales)?	<ol style="list-style-type: none"> <li>1. This village</li> <li>2. Another village</li> <li>3. Local market town</li> <li>4. District town</li> <li>5. Zonal town</li> <li>6. Regional town</li> <li>7. Capital</li> <li>8. Other (specify)</li> <li>-8 Don't Know</li> <li>-9 Refused</li> </ol>
1802	Why do you sell at this location?	<ol style="list-style-type: none"> <li>1. Get best price at this market</li> <li>2. Do not have access to transport to other markets</li> <li>3. Poor road conditions to other markets</li> <li>4. Not aware of prices at other markets</li> <li>5. Other (specify)</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>
1803	Are there other markets where you would prefer to sell your livestock/animal products?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No (<b>Skip to q1805</b>)</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>
1804	If yes, why do you not sell at these markets?	<ol style="list-style-type: none"> <li>1. Transport cost too high</li> <li>2. Too long to reach the market</li> <li>3. Unsure of prices in that market</li> <li>4. No place or too costly to stay/keep animals at that place</li> <li>5. Poor transport conditions</li> <li>6. Security reasons</li> <li>7. Other (specify)</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>
1805	Do you produce agricultural crops?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No (<b>Skip to q1810</b>)</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>

1806	Where do you normally sell your agricultural crops? (Identify the most frequently used location for selling your main agricultural crop)?	<ol style="list-style-type: none"> <li>1. At farm (to neighbor or to itinerant merchant)</li> <li>2. In village</li> <li>3. Local market</li> <li>4. Regional market</li> <li>5. Other (specify)</li> </ol> <p>-8 DK -9 Refused</p>
1807	Why do you sell at this location?	<ol style="list-style-type: none"> <li>1. Get best price at this market</li> <li>2. Do not have access to transport to other markets</li> <li>3. Poor road conditions to other markets</li> <li>4. Not aware of prices at other markets</li> <li>5. Other (specify)</li> </ol> <p>-8 DK -9 Refused</p>
1808	Are there other markets where you would prefer to sell your agricultural crops (or your main agricultural crop)?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No (<b>Skip to q1810</b>)</li> </ol> <p>-8 DK -9 Refused</p>
1809	If so, why do you not sell at these markets?	<ol style="list-style-type: none"> <li>1. Transport cost too high</li> <li>2. Too long to reach the market</li> <li>3. Unsure of prices in that market</li> <li>4. No place or too costly to stay/keep crops at that place</li> <li>5. Poor transport conditions</li> <li>6. Security reasons</li> <li>7. Other (specify)</li> </ol> <p>-8 DK -9 Refused</p>
1810	Do you purchase agricultural and livestock inputs?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No (<b>Skip to Module 19</b>)</li> </ol> <p>-8 DK -9 Refused</p>
1811	Where do you normally purchase your main agricultural and livestock inputs? (Identify the most frequently used location for the most expensive inputs you purchase)?	<ol style="list-style-type: none"> <li>1. At farm (to neighbor or to itinerant merchant)</li> <li>2. Village shop</li> <li>3. Local market</li> <li>4. Regional market</li> <li>5. Shop in regional center</li> <li>6. Security concerns</li> <li>7. Other (specify)</li> </ol> <p>-8 Don't Know -9 Refused</p>

1812	Why do you purchase inputs at this location?	<ol style="list-style-type: none"> <li>1. Get best price at this market</li> <li>2. Do not have access to transport to other markets</li> <li>3. Poor road conditions to other markets</li> <li>4. Not aware of prices at other markets</li> <li>5. Other (specify)</li> </ol> <p>-8 DK -9 Refused</p>
1813	Are there other markets where you would prefer to purchase your agricultural and livestock inputs?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No <b>(Skip to next module)</b></li> </ol> <p>-8 DK -9 Refused</p>
1814	If so, why do you not purchase at these markets?	<ol style="list-style-type: none"> <li>1. Transport cost too high</li> <li>2. Too long to reach the market</li> <li>3. Unsure of prices in that market</li> <li>4. No place or too costly to stay/keep crops at that place</li> <li>5. Poor transport conditions</li> <li>6. Other (specify)</li> </ol> <p>-8 Don't Know -9 Refused</p>

## MODULE 19.0 Access to Animal Health Services

1901	<p>Which animal services are available for your livestock in this area? (Multiple responses possible)</p>	<ol style="list-style-type: none"> <li>1. Vaccination, dipping inoculation</li> <li>2. Treatment for diseases</li> <li>3. Animal de-worming</li> <li>4. Breeding services</li> <li>5. Commercial feed supply</li> <li>6. Veterinary store with vaccines</li> <li>7. Veterinary store with de-worming supplies</li> <li>8. Veterinary store with antibiotics</li> <li>9. Veterinary store with salt licks/mineral supplements</li> <li>10. Other (specify)</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>
1902	<p>Was there a time in the last year when you needed any of these animal services for your livestock but were not able to get them?</p>	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No (Skip to next module)</li> </ol>
1903	<p>If yes, why were you not able to get the animal services that you needed? (Multiple responses possible)</p>	<ol style="list-style-type: none"> <li>1. No veterinary center</li> <li>2. No staff in the center</li> <li>3. Veterinary center was far away</li> <li>4. Veterinary center was destroyed/burnt</li> <li>5. Security problems</li> <li>6. No transportation</li> <li>7. No road/road condition poor</li> <li>8. No veterinary store</li> <li>9. Veterinary store did not have supplies needed</li> <li>10. No money to pay for what I needed</li> <li>11. Others (specify)</li> <li>-8 DK</li> <li>-9 Refused</li> </ol>



## MODULE 21.0 Access to Financial Services/Savings

2101 Do any of your household members have cash saving?			1. Yes 2. No <b>(Skip to next module)</b> -8 DK -9 Refused
2102	2103	2104	2105
Saving Number	ID of household member Owning the Saving	Where is the savings held?  1. In cash at home 2. With micro loan 3. With Bank 4. With Savings group 5. Other (specify) -8 DK -9 Refused	What is the primary purpose of the saving?  1. To use in emergencies 2. To buy livestock 3. For non-livestock business investment 4. Other (specify) -8 DK -9 Refused
1			
2			
3			
4			
5			
6			

## MODULE 22.0 Access to Information

	2201 Did you receive any information on [topic] in the last year? 1 Yes 2 No >> Skip to next topic -8 DK -9 Refused	2202 What was your main source of information about [topic]?  Enter from list
a. Long-term changes in weather patterns		
b. Rainfall prospects/ weather prospects for coming season		
c. Water available and prices in local boreholes, shallow wells, etc.		
d. Methods for animal health/husbandry		
e. Livestock disease threats or epidemics		
f. Current market prices for live animals in the area		
g. Market prices for animal products (milk, hides, skins etc.)		
h. Grazing conditions in nearby areas		
i. Conflict or other restrictions on access to grazing		
j. Business and investment opportunities		
k. Opportunities for borrowing money		
l. Market prices of the food that you buy		
m. Child nutrition and health information		

2202 Main Information sources	
1	Rural development agents
2	Clan/traditional leaders
3	Diksi or madrasa teachers
4	Formal school teachers
5	Neighbors or friends
6	Government officials
7	Family members
8	Newspaper
9	Radio / TV
10	Internet or SMS

## Annex 3. Community Questionnaire

### MODULE 1. Informed Consent

### MODULE 2. Community Characteristics

201	What is the total population of this community?	
202	In the last five years, has the population of this community stayed the same, increased or decreased?	1. Stayed the same 2. Increased 3. Decreased
203	What are the three largest ethnic groups in this community? (Specify)	6. _____ 7. _____ 8. _____
204	How far is this community from the nearest town? (km)	
205	How far is this community from the zonal capital? (km)	
206	For how many years has this community existed?	10. More than 20 years 11. Between 10 and 20 years 12. Less than 10 years
207	Does this community have two cropping seasons?	1. Yes 2. No
208	Does this community have communal grazing land?	1. Yes 2. No <b>(Skip to Q211)</b>
209	If yes, is there a group in the community that decides who can use this land and when they can use it?	1. Yes 2. No
210	In the last year, has there ever been a problem of too many animals on the communal grazing land?	1. Yes 2. No
211	Does this community have a communal water source for livestock?	1. Yes 2. No <b>(Skip to Q214)</b>
212	What is this source?	1. River 2. Stream 3. Pond

213	In the last year, has there ever been a time when there was not enough water for all the animals?	1. Yes 2. No
214	Do people in this community get their firewood from communal land?	1. Yes 2. No (Skip to Q217)

215	If yes, is there a group in the community that decides who can gather the wood and how much?	1. Yes 2. No
216	In the last year, has there ever been a problem of not enough firewood on the communal land?	1. Yes 2. No
217	Is there a water user's group that manages the water used for irrigation in this community?	1. Yes 2. No

## MODULE 3. Community Infrastructure and Services

WATER		
301	Does this community have access to piped water?	1. Yes 2. No <b>(Skip to Q304)</b>
302	If yes, is the water in public standpipes or piped into houses?	1. Public standpipe 2. Piped into houses
303	What share of the households in the community has access to piped water?	1. Everyone 2. Most of the households 3. About half of the households 4. Less than half of the households 5. Very few
304	What are the main sources of drinking water in the dry season?	1. Tube wells or boreholes 2. Protected hand-dug wells 3. Protected springs 4. Rainwater collection 5. Ponds and rivers 6. Unprotected springs/wells 7. Truck/vendor 8. Other (specify) _____
305	What are the main sources of drinking water in the wet season?	1. Tube wells or boreholes 2. Protected hand-dug wells 3. Protected springs 4. Rainwater collection 5. Ponds and rivers 6. Unprotected springs/wells 7. Truck/vendor 8. Other (specify) _____
ELECTRICITY		
306	Do any of the households in the community have electricity?	1. Yes 2. No <b>(Skip to Q309)</b>
307	What share of households in the community has electricity?	1. Everyone 2. Most of the households 3. About half of the households 4. Less than half of the households 5. Very few
308	What is the main source of electricity?	1. Public utility 2. Generator 3. Other (specify) _____

TELEPHONE SERVICE		
309	Does this community have cell phone service?	1. Yes 2. No <b>(Skip to Q311)</b>
310	What share of households in this community has cell phones?	1. Everyone 2. Most of the households 3. About half of the households 4. Less than half of the households 5. Very few
311	Does this community have public telephones?	1. Yes 2. No
312	How far is the nearest public telephone? (km)	
ROADS AND TRANSPORTATION		
313	What are the main routes used to reach this community? (multiple responses possible)	1. Paved road 2. Direct road 3. Mixed paved and dirt 4. Footpath 5. Trail 6. Other (specify) _____
314	Are there times of the year when people cannot travel because of poor road/trail conditions?	1. Yes 2. No
315	Is this community served by a public transport system?	1. Yes <b>(Skip to Q317)</b> 2. No
316	How far is the nearest community with public transportation? (km)	
317	What is the share of households in this community that uses public transportation?	1. Everyone 2. Most of the households 3. About half of the households 4. Less than half of the households 5. Very few
HOUSING		
318	What share of households in the community has tin roofs?	1. Everyone 2. Most of the households 3. About half of the households 4. Less than half of the households 5. Very few

319	What share of households in the community has brick or cement block housing?	<ol style="list-style-type: none"> <li>1. Everyone</li> <li>2. Most of the households</li> <li>3. About half of the households</li> <li>4. Less than half of the households</li> <li>5. Very few</li> </ol>
<b>SCHOOLS</b>		
320	Is there a primary school in this community?	<ol style="list-style-type: none"> <li>1. Yes (Skip to 322)</li> <li>2. No</li> </ol>
321	How far away is the nearest primary school? (kms)	
322	What share of eligible school-age children attend primary school?	<ol style="list-style-type: none"> <li>1. All</li> <li>2. Most</li> <li>3. About half</li> <li>4. Less than half</li> <li>5. Very few</li> </ol>
323	Are there enough teachers for the primary school that children in this community attend?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
324	What is the physical condition of the primary school that the children in this community attend?	<ol style="list-style-type: none"> <li>1. Very good</li> <li>2. Good</li> <li>3. Poor</li> <li>4. Very poor</li> </ol>
325	Is there a secondary school in this community?	<ol style="list-style-type: none"> <li>1. Yes (Skip to Q327)</li> <li>2. No</li> </ol>
326	How far away is the nearest secondary school? (kms)	
327	What share of eligible school-age children attend secondary school?	<ol style="list-style-type: none"> <li>1. All</li> <li>2. Most</li> <li>3. About half</li> <li>4. Less than half</li> <li>5. Very few</li> </ol>
328	Are there enough teachers for the secondary school that children in this community attend?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
329	What is the physical condition of the secondary school that the children in this community attend?	<ol style="list-style-type: none"> <li>1. Very good</li> <li>2. Good</li> <li>3. Poor</li> <li>4. Very poor</li> </ol>

<b>HEALTH SERVICES</b>		
330	Is there a health center in this community?	<ol style="list-style-type: none"> <li>1. Yes (skip to Q332)</li> <li>2. No</li> </ol>
331	How far is the nearest health center from this community? (km)	

332	What is the physical condition of the nearest health center to this community?	<ol style="list-style-type: none"> <li>1. Very good</li> <li>2. Good</li> <li>3. Poor</li> <li>4. Very poor</li> </ol>
333	In the last year was there a time when people in the community needed health services but could not get them from the health center?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No <b>(Skip to Q335)</b></li> </ol>
334	If yes, why were they not able to get health services from the health center? (multiple responses possible)	<ol style="list-style-type: none"> <li>1. No beds, health center was full</li> <li>2. No staff in the health center</li> <li>3. Health center was destroyed/burnt</li> <li>4. Security problem</li> <li>5. No transportation</li> <li>6. No road or poor road condition</li> <li>7. No drugs at the health center</li> <li>8. No money for services</li> <li>9. Quality of the health service is very poor</li> <li>10. Other (specify) _____</li> </ol>
<b>VETERINARY AND VALUE-ADDED ANIMAL SERVICES</b>		
335	Is there a facility for veterinary services in this community?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
336	How far is the veterinary center from this community? (km)	
337	What is the physical condition of the nearest veterinary center to this community?	<ol style="list-style-type: none"> <li>1. Very good</li> <li>2. Good</li> <li>3. Poor</li> <li>4. Very poor</li> </ol>
338	In the last year was there a time when people in the community needed veterinary services but could not get them from the veterinary center?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No <b>(Skip to Q340)</b></li> </ol>
339	If yes, why were they not able to get veterinary services from the veterinary center? (multiple responses possible)	<ol style="list-style-type: none"> <li>1. No staff in the veterinary center</li> <li>2. Veterinary center too busy</li> <li>3. Veterinary center was destroyed/burnt</li> <li>4. Security problem</li> <li>5. No transportation</li> <li>6. No road or poor road condition</li> <li>7. No equipment/drugs at the veterinary center</li> <li>8. No money for services</li> <li>9. Quality of the services is poor</li> <li>10. Other (specify) _____</li> </ol>
340	Which services are provided by the veterinary center? (multiple responses possible)	<ol style="list-style-type: none"> <li>1. Livestock vaccinations</li> <li>2. Livestock antibiotics</li> <li>3. De-worming</li> <li>4. Dipping inoculation</li> </ol>

		5. Other treatment for diseases 6. Supplemental feeding (commercial feeding) 7. Others (specify) _____
341	How far is the nearest abattoir from this community? (km)	
342	How far is the nearest dairy processing facility from this community? (km)	
<b>AGRICULTURAL EXTENSION SERVICES</b>		
343	Are there agricultural extension services offered in this area?	1. Yes 2. No
344	In the last year was there a time when people in the community needed agricultural extension services but could not get them?	1. Yes 2. No <b>(Skip to Q346)</b>
345	Is yes, why were they not able to get agricultural extension services? (multiple responses possible)	1. Extension service center was closed 2. There was no extension worker 3. The extension service center was destroyed/burnt 4. Security problem 5. Extension workers were not cordial 6. The extension center was too far away 7. There was no transportation 8. No road or poor road condition 9. No money for services 10. Quality of the services is poor 11. Other (specify) _____
346	Which services are provided by the agricultural extension service? (multiple responses possible)	1. Seed supply 2. Fertilizer supply 3. Training 4. Climate-adapted technologies (e.g., drought-tolerant seeds) 5. Others (specify) _____

<b>MARKETS</b>		
347	How far away is the nearest livestock market from this community? (km)	
348	In the last year was there a time when people in this community needed to buy or sell livestock in the market but could not?	1. Yes 2. No <b>(Skip to Q350)</b>
349	Why were people not able to buy or sell livestock in the market? (multiple responses possible)	1. Market closed 2. No road or poor road condition 3. No transportation 4. Could not pay for transportation 5. Security problem 6. Other (specify) _____
350	Is there an emergency plan for livestock offtake if a drought hits?	1. Yes 2. No
351	How far away is the nearest market for selling agricultural products from this community? (km)	

352	In the last year was there a time when people in this community needed to sell agricultural products in the market but could not?	1. Yes 2. No <b>(Skip to Q354)</b>
353	Why were people not able to sell agricultural products in the market? (multiple responses possible)	1. Market closed 2. No road or poor road condition 3. No transportation 4. Could not pay for transportation 5. Security problem 6. Other (specify) _____
354	How far away is the nearest market for purchasing agricultural inputs from this community? (km)	
355	In the last year was there a time when people in this community needed to buy agricultural inputs in the market but could not?	1. Yes 2. No <b>(Skip to Q357)</b>
356	Why were people not able to buy agricultural inputs in the market? (multiple responses possible)	1. Market closed 2. No road or poor road condition 3. No transportation 4. Could not pay for transportation 5. Security problem 6. Other (specify) _____
<b>SECURITY</b>		
357	Does this community have a security or police force?	1. Yes 2. No <b>(Skip to Q359)</b>
358	Who provides the security/police force? (multiple responses possible)	1. Local government 2. National government 3. Community members 4. Other (specify) _____
359	How long does it take for police to reach this community?	1. Over one hour 2. About one hour 3. Half an hour 4. Minutes
<b>CREDIT</b>		
360	Are there institutions in this community where people can borrow money?	1. Yes 2. No <b>(Skip to Q362)</b>
361	Which institutions provide these services? (multiple responses possible)	1. Banks 2. NGO 3. Community group 4. Friends/relatives 5. Shops/merchants 6. Money lender 7. Zakat 8. Other (specify) _____
<b>OTHER PROGRAMS AND SERVICES</b>		
362	Are there institutions in this community where people can receive adult education or training?	1. Yes

		2. No <b>(Skip to Q364)</b>
363	If yes, who provides these services? (multiple responses possible)	1. Government 2. NGOs 3. Religious organization 4. Other (specify) _____
364	Are there institutions in this community where people can receive food assistance?	1. Yes 2. No <b>(Skip to Q366)</b>
365	If yes, who provides these services? (multiple responses possible)	1. Government 2. NGOs 3. Religious organization 4. Social protection program 5. Other (specify) _____
366	Are there institutions in this community where people can receive housing materials and other non-food items?	1. Yes 2. No <b>(Skip to Q368)</b>
367	If yes, who provides these services? (multiple responses possible)	1. Government 2. NGOs 3. Religious organization 4. Other (specify) _____
368	Are there institutions in this community where people can receive assistance due to losses of livestock?	1. Yes 2. No <b>(Skip to next module)</b>
369	If yes, who provides these services? (multiple responses possible)	1. Government 2. NGOs 3. Religious organization 4. Gifts (donation of cash/animals to disaster stricken people) 5. Social protection program 6. Other (specify) _____

## MODULE 4. Community Organizations

	401	402	403
	Are any of the following groups active in this community?  yes=1 no=2	Who participates in this group?  1= Men 2= Women 3= Both  <b>Enter code</b>	Which age group participates in this group?  1=Youth 2=Adults 3=Older persons 4=Everyone  <b>Enter code</b>
a. Water users' group			
b. Grazing land users' group			
c. Disaster planning group			
d. Credit or micro-finance group (VLSA, merry-go-round, SACCO, etc.)			
e. Savings groups			
f. Zakat (Charitable giving, religious)			
g. Mutual help group (including burial societies)			
h. Trade or business associations			
i. Civic group (improving community)			
j. Charitable group (helping others)			
k. Religious group			
l. Political group			
m. Women's group			
n. Youth group			
o. Other (specify)			
p. Other (specify)			
q. Other (specify)			

## MODULE 5. Government and NGO Programs

501	Are there any government programs in this community?	1. Yes 2. No <b>(Skip to Q503)</b>
502	If yes, what kinds of government programs are there? <b>(List all programs)</b>	1. Livestock 2. Agriculture 3. Water 4. Health 5. Disaster planning 6. Disaster response 7. Other (specify) _____ 8. Other (specify) _____ 9. Other (specify) _____
503	Are there any NGO programs in this community?	1. Yes 2. No <b>(Skip to next module)</b>
504	If yes, what kinds of NGO programs are there? <b>(List all programs)</b>	1. Livestock 2. Agriculture 3. Water 4. Health 5. Disaster planning 6. Disaster response 7. Other (specify) _____ 8. Other (specify) _____ 9. Other (specify) _____

## MODULE 6. Shocks

	601	602	603	604	605
Over the past five years, has this community experienced any of the following shocks?	1=Yes 2=No >> Next item	Date (mo/year)	Date (mo/year)	Date (mo/year)	Date (mo/year)
<b>Natural shocks</b>					
a. Excessive rains					
b. Too little rain/drought					
c. Livestock/crop disease					
d. Very bad harvest					
e. Landslides/erosion					
<b>Conflict shocks</b>					
f. Theft of money					
g. Theft of crops					
h. Theft or destruction of assets					
i. Theft of livestock (raids)					
j. Destruction or damage of houses due to violence					
k. Loss of land due to conflict					
l. Violence against community members					
<b>Economic shocks</b>					
m. Sharp food price increases					
n. Unavailability of agricultural or livestock inputs					
o. No demand for agricultural or livestock products					
p. Increase in price of agricultural or livestock inputs					
q. Drop in price of agricultural or livestock products					

## MODULE 7. Land Tenure

	Does this type of tenure system exist in your community?  1=yes 2=no
1. Customary – privately held	
2. Customary land – communally held	
3. Leasehold	
4. Freehold	
5. Public land	
6. Other (specify)	

## MODULE 8. Governance

What types of community governance do you have in your community?	1. Traditional 2. Formal government representative 3. Both
Do you have a conflict resolution committee in your community?	1=yes 2=no

**\*\*THANK YOU\*\***

After the interview thank the respondent for giving you his/her time and for the co-operation in providing the information. Inform them that you may possibly be returning to collect more information or seek any necessary clarification on the information provided at later date. At this point invite the respondent to ask you any questions that he/she might have. Answer where you can. If you do not know the answer(s), tell the respondent that his/her questions will be forwarded to a relevant person who can respond.

## Annex 4. Qualitative Key Informant Interviews

### Case Study Sample

#### 1. Participation in Government or NGO programs

- What Government or NGO programs are active here?
  - Describe activities
  - Do government and NGO or other programs coordinate activities?
  - Who benefits and how? (men, women)
  - Who does not participate/benefit? Why?
- How have these programs affected the community?
  - Positive changes
  - Negative changes
- Effects of external support on community sharing?
- Which programs are managed well? Which are not managed well? Why?
- Recommended changes to these programs? What is missing?
- Has the community used its links to:
  - Obtain government services? Which ones? For whom?
  - Advocate for change? On what issues? What was the result?
  - Gain access to formal safety nets?

#### 2. Shocks, Risks, & Coping Strategies

- Types of coping strategies when income or agricultural/livestock production is not enough?
- Reliance on other households during income and food shortages?
  - What kind of support?
  - Any changes in this practice? How? Why?
- Household and community adaptations to reduce long-term shocks
- Role of the community in reducing the impact of shocks. Any changes in the last 5 years? What changes?
- Role of organizations in managing shocks
  - Government
  - NGO, community organizations
  - Any changes in the past 5 years? What changes?

## Annex 5. Qualitative Focus Group Interviews

### Case Study Sample

(Men and women are interviewed separately. After introductions, ask participants to develop a map of the community with geographical boundaries and key features of the village. The map will be the focal point for the interview.)

#### 1. Shocks

##### A. Characteristics

1. type of shock; duration; how many people affected (*draw a timeline with participants of shocks and duration*)
2. ways in which it is affecting the community (whole community/ women/ men) (*show on map how shocks affected community*)

#### 2. For Each Shock What is the Community Response (attitudes)

##### A. How is the community responding to the shock?

1. Did the community know about the shock in advance?
  - a. If yes, what actions did community leaders and members take together to reduce the impact of the shock on the community?
  - b. What actions were most effective in reducing the shock? (*rank effectiveness if multiple actions taken*)
  - c. If no actions were taken, why not?
2. Are people in the community supporting each other to recover? How? If not, why not?
3. Have the levels of trust that people in the community have in each other changed? How?
4. Do people feel that crime has increased or decreased? Describe any changes in how people feel about their physical safety in the community.

#### 3. Behavior

##### A. What actions is the community taking to respond to the shock? (Show actions on map where appropriate)

1. What actions are people taking to cope?
2. Are people working together as community to cope with each shock? How?
3. What has the community learned from previous experience about how to respond to shocks?
4. What did people do differently this time in responding to a shock?
5. Are people within the community sharing resources?
  - a. Which resources are they sharing (money, food, labor, information, other)?
  - b. Who do people share with? (e.g., family, neighbors, most vulnerable, etc.).
  - c. Who gets priority when sharing resources? (ask participants to do a simple ranking of resources that are shared, and who gets priority)

- d. What are people doing to assist each other to be productive again (e.g., labor exchange, loaning inputs such as animal labor, passing on information)
- e. What are negative ways in which people are coping (theft, begging, etc.)?
6. How are shocks affecting the relationships within the community?
7. Are people breaking up into subgroups to manage shocks?
  - a. If yes, why? What are the groups?
  - b. How does this affect the community's ability to cope?
8. Is there new or renewed conflict due to shocks?
  - a. In the community? (*Describe using map*)
  - b. With other communities? (*Describe using map*)
  - c. If yes, how is the community dealing with this conflict?
  - d. What kinds of conflict resolution mechanisms are used, and who uses them?
9. Are communities or individuals in other locations assisting you to cope with shocks? Explain.
10. Do people in the community use their connections to people in authority to access support (formal safety nets, services)? How?

#### 4. Participation

(Ask participants to draw a Venn diagram showing relative contribution of different community members. Draw lines to show who is giving help to which person/group, who is receiving help, and who is not receiving help.)

- A. Are community leaders effective at organizing support for all members of the community? Why or why not?
  1. Who else in the community is helping community members to deal with shocks?
  2. Is the community engaged in collective action to deal with shocks?
    - a. What kinds of collective action?
    - b. Is there collective action towards: (describe each; use map to illustrate)
      - i. Maintenance or repair of important community infrastructure (e.g., roads, markets, schools, water, health care facilities, etc.)?
      - ii. Management of common or critical natural resources?
      - iii. Deciding on community priorities through meetings open to all?
      - iv. Cooperative actions with other communities to reduce/respond to shocks that affect multiple communities?
      - v. Other activities?
  3. How is this collective action organized (e.g., through religious organizations, informal groups, NGOs, Mission projects, government, other)?
    - a. Ways in which each of these groups is helping
  4. Is participation in collective action influenced by gender? How?
  5. Which households are not participating in collective action? Why?
  6. Do you think your community is successfully recovering from the shocks it is exposed to? Why or why not?
  7. What do you think are the main differences between a community that successfully responds to a shock, and one that does not?

# Exercise 2.3. Sample Baseline Data

## Annex 6. Quantitative and Qualitative Data

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## Household Demographics

This section provides quantitative on household demographics, dwelling characteristics, education and livelihood activities. The household survey data confirm that the ZOI area is dominated by pastoralists and agro-pastoralists. However, non-pastoralists make up a large proportion of households as well, near one-quarter. The main sources of food and income are farming and livestock rearing; wage labor and salaried work are only major sources among non-pastoralists. However, the predominant livelihood source for non-pastoralists is marginal farming.

Most people live in thatched huts or tents, do not have access to a latrine, and have limited access to clean drinking water. Demographically, the majority of households have both male and female adults. However, female-adult-only households, which can be more vulnerable to the effects of shocks, make up just over 10 percent of all households, rising to nearly one-fifth of non-pastoralist households. Another vulnerable group is households having a member with a disability, which comprise one-tenth of all households. Approximately one quarter of the male population has any formal education; education is especially rare for females (eight percent).

**Table 1: Household demographics characteristics**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Household size and age-sex composition</b>				
Household size	5.7	5.8a	5.9b	5.0ab
Percent females 0-14	42.8	43.4a	44.3b	39.3ab
Percent females 15-64	51.8	51.1	53.1	50.6
Percent females 65+	5.2	5.4a	2.6a	9.4a
Percent males 0-14	45.4	44.7	44.9	47.6
Percent males 15-64	49.3	48.8	51.0a	46.9a
Percent males 65+	5.1	6.4a	4.1a	5.0
<b>Percent of households with a disabled member</b>				
Any disabled member	10.4	10.6	9.2	12.3
Female disabled member	5.6	5.2	4.8	7.6
Male disabled member	6.0	6.6	5.0	6.8
<b>Gendered household type (percent)<sup>a/</sup></b>				
Male and female adult households	86.0	87.2a	90.4a	76.3a
Female adult only households	11.4	11.5a	7.4a	18.2a
Male adult only households	2.5	1.3a	2.2b	4.8ab
Child no adult households	0.2	0.0a	0.0b	0.7ab

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>a/</sup> "Gendered household type" intentionally avoids the designation of "head of household", which presumes certain characteristics that may or may not be present in household gender dynamics and often reflects the bias of the researcher or respondent

**Table 2: Education and occupation status of adult household members**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Education (percent)</b>				
Females: No formal education	92.1	92.9	92.5	90.1
Females: Primary	6.5	5.3	6.5	8.4
Females: Secondary or higher	1.4	1.8	1.0	1.5
Males: No formal education	75.0	79.2 <sup>a</sup>	74.5 <sup>a</sup>	68.9 <sup>a</sup>
Males: Primary	18.4	14.1 <sup>ab</sup>	19.9 <sup>a</sup>	22.7 <sup>b</sup>
Males: Secondary or higher	6.5	6.7	5.6 <sup>a</sup>	8.4 <sup>a</sup>
<b>Main occupation (percent)<sup>c</sup></b>				
Females: Farming own land	10.9	3.3 <sup>ab</sup>	14.4 <sup>a</sup>	16.2 <sup>b</sup>
Females: Livestock rearing	9.4	16.9 <sup>a</sup>	6.3 <sup>a</sup>	3.5 <sup>1a</sup>
Females: Unpaid domestic work	69.2	72.8 <sup>a</sup>	69.9 <sup>b</sup>	61.6 <sup>ab</sup>
Females: Salaried or other paid work	5.1	2.2 <sup>a</sup>	4.1 <sup>a</sup>	12.0 <sup>a</sup>
Females: Other	5.4	4.8	5.3	6.7
Males: Farming own land	51.7	21.5 <sup>a</sup>	70.8 <sup>a</sup>	60.8 <sup>a</sup>
Males: Livestock rearing	29.7	63.4 <sup>a</sup>	14.2 <sup>a</sup>	6.4 <sup>a</sup>
Males: Unpaid domestic work	0.4	0.2	0.5	0.7
Males: Salaried or other paid work	6.6	2.3 <sup>a</sup>	3.7 <sup>b</sup>	20.4 <sup>ab</sup>
Males: Other	11.6	12.6	10.7	11.7

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>c</sup> Occupational status is given for working-age adults (18-60 years).

**Table 3: Livelihood activities and strategies**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Percent of households engaging in various livelihood activities</b>				
Farming/crop production and sales	84.8	76.9 <sup>a</sup>	100.0 <sup>ab</sup>	69.7 <sup>b</sup>
Livestock production and sales	80.8	100.0 <sup>a</sup>	99.3 <sup>a</sup>	20.4 <sup>a</sup>
Wage labor	17.9	12.8 <sup>a</sup>	18.3 <sup>a</sup>	24.5 <sup>a</sup>
Salaried work	1.7	0.4 <sup>a</sup>	0.7 <sup>b</sup>	5.3 <sup>ab</sup>
Sale of wild/brush products	1.5	0.6 <sup>a</sup>	1.3 <sup>b</sup>	3.1 <sup>ab</sup>
Self-employment	5.4	2.6 <sup>a</sup>	3.5 <sup>b</sup>	12.7 <sup>ab</sup>
Sale of other non-livestock assets	0.2	0.2	0.1	0.4
Remittances	4.0	3.9 <sup>a</sup>	1.5 <sup>a</sup>	8.4 <sup>a</sup>
Gifts/inheritance	6.7	4.3 <sup>a</sup>	3.2 <sup>b</sup>	16.3 <sup>ab</sup>
<b>Main source of household income and food (percent)</b>				
Farming/crop production and sales	53.5	0.0 <sup>a</sup>	100.0 <sup>a</sup>	50.6 <sup>a</sup>
Livestock production and sales	34.8	100.0 <sup>ab</sup>	0.0 <sup>a</sup>	0.0 <sup>b</sup>
Wage labor	3.2	0.0 <sup>a</sup>	0.0 <sup>b</sup>	13.3 <sup>ab</sup>
Salaried work	1.1	0.0 <sup>a</sup>	0.0 <sup>b</sup>	4.5 <sup>ab</sup>
Sale of wild/brush products	0.5	0.0 <sup>a</sup>	0.0 <sup>b</sup>	2.0 <sup>ab</sup>
Self-employment	2.5	0.0 <sup>a</sup>	0.0 <sup>b</sup>	10.3 <sup>ab</sup>
Sale of other non-livestock assets	0.0	0.0	0.0	0.1
Remittances	1.3	0.0 <sup>a</sup>	0.0 <sup>b</sup>	5.5 <sup>ab</sup>
Gifts/inheritance	2.1	0.0 <sup>a</sup>	0.0 <sup>b</sup>	8.9 <sup>ab</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 4: Household dwelling characteristics**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastor-alist	Non-pastor-alist
<b>Type of house (percent) and number of rooms</b>				
House (brick, cement or adobe)	9.1	4.0 <sup>ab</sup>	10.8 <sup>a</sup>	13.8 <sup>b</sup>
Thatched hut	78.2	88.8 <sup>a</sup>	76.8 <sup>a</sup>	65.0 <sup>a</sup>
Tent	10.2	6.1 <sup>a</sup>	9.9 <sup>a</sup>	16.7 <sup>a</sup>
Other	2.5	1.2 <sup>a</sup>	2.6	4.5 <sup>a</sup>
Mean number of rooms	1.9	2.2 <sup>a</sup>	1.9 <sup>a</sup>	1.7 <sup>a</sup>
<b>Type of latrine (percent)</b>				
No toilet	72.4	70.4 <sup>a</sup>	71.0	77.7 <sup>a</sup>
Flush toilet	3.0	3.1	3.8 <sup>a</sup>	1.4 <sup>a</sup>
Pit toilet	24.6	26.4	25.2	21.0
<b>Water source (percent) and time to fetch water</b>				
Pond	41.7	54.9 <sup>ab</sup>	35.6 <sup>a</sup>	33.1 <sup>b</sup>
Hand dug well	19.1	17.4	20.2	19.5
Tube well	3.0	1.9	3.5	3.7
Deep tube well	4.4	4.4	4.5	4.4
Borehole	12.7	10.8	13.5	13.9
Berkad (artificial reservoirs)	9.7	6.3 <sup>ab</sup>	11.9 <sup>a</sup>	10.7 <sup>b</sup>
River	3.8	2.0 <sup>ab</sup>	4.1 <sup>a</sup>	5.8 <sup>b</sup>
Trucked to settlements with permanent water source	1.4	0.8	1.4	2.3
Other	4.3	1.5 <sup>ab</sup>	5.4 <sup>a</sup>	6.6 <sup>b</sup>
Average time to fetch water (hrs.)	1.5	1.8 <sup>a</sup>	1.5 <sup>a</sup>	1.2 <sup>a</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

## Food Security and Nutrition

This section provides quantitative and qualitative data on food security and nutrition indicators. Nearly half, 45.6 percent of the population is undernourished: they do not eat enough food (calories) for an active, healthy life. Dietary quality is very poor. Apart from milk and milk products, food groups that are important sources of micronutrients and protein, such as fruits and vegetables, meat, eggs and legumes, are rarely eaten. Analysis of experiential indicators reveals that the food security situation in the area is very poor, with over three-quarters of households suffering from food insecurity and nearly 20 percent from its most extreme form: hunger. The most commonly-employed strategies for coping with food insecurity are relying on less preferred and less expensive foods, limiting portion sizes at meal times, and reducing the number of meals eaten in a day.

While pastoralists appear to eat less overall than either agro-pastoralists or non-pastoralists, non-pastoralists have the lowest diet quality and do the poorest on all experiential measures of food insecurity. Examination of the relationships between the food security indicators and the poverty indicators suggests that it is ownership of assets, rather than current income, that helps households avert hunger.

The prevalence of wasting among children under 5, which may be related to acute food deprivation or severe disease or both, is 12.2 percent. It is more prevalent among pastoralists and agro-pastoralists than non-pastoralists. Milk is an important source of protein and micronutrients for children under five,

with over three-fourths consuming milk in the week prior to the survey. As would be expected, children’s milk consumption is highest in pastoralist households. Neither expenditures-poverty nor asset-poverty appear to have a strong bearing on the prevalence of wasting (see next section).

**Qualitative data overview:** Female FG participants reported that during food shortages, portion sizes of meals are reduced and if they persist or get worse, certain household members are given priority. In the worst cases, older children and adults will only eat once a day or once every other day depending on the food available in the house. Regarding borrowing food from a relative or neighbor, FGDs are suggestive that there are strong cultural norms to help the less fortunate, whether by providing food, grain, labor, wood or money as “gifts” or by sharing cattle, plows, or labor to prepare fields or reconstruct houses destroyed by floods, etc. One female FG participant claimed that “hunger is no longer common” in their community, even during drought. Rather than “sitting and waiting for help,” they might collect firewood from the mountains in order to sell in the city, seek wage labor as maids, or even purchase chat for resale. In other words, these women reported taking proactive steps to mitigate the effects of food shortages when possible.

FG participants indicated that children as a group tend to be one of the most vulnerable to food insecurity. According to KIs with health extension workers, nutrition screening typically occurs during vaccination campaigns, but the campaigns are severely understaffed and under-resourced. Interviewees also reported that there is often little or no supplementary/therapeutic foods available, even for those children diagnosed as malnourished. When children are diagnosed as severely malnourished, they are referred to a community health clinic. Lack of adequate transportation and road infrastructure are major issues preventing health extension workers from accessing remote and scattered rural communities. Malnutrition may be exacerbated when families migrate, as finding food becomes even more challenging under such stressful conditions. Health workers also suggest that polygamy, and cultural reluctance to use family planning, contribute to malnutrition, in particular as it can be difficult for men to provide for his children from multiple wives.

**Table 5: Calorie consumption, undernourishment and dietary diversity**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Calorie consumption and undernourishment</b>				
Per capita calorie consumption	2,323	2111 <sup>ab</sup>	2,465 <sup>a</sup>	2,383 <sup>b</sup>
Undernourishment (percent)	45.6	54.9 <sup>ab</sup>	40.7 <sup>a</sup>	40.6 <sup>b</sup>
<b>Dietary diversity</b>				
Dietary diversity score	4.2	4.4 <sup>a</sup>	4.4 <sup>b</sup>	3.7 <sup>ab</sup>
Cereals	89.5	91.7 <sup>a</sup>	90.8 <sup>b</sup>	84.1 <sup>ab</sup>
<b>Consumption from food groups (percent)</b>				
Roots and tubers	11.3	8.5 <sup>a</sup>	11.8	14.4 <sup>a</sup>
Vegetables	24.6	19.7 <sup>ab</sup>	26.2 <sup>a</sup>	29.0 <sup>b</sup>
Fruits	4.8	1.7 <sup>ab</sup>	7.3 <sup>a</sup>	5.2 <sup>b</sup>
Meat	7.4	8.7 <sup>a</sup>	7.7 <sup>b</sup>	5.2 <sup>ab</sup>
Eggs	3.0	1.6 <sup>ab</sup>	3.5 <sup>a</sup>	4.2 <sup>b</sup>
Fish and seafood	2.9	1.7 <sup>a</sup>	4.0 <sup>a</sup>	2.9
Pulses, legumes and nuts	9.8	6.4 <sup>ab</sup>	12.0 <sup>a</sup>	11.0 <sup>b</sup>
Milk and milk products	77.6	89.8 <sup>a</sup>	80.0 <sup>a</sup>	55.7 <sup>a</sup>
Oils and fats	47.9	50.1 <sup>a</sup>	51.0 <sup>b</sup>	39.5 <sup>ab</sup>
Sugar and honey	78.3	89.2 <sup>a</sup>	76.6 <sup>a</sup>	65.2 <sup>a</sup>
Miscellaneous	65.8	71.0 <sup>a</sup>	68.6 <sup>b</sup>	53.1 <sup>ab</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 6: Household hunger scale and prevalence of hunger**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
<b>Household food insecurity access scale</b>				
Mean	7.2	6.9 <sup>a</sup>	7.0 <sup>b</sup>	8.2 <sup>ab</sup>
<b>Food security groups (percent)</b>				
Food secure	26.9	24.7	26.5	31.0
Mildly food insecure	3.8	4.0	3.4	4.0
Moderately food insecure	33.9	39.3 <sup>a</sup>	37.3 <sup>b</sup>	19.7 <sup>ab</sup>
Severely food insecure	35.4	32.0 <sup>a</sup>	32.8 <sup>b</sup>	45.2 <sup>ab</sup>
<b>Hunger</b>				
Household hunger scale	0.66	0.55 <sup>a</sup>	0.55 <sup>b</sup>	1.0 <sup>ab</sup>
Hunger (percent)	18.8	15.2 <sup>a</sup>	16.2 <sup>b</sup>	28.6 <sup>ab</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 7: Child malnutrition: Wasting among children under 5**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
Percent wasted	12.2	13.5 <sup>a</sup>	13.2 <sup>b</sup>	8.1 <sup>ab</sup>
Percent severely wasted	5.4	6.4 <sup>a</sup>	5.8 <sup>b</sup>	3.0 <sup>ab</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 8: Consumption of animal milk by children under 5 in the previous week**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
Percent of children <5 consuming animal milk	76.0	86.56 <sup>ab</sup>	73.4 <sup>a</sup>	66.0 <sup>b</sup>
<b>Source of milk</b>				
Own animals	92.1	97.5 <sup>a</sup>	95.0 <sup>b</sup>	75.5 <sup>ab</sup>
Relative's animals	6.8	6.3	5.5 <sup>a</sup>	10.8 <sup>a</sup>
Bought	6.3	3.7 <sup>a</sup>	3.7 <sup>b</sup>	16.9 <sup>ab</sup>
Other	0.3	0.0	0.6	0.4
<b>Amount of milk consumed among all children (mean, fl oz)</b>				
	83.3	96.4 <sup>a</sup>	81.7 <sup>a</sup>	67.5 <sup>a</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

## Shock Exposure, Coping Strategies, and Recovery

This section provides quantitative and qualitative data on shock exposure and on various aspects of resilience capacities related to shock exposure, coping strategies, perceived ability to recover, social capital and confidence to adapt.

Detailed understanding of the shocks and stressors that affect households is required for effective resilience programming and for understanding whether projects designed to enhance resilience are actually doing so. Attesting to the fact that the ZOI area is highly shock-prone, over 85 percent of households reported experiencing a shock in the year prior to the baseline survey. According to the quantitative data, the most common shock experienced was an increase in food prices. The next most widely-reported shocks were mostly related to climate change, including livestock and crop disease, drought, poor harvests, and increased prices of agricultural or livestock inputs. While there are some differences by type of shock, overall shock exposure does not differ across the pastoralist, agro-pastoralist and non-pastoralist groups. However, pastoralists show a higher perceived ability to recover from climatic shocks, perhaps reflecting their ability to migrate in search of water and pasture, in comparison to agro-pastoralists and non-pastoralists. They also report a stronger ability to recover from most of the economic shocks.

**Qualitative data overview:** Importantly, according to the qualitative data, it is the increased threat of severe, recurrent drought, accompanied in recent years by heavy flooding, that people perceive as the biggest threat they face on a continuing basis. The combination of alternating droughts and flooding have increased the frequency of shocks experienced by households, and the dual nature of the shocks have increased stress on crop and livestock production. Focus group discussions reveal that people have moved from considering drought to be a normal cyclical phenomenon that they were able to cope with to a more frequent disturbance that disrupts household stability and community life. Shocks underlie an increase in localized conflict between different groups that live in close proximity to each other. Conflict over pasture and water is a long-standing issue, but is exacerbated during severe or sustained drought. Because of the need to avoid conflict, pastoralist households lose flexibility in their ability to make the best migration decisions to ensure the survival of their animals.

*“Due to shortage of rainfall ...farming is limited. There is serious food shortage as a result: there is nothing to eat.”* –Female FGD participant;

Resilience is a set of capacities that enable households and communities to effectively function in the face of shocks and stresses and still meet a set of well-being outcomes.

**Ability to Recover and Coping Strategies.** Households’ subjective reports of their ability to recover from actual shocks they experience is a key source of information on the strength of their resilience. Most quantitative survey households reported that they had not recovered from the shocks they had experienced in the previous year. From the qualitative data, nearly all focus group participants stated that shocks are becoming more frequent and are severely straining traditional coping strategies. These heightened shocks have motivated communities to undertake more cooperative activities to mitigate their effects, though people acknowledge that the scale of some shocks exceed their capacities. Pastoralists in particular, according to focus groups, are better able to recover from economic shocks than agro-pastoralist or non-pastoralists. Pastoralists are also better able to cope with climate shocks through migration, though this often brings them into conflict with other groups.

Households use a narrow range of coping strategies in response to shocks, the most common ones being selling off livestock assets, reducing food consumption, and relying on family members for loans. Taking children out of school is avoided as a coping strategy, and permanent migration is not viewed as desirable unless there is little other choice. A substantial minority of households rely on access to food-for-work or cash-for-work schemes of government or NGOs.

**Social Capital.** The quantity and quality of social networks and access to larger institutions in society are critical resources that people need both to survive and to improve their livelihoods. Social interactions and networks are complex, with many traditional mechanisms for community cooperation and control. Informal support from relatives, neighbors or friends, such as loans, gifts or remittances, is received far more often than formal support from government or NGOs (e.g., food rations and food-for-work).

FG participants stated that there is strong community belief in helping those who have little; priority is given to those who have the least or have the biggest problem. They explained that elders and the disabled come first in the culture; then religious and community leaders. They do not work to solve problems based on family and clan level, rather they try to solve problems as a community: “Community leaders and elders advise us and make us help each other at the time of shocks. They tell us to give half of what we have to the one who is in need and to do things together as a group when the time is bad.”

*“If your neighbor doesn’t have a cow to be milked you have a responsibility to give one for him from yours. For example, I didn’t grow that much this year so I went to my neighbors and tell them I couldn’t survive the summer with the food I have so they gave me food and seed to grow for the next winter.”* –Female FGD participant

**Aspirations and Confidence to Adapt.** Aspirations and confidence to adapt are psychosocial capabilities that are thought to give people greater resilience in the face of shocks. They are examined in this report using three indicators--absence of fatalism, belief in individual power to enact change, and exposure to alternatives to the status quo--combined into an overall index. The index shows little or no difference in this aspect of resilience across the pastoralist status groups. However there are some notable differences in the index components across groups. Pastoralists are more likely to believe in individual power to enact change, but also more likely to have fatalistic attitudes. Exposure to alternatives to the status quo is very low among all groups. The qualitative data show that the high degree of fatalism among households is countered by an equally strong belief in individual power to enact change. This duality mirrors opinions expressed in focus groups, that while there are factors outside of individuals’ control, like drought and flood, households and communities that work hard and take measures to protect their assets will have better outcomes.

**Table 9: Percent of households experiencing various shocks in the last year**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Climate shocks</b>				
Too little rain/drought	43.6	46.2	41.9	42.4
Livestock/crop disease	47.0	48.3 <sup>a</sup>	50.3 <sup>b</sup>	39.0 <sup>ab</sup>
Very bad harvest	40.3	37.1 <sup>a</sup>	45.7 <sup>ab</sup>	35.6 <sup>b</sup>
Excessive rains	14.9	13.3 <sup>a</sup>	13.6 <sup>b</sup>	19.7 <sup>ab</sup>
Landslides/erosion	14.4	13.9	15.6	13.1
<b>Conflict shocks</b>				
Theft of money	1.9	2.3	1.5	2.1
Theft of crops	1.5	1.3	2.0	0.8
Theft or destruction of assets	1.4	1.3	1.0	2.2
Theft of livestock	3.1	4.3 <sup>a</sup>	2.8	2.0 <sup>a</sup>
Destruction or damage of house due to raids	0.4	0.5	0.2	0.5
Loss of land due to conflict	1.1	1.2	0.9	1.2
Violence against household members	0.5	0.2 <sup>a</sup>	0.5	1.0 <sup>a</sup>
<b>Economic shocks</b>				
Sharp food price increases	63.5	65.7	61.7	63.2
Unavailability of agricultural or livestock inputs	23.0	21.7	24.0	23.3
No demand for agricultural or livestock products	16.6	15.9	18.0	14.9
Increase in price of agricultural or livestock inputs	38.7	40.1	39.2	35.6
Drop in price of agricultural or livestock products	23.5	24.2	23.7	21.9
Death of household member	4.2	2.7 <sup>ab</sup>	4.4 <sup>a</sup>	6.1 <sup>b</sup>
<b>Any shock in the last year</b>	<b>86.8</b>	<b>87.0</b>	<b>87.8</b>	<b>84.7</b>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 10: Perceived severity of shocks among those who experienced the shock<sup>1</sup>**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Climate shocks</b>				
Excessive rains	3.22	3.29 <sup>a</sup>	3.38 <sup>b</sup>	2.95 <sup>ab</sup>
Too little rain/drought	3.65	3.72 <sup>a</sup>	3.64	3.55 <sup>a</sup>
Livestock/crop disease	3.47	3.53 <sup>a</sup>	3.41 <sup>a</sup>	3.52
Very bad harvest	3.63	3.62	3.61	3.70
Landslides/erosion	3.38	3.44	3.38	3.29
<b>Conflict shocks</b>				
Theft of money	3.26	-	-	-
Theft of crops	3.30	-	-	-
Theft or destruction of assets	3.29	-	-	-
Theft of livestock	3.46	3.59	3.36	-
Destruction or damage of house due to raids	-	-	-	-
Loss of land due to conflict	-	-	-	-
Violence against household members	-	-	-	-
<b>Economic shocks</b>				
Sharp food price increases	3.54	3.63 <sup>a</sup>	3.47 <sup>a</sup>	3.52
Unavailability of agricultural or livestock inputs	3.39	3.43	3.40	3.34
No demand for agricultural or livestock inputs	3.33	3.39	3.34	3.20
Increase in price of agricultural or livestock inputs	3.35	3.41	3.29	3.36
Drop in price of agricultural or livestock inputs	3.35	3.44	3.30	3.28
Death of household member	3.32	3.31	3.25	3.42
<b>Index of shock exposure<sup>2</sup></b>	<b>11.5</b>	<b>11.8</b>	<b>11.8</b>	<b>10.8</b>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>1</sup> Measured on a 1-5 scale with 1 being least severe and 5 being most severe.

<sup>2</sup> The index of shock exposure is a weighted average of the incidence of occurrence of each shock (1=yes, 0=no), where the weights are the perceived severity of each shock experienced as measured on a 1-5 scale.

**Table 11: Perceived ability to recover from various shocks**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Climatic shocks</b>				
Excessive rains	31.4	35.8	32.2	26.0
Too little rain/drought	40.1	47.5 <sup>ab</sup>	38.0 <sup>a</sup>	31.9 <sup>b</sup>
Livestock/crop disease	43.3	49.7 <sup>ab</sup>	42.1 <sup>a</sup>	34.2 <sup>b</sup>
Very bad harvest	35.0	40.5 <sup>a</sup>	34.9 <sup>b</sup>	26.8 <sup>ab</sup>
Landslides/erosion	40.4	49.9 <sup>a</sup>	39.2	28.1 <sup>a</sup>
<b>Conflict shocks</b>				
Theft of money	52.1	-	-	-
Theft of crops	40.6	-	-	-
Theft or destruction of assets	58.2	-	-	-
Theft of livestock (raids)	40.9	37.9	45.3	-
Destruction or damage of house due to violence	-	-	-	-
Loss of land due to conflict	-	-	-	-
Violence against household members	-	-	-	-
<b>Economic shocks</b>				
Sharp food price increase	45.0	50.7 <sup>a</sup>	46.6 <sup>b</sup>	33.4 <sup>ab</sup>
Unavailability of agricultural or livestock inputs	38.5	49.3 <sup>a</sup>	38.4 <sup>b</sup>	23.0 <sup>ab</sup>
No demand for agricultural or livestock products	43.4	45.8 <sup>a</sup>	47.4 <sup>b</sup>	30.5 <sup>ab</sup>
Increase in price of agricultural or livestock inputs	46.9	50.1 <sup>a</sup>	48.0	38.9 <sup>a</sup>
Drop in price of agricultural or livestock products	52.5	62.6 <sup>ab</sup>	47.3 <sup>a</sup>	46.1 <sup>b</sup>
Death of household member	39.7	41.4	41.6	36.1
Perceived ability to recover index <sup>1</sup>	2.25	2.35 <sup>a</sup>	2.24	2.12 <sup>a</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**NOTE:** Blank cells indicate that results are not statistically representative, n<=30.

<sup>1</sup> Index scale of 1-5: From “Did not recover” to “Recovered and better off” or “Not affected.”

**Table 12: Food insecurity coping strategies and coping strategy index**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Percent of households relying on various coping strategies</b>				
Rely on less preferred and less expensive foods	49.9	45.4 <sup>ab</sup>	52.0 <sup>a</sup>	52.6 <sup>b</sup>
Borrow food, or rely on help from a friend or relative	32.9	29.0 <sup>a</sup>	32.5 <sup>b</sup>	39.4 <sup>ab</sup>
Purchase food on credit	27.8	26.1	28.9	28.4
Send household members to eat elsewhere	15.9	11.3 <sup>ab</sup>	17.1 <sup>a</sup>	20.3 <sup>a</sup>
Limit portion size at mealtimes	55.7	57.5	55.8	52.9
Restrict consumption by adults in order for small children to eat	34.0	34.5	33.2	34.7
Feed working members of household at the expense of non-working members	14.7	10.5 <sup>ab</sup>	17.4 <sup>a</sup>	15.9 <sup>a</sup>
Reduce number of meals eaten in a day	59.9	63.1 <sup>a</sup>	59.9	55.2 <sup>a</sup>
Skip entire days without eating	22.0	19.5 <sup>a</sup>	21.2 <sup>b</sup>	27.1 <sup>ab</sup>
Coping strategies index	23.6	21.6 <sup>a</sup>	23.6	26.3 <sup>a</sup>
<b>(Higher: more food insecure)</b>				

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 13: Coping strategies in response to shocks**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Change livestock and land holdings</b>				
Send livestock in search of pasture	53.0	62.7 <sup>a</sup>	55.1 <sup>a</sup>	34.2 <sup>a</sup>
Sell livestock	67.1	78.3 <sup>a</sup>	70.8 <sup>a</sup>	43.5 <sup>a</sup>
Slaughter livestock	17.6	25.4 <sup>ab</sup>	13.7 <sup>a</sup>	12.7 <sup>b</sup>
Lease out land	3.5	1.9 <sup>a</sup>	4.8 <sup>a</sup>	3.4
<b>Migration</b>				
Migrate (some members)	20.9	26.9 <sup>a</sup>	20.4 <sup>a</sup>	12.6 <sup>a</sup>
Migrate (whole family)	5.5	6.1	4.9	5.7
Send member to a relative	9.2	6.0 <sup>ab</sup>	10.8 <sup>a</sup>	11.2 <sup>b</sup>
<b>Coping strategies to reduce current expenditure</b>				
Take children out of school	9.9	8.2	10.7	11.1
Move to less expensive house	4.7	4.5	4.6	5.2
Reduce food consumption	67.5	69.4 <sup>a</sup>	69.5 <sup>b</sup>	61.0 <sup>ab</sup>
<b>Coping strategies to get more food or money</b>				
Take up new wage labor	26.7	19.6 <sup>ab</sup>	31.1 <sup>a</sup>	29.4 <sup>b</sup>
Sell household items	2.2	1.1 <sup>ab</sup>	2.4 <sup>a</sup>	3.6 <sup>b</sup>
Sell productive assets	1.8	1.1 <sup>a</sup>	2.5 <sup>a</sup>	1.7
Take out loan from ...NGO	1.6	2.2	1.3	1.3
...Bank	1.0	0.6	1.1	1.3
...Money lender	9.2	11.0 <sup>a</sup>	9.4 <sup>b</sup>	6.3 <sup>ab</sup>
...Friends/relatives	44.3	48.0 <sup>a</sup>	44.7 <sup>b</sup>	38.2 <sup>ab</sup>
Send children to work	4.3	2.4 <sup>ab</sup>	4.8 <sup>a</sup>	6.1 <sup>b</sup>
Receive money or food from family members	31.0	32.3	29.8	31.3
Receive food aid from gov't	15.1	17.1 <sup>a</sup>	13.8 <sup>a</sup>	14.6
Receive food aid from NGO	15.3	18.9 <sup>a</sup>	14.5	11.3 <sup>a</sup>
Participate in food-for-work or cash-for-work	25.6	27.6 <sup>a</sup>	27.5 <sup>b</sup>	19.0 <sup>ab</sup>
Use money from savings	10.9	11.4	11.9	8.2
Remittances	7.4	8.9 <sup>a</sup>	5.9 <sup>a</sup>	7.6
Other	1.1	0.5 <sup>a</sup>	1.8 <sup>a</sup>	0.9

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**NOTE:** The data are only presented for the households that experienced at least one shock in the last year (86.8 percent of households).

**Table 14: Migration patterns and remittances**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
Percent of households migrating in the last two years	10.5	14.6 <sup>ab</sup>	8.2 <sup>a</sup>	8.6 <sup>b</sup>
Percent of households with plans to migrate	4.6	5.5	4.4	3.6
Reasons for planning to migrate (percent, among planners)				
Water/grazing land/farm land	52.2	61.9 <sup>a</sup>	51.9	31.0 <sup>a</sup>
Security reasons	1.5	1.8	1.9	0.0
Marriage	2.1	0.0	2.6	5.5
Death of a family member	7.5	14.5	3.5	0.0
Government resettlement	3.4	4.0	2.6	3.6
Other	33.4	17.9 <sup>ab</sup>	37.5 <sup>a</sup>	59.8 <sup>b</sup>
Percent of households with an individual member who migrated in the last two years	10.5	14.3 <sup>ab</sup>	8.4 <sup>a</sup>	8.4 <sup>b</sup>
Reasons for migrating (percent among migrants)				
Education	11.1	13.4	11.8	-
Alternative source of income	22.9	9.1	13.2	-
Marriage	7.7	8.2	9.6	-
Conflict	0.9	1.0	0.0	-
Take livestock to pasture/water	52.4	65.0	58.7	-
Other	5.1	3.3	6.9	-
Percent of individual migrants who send remittances to household	20.6	18.9 <sup>a</sup>	1.1 <sup>a</sup>	-

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**NOTE:** Blank cells indicate that results are not statistically representative (n<=30).

**Table 15: Formal and informal sources of social support received in the last year**

Indicator	AI	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
Received formal support (percent of households)	27.3	31.4 <sup>ab</sup>	25.7 <sup>a</sup>	24.2 <sup>b</sup>
Sources of formal support <sup>c/</sup>				
Government	57.7	59.6	58.8	52.3
NGOs	57.2	59.0	54.4	59.2
Religious organization	0.0	0.0	0.0	0.0
Other	1.1	0.7	0.4	3.3
Types of formal support received <sup>d/</sup>				
Food ration	65.2	68.1	64.9	60.2
Food-for-work/Cash-for-work	58.2	64.3 <sup>a</sup>	56.7	49.4 <sup>a</sup>
Housing materials	0.8	1.3	0.8	0.0
Installed water points	0.4	0.3	0.1 <sup>a</sup>	1.1 <sup>a</sup>
Install latrine	0.5	0.9	0.4	0.0
School for children	1.0	0.4	1.6	0.8
Cash transfer	2.8	3.3	2.0	3.3
Other	3.0	2.8	1.9	5.5
Received informal support (percent of households)	43.8	51.2 <sup>a</sup>	36.7 <sup>ab</sup>	45.5 <sup>b</sup>
Types of informal support received <sup>d/</sup>				
Charitable giving (religious)	6.6	2.7 <sup>a</sup>	7.3 <sup>a</sup>	11.9 <sup>a</sup>
Remittances	24.3	30.2 <sup>a</sup>	17.0 <sup>ab</sup>	25.0 <sup>b</sup>
Gifts (cash or animals)	48.7	44.7	52.5	50.0
Loans	56.1	60.8 <sup>a</sup>	59.2 <sup>b</sup>	44.0 <sup>ab</sup>
Restocking assistance for relatives	7.0	6.7	6.6	8.3
Giving alms to the poor	3.7	1.0 <sup>ab</sup>	5.4 <sup>a</sup>	5.8 <sup>b</sup>
Other	0.8	0.3	1.0	1.0
Received capacity-building support (percent of households)	41.4	48.9 <sup>a</sup>	43.7 <sup>b</sup>	26.1 <sup>ab</sup>
Sources of capacity-building support <sup>c/</sup>				
Government	96.9	98.0 <sup>a</sup>	97.4 <sup>b</sup>	92.0 <sup>ab</sup>
NGO	26.1	28.8	22.0	31.0
Private sector	1.6	1.6	1.9	0.8
Types of capacity-building support received <sup>d/</sup>				
Vocational training	10.8	12.3 <sup>a</sup>	11.8 <sup>b</sup>	7.1 <sup>ab</sup>
Business development training	10.0	14.7 <sup>a</sup>	9.4 <sup>a</sup>	4.3 <sup>a</sup>
Early warning training	12.9	17.5 <sup>a</sup>	12.8 <sup>a</sup>	6.2 <sup>a</sup>
Natural resource management	34.3	42.1 <sup>a</sup>	35.8 <sup>a</sup>	20.3 <sup>a</sup>
Seed packets/starter packets	9.3	12.3 <sup>a</sup>	9.6 <sup>b</sup>	4.4 <sup>ab</sup>
Adult education	9.7	13.5 <sup>a</sup>	9.1 <sup>a</sup>	4.9 <sup>a</sup>
Mobile phone for marketing	1.9	2.6 <sup>a</sup>	2.1	0.4 <sup>a</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>c/</sup> Reported only for those households receiving the support.

**Table 16: Indexes of bonding, bridging and linking social capital**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
Bonding social capital (mean)	63.1	70.4 <sup>a</sup>	63.3 <sup>a</sup>	52.2 <sup>a</sup>
Bridging social capital (mean)	46.4	55.2 <sup>a</sup>	45.4 <sup>a</sup>	35.2 <sup>a</sup>
Linking social capital (mean)	41.9	45.9 <sup>ab</sup>	40.0 <sup>a</sup>	39.5 <sup>b</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 17: Aspirations and confidence to adapt**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
Index of aspirations and confidence to adapt	28.9	28.4	29.0	29.3
Index components				
Absence of fatalism	44.8	40.5 <sup>ab</sup>	47.5 <sup>a</sup>	46.8 <sup>b</sup>
Belief in individual power to enact change	59.9	63.0 <sup>ab</sup>	58.5 <sup>a</sup>	58.6 <sup>b</sup>
Exposure to alternatives to the status quo	4.8	4.5	4.5	5.7

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

## Assets and Consumption Expenditures (Poverty)

This section provides quantitative and qualitative data on household assets, consumption and expenditure. When per-capita household expenditures—a measure of current income—is used for measurement, along with the \$1.25 poverty line, the prevalence of poverty is 56.3 percent. When poverty is measured using asset ownership, a different picture emerges. By this measure of structural, long-term deprivation, non-pastoralists are more likely to suffer from structural poverty than are pastoralists.

The main challenges to livestock rearing are animal disease, land degradation due to invasive plant species, predators, drought and overgrazing. Participation in livestock markets is widespread, but not universal: about 60 percent of all households either purchased or sold an animal in the year prior to the survey. Travel distances to markets, in addition to lack of information and means of communication, are factors limiting market participation. The commodities produced from livestock—meat, milk and hides—are a vital part of the livestock production and marketing system. Households consume most of the meat, milk and hides that they produce: subsistence production dominates.

Livelihood diversification is important for resilience because it allows flexibility, reducing households' vulnerability in the face of shocks. Among the pastoralist status groups, agro-pastoralists have the widest diversity of livelihoods, followed by pastoralists and non-pastoralists. Ownership of productive assets, access to markets, services, infrastructure and information are equally important factors determining households' resilience (see next section). In general, conditions in this dimension of resilience are better for pastoralists than agro- and non-pastoralists.

**Qualitative data overview:** FGDs relevant to livelihood diversification provide some information about women's contribution to such diversification. FG participants in a pastoral area said that women who live near roads can engage in petty trade. Other women have started raising chickens, which are the only property they have full authority over without involvement of their husbands. One FGD suggested that widows tend to be more "prosperous" because they are more free to engage in

livelihood activities and sometimes qualify for targeted support. In one community, the identified “positive deviant” was a widow. She explained that the culture makes women dependent on men but when widowed, women are forced to work hard and exercise their own initiative. An example of a positive change for widowed women is that they can sell livestock, while married women cannot because they don’t have the authority to make household decisions.

“You can bring what the community needs from town and get profit if you are a trader, but farming doesn’t work during droughts.” –Positive deviant

**Table 18: Household consumption expenditures and assets (excluding livestock)**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
Expenditures poverty (\$1.25 per day poverty line)				
Poverty (percent)	56.3	60.7 <sup>a</sup>	56.3 <sup>b</sup>	50.0 <sup>ab</sup>
Depth of poverty (percent)	22.4	23.1	22.2	21.7
Per capita expenditures (daily CFA Franc)				
Total	439.3	397.5	439.3	504.7
Food	358.3	329.5	358.3	402.7
Non-food	81.1	70.6	81.1	102.0
Percent of expenditures on food (mean)	2141.7	2175.7	2136.5	2097.2
Percent of food expenditures from three sources				
Purchases	45.6	44.5 <sup>a</sup>	41.9 <sup>b</sup>	54.0 <sup>ab</sup>
Home production	49.7	52.0 <sup>a</sup>	55.4 <sup>b</sup>	36.0 <sup>ab</sup>
Received in-kind	4.7	3.5 <sup>a</sup>	2.7 <sup>b</sup>	10.0 <sup>ab</sup>
Asset poverty				
Poverty (percent)	56.3	45.0 <sup>a</sup>	53.7 <sup>a</sup>	78.0 <sup>a</sup>
Index of consumption assets <sup>c/</sup>	1.3	1.4 <sup>a</sup>	1.3 <sup>a</sup>	1.2
Index of productive assets <sup>d/</sup>	8.1	8.2 <sup>a</sup>	9.4 <sup>a</sup>	5.7 <sup>a</sup>
Animals owned (TLU's) <sup>e/</sup>	6.4	10.1 <sup>a</sup>	5.5 <sup>a</sup>	2.5 <sup>a</sup>
Overall asset index <sup>f/</sup>	49.3	51.0 <sup>a</sup>	50.1 <sup>a</sup>	45.2 <sup>a</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>c/</sup> Number of consumption assets owned out of 21.

<sup>d/</sup> Number of productive agricultural assets owned out of 22.

<sup>e/</sup> TLU's are Tropical Livestock Units (see text).

<sup>f/</sup> The asset index is constructed using principal components analysis and placed on a scale of 0 to 100.

**Table 19: Productive assets**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Nonpastoralist
<b>Agricultural productive assets (percent HHs owning)</b>				
Plough yoke	66.6	66.7 <sup>a</sup>	78.0 <sup>a</sup>	46.0 <sup>a</sup>
Plough beam	64.4	65.7 <sup>a</sup>	76.8 <sup>a</sup>	40.5 <sup>a</sup>
Plough lever	64.3	65.6 <sup>a</sup>	76.8 <sup>a</sup>	40.1 <sup>a</sup>
Pair of plough blade	63.7	65.1 <sup>a</sup>	76.0 <sup>a</sup>	39.6 <sup>a</sup>
Leather tie for plough	59.7	59.6 <sup>a</sup>	71.9 <sup>a</sup>	38.1 <sup>a</sup>
Metal-plough	58.5	61.2 <sup>a</sup>	69.7 <sup>a</sup>	34.4 <sup>a</sup>
Sickle	56.3	52.7 <sup>a</sup>	68.4 <sup>a</sup>	40.3 <sup>a</sup>
Pick axe	45.3	47.1 <sup>a</sup>	50.4 <sup>b</sup>	33.6 <sup>ab</sup>
Axe	76.3	82.1 <sup>a</sup>	79.2 <sup>b</sup>	62.3 <sup>ab</sup>
Pruning/cutting shears	7.6	5.2 <sup>ab</sup>	8.4 <sup>a</sup>	9.8 <sup>a</sup>
Hoe	42.5	43.6 <sup>a</sup>	46.8 <sup>b</sup>	33.3 <sup>ab</sup>
Spade or shovel	43.0	47.7 <sup>a</sup>	46.1 <sup>b</sup>	30.4 <sup>ab</sup>
Whip (leather)	45.6	50.0 <sup>a</sup>	53.9 <sup>b</sup>	24.4 <sup>ab</sup>
Traditional beehive	13.4	15.6 <sup>a</sup>	14.9 <sup>b</sup>	7.7 <sup>ab</sup>
Modern beehive	1.1	0.7	1.2	1.3
Knapsack chemical sprayer	1.5	1.1	1.7	2.0
Mechanical water pump	0.6	0.4	0.6	1.0
Motorized water pump	0.6	0.2 <sup>a</sup>	0.7	1.1 <sup>a</sup>
Stone grain mill	19.1	14.7 <sup>a</sup>	23.1 <sup>a</sup>	18.7
Motorized grain mill	0.8	0.4	1.2	0.5
Broad bed maker	2.4	1.7	3.1	2.2
Small tractor	0.4	0.0 <sup>ab</sup>	0.5 <sup>a</sup>	0.8 <sup>b</sup>
Hand-held motorized tiller	2.3	1.2 <sup>a</sup>	3.5 <sup>a</sup>	1.9
<b>Index of agricultural productive assets<sup>c/</sup></b>	<b>8.1</b>	<b>8.2<sup>a</sup></b>	<b>9.4<sup>a</sup></b>	<b>5.7<sup>a</sup></b>
<b>Animals (TLUs owned)<sup>d/</sup></b>	<b>6.4</b>	<b>10.1<sup>a</sup></b>	<b>5.5<sup>a</sup></b>	<b>2.5<sup>a</sup></b>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>c/</sup> This index is the sum of assets owned with three sets grouped together into one category: Traditional beehive and modern beehive, Mechanical water pump and Motorized water pump, and Stone grain mill and motorized grain mill. The index ranges from 0 to 21.

<sup>d/</sup> Tropical livestock units (see Section 3.5).

**Table 20: Livestock assets**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
<b>Percent of households owning various animals</b>				
<b>Cattle</b>				
Oxen	49.2	55.8 <sup>a</sup>	56.3 <sup>b</sup>	26.4 <sup>ab</sup>
Bulls	11.8	18.7 <sup>a</sup>	10.0 <sup>a</sup>	4.8 <sup>a</sup>
Young bulls	23.8	32.3 <sup>a</sup>	25.3 <sup>a</sup>	8.6 <sup>a</sup>
Exotic bulls	0.3	0.3	0.2	0.3
Local cows	82.0	94.6 <sup>a</sup>	88.3 <sup>a</sup>	51.5 <sup>a</sup>
Crossbred cows	0.4	0.3	0.5	0.4
Exotic cows	0.3	0.4	0.2	0.3
Local heifers	32.4	44.9 <sup>a</sup>	32.4 <sup>a</sup>	13.4 <sup>a</sup>
Crossbred heifers	0.1	0.0	0.1	0.3
Exotic heifers	0.2	0.2	0.3	0.1
Local calves	68.3	87.1 <sup>a</sup>	72.0 <sup>a</sup>	33.7 <sup>a</sup>
Crossbred calves	0.2	0.4	0.1	0.0
Exotic calves	0.1	0.0	0.1	0.0
<b>Poultry</b>				
Poultry	32.7	34.2 <sup>a</sup>	37.9 <sup>b</sup>	21.2 <sup>ab</sup>
<b>Sheep/goats</b>				
Sheep	55.5	64.4 <sup>a</sup>	60.0 <sup>b</sup>	33.9 <sup>ab</sup>
Goats	72.2	82.9 <sup>a</sup>	76.1 <sup>a</sup>	49.3 <sup>a</sup>
<b>Other</b>				
Donkeys	34.7	37.9 <sup>a</sup>	38.1 <sup>b</sup>	23.8 <sup>ab</sup>
Horses	0.2	0.4 <sup>a</sup>	0.0 <sup>a</sup>	0.1
Mules	0.7	1.9 <sup>ab</sup>	0.2 <sup>a</sup>	0.00 <sup>b</sup>
Camels	16.4	26.4 <sup>a</sup>	13.1 <sup>a</sup>	7.3 <sup>a</sup>
<b>Summary by category of animal (percent)</b>				
Cattle (excluding oxen)	85.5	96.0 <sup>a</sup>	92.4 <sup>a</sup>	57.4 <sup>a</sup>
Oxen	49.2	55.8 <sup>a</sup>	56.3 <sup>b</sup>	26.4 <sup>ab</sup>
Poultry	32.7	34.2 <sup>a</sup>	37.9 <sup>b</sup>	21.2 <sup>ab</sup>
Sheep/goats	79.1	88.5 <sup>a</sup>	83.5 <sup>a</sup>	56.8 <sup>a</sup>
Other	43.7	52.3 <sup>a</sup>	45.0 <sup>a</sup>	28.6 <sup>a</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 21: Access to land**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
<b>Access to land (mean hectares)</b>				
Now	1.54	1.3 <sup>a</sup>	1.8 <sup>ab</sup>	1.4 <sup>b</sup>
One year ago	1.53	1.3 <sup>a</sup>	1.8 <sup>ab</sup>	1.3 <sup>b</sup>
Two years ago	1.52	1.3 <sup>a</sup>	1.8 <sup>ab</sup>	1.3 <sup>b</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 22: Production, consumption, sales, and purchases of livestock commodities**

Indicator	All	Pastoralist status		
		Pastor- alist	Agro- pastoralist	Non- pastoralist
Amount produced in last year				
Meat (kgs)	3.2	5.3 <sup>ab</sup>	2.4 <sup>a</sup>	1.5 <sup>b</sup>
Milk (liters)	371.1	575.6 <sup>a</sup>	333.9 <sup>a</sup>	138.1 <sup>a</sup>
Hides (number)	0.6	1.0 <sup>a</sup>	0.5 <sup>a</sup>	0.2 <sup>a</sup>
Amount purchased in last year				
Meat (kgs)	0.8	0.5	0.9	1.0
Milk (liters)	26.1	9.2 <sup>a</sup>	19.0 <sup>a</sup>	63.0 <sup>a</sup>
Hides (number)	0.0	0.1 <sup>a</sup>	0.0	0.0 <sup>a</sup>
Amount consumed in last year				
Meat (kgs)	4.2	7.2 <sup>ab</sup>	2.9 <sup>a</sup>	2.2 <sup>b</sup>
Milk (liters)	349.3	531.3 <sup>a</sup>	303.4 <sup>a</sup>	164.1 <sup>a</sup>
Hides (number)	0.6	0.9 <sup>a</sup>	0.5 <sup>a</sup>	0.2 <sup>a</sup>
Amount sold in last year				
Meat (kgs)	0.24	0.45	0.21	0.0
Milk (liters)	36.6	47.9 <sup>a</sup>	38.6 <sup>b</sup>	16.7 <sup>a,b</sup>
Hides (number)	0.05	0.07	0.04	0.04

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 23: Fodder types and availability**

Indicator	All	Pastoralist status		
		Pastor- alist	Agro- pastor alist	Non- pastor alist
Percent of livestock owners using type of fodder				
Communal pasture browse	71.4	88.8 <sup>a</sup>	64.2 <sup>a</sup>	55.0 <sup>a</sup>
Private pasture browse	22.1	8.7 <sup>ab</sup>	28.4 <sup>a</sup>	33.1 <sup>b</sup>
Green fodder	1.3	0.4 <sup>a</sup>	1.1 <sup>a</sup>	3.5 <sup>a</sup>
Crop residue	4.2	1.4 <sup>ab</sup>	5.6 <sup>a</sup>	6.2 <sup>b</sup>
Improved feed	0.0	0.0	0.0	0.2
Hay	1.0	0.7	0.8 <sup>a</sup>	2.0 <sup>a</sup>
Mean length of time to get to fodder/pasture (hrs.)				
	1.8	2.1 <sup>ab</sup>	1.7 <sup>a</sup>	1.5 <sup>b</sup>
Percent of livestock owners getting fodder at various places				
Market	1.4	1.1 <sup>a</sup>	0.7 <sup>b</sup>	3.5 <sup>ab</sup>
Own field	28.3	11.4 <sup>ab</sup>	37.2 <sup>a</sup>	39.6 <sup>b</sup>
Neighbors	1.3	0.3 <sup>a</sup>	0.9 <sup>a</sup>	3.9 <sup>a</sup>
Livestock feed service	0.8	0.2 <sup>a</sup>	0.7 <sup>b</sup>	2.2 <sup>ab</sup>
Community field	67.6	86.7 <sup>a</sup>	60.3 <sup>a</sup>	48.9 <sup>a</sup>
Other	0.6	0.3 <sup>a</sup>	0.3 <sup>b</sup>	1.9 <sup>ab</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 24: Livestock water availability**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
Percent of livestock owners getting water for their livestock from various sources				
River	5.2	2.6 <sup>ab</sup>	6.1 <sup>a</sup>	8.0 <sup>b</sup>
Stream	2.0	0.4 <sup>ab</sup>	2.9 <sup>a</sup>	2.9 <sup>b</sup>
Spring	3.1	1.3 <sup>ab</sup>	4.1 <sup>a</sup>	4.4 <sup>b</sup>
Pond	49.3	57.8 <sup>ab</sup>	44.8 <sup>a</sup>	43.6 <sup>b</sup>
Borehole well	14.1	11.3	16.0	14.9
Hand dug well	20.4	22.1	20.5	17.2
Delivered by water truck	1.9	0.9	2.2	2.9
Other	4.0	3.6 <sup>a</sup>	3.4 <sup>b</sup>	6.1 <sup>ab</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 25: Diversity of livelihood sources**

Indicator	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
Number of livelihood activities	2.1	2.0 <sup>a</sup>	2.3 <sup>a</sup>	1.7 <sup>a</sup>

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

## Access to Markets, Services and Information

This section provides quantitative and qualitative data on household households' access to and participation in market systems, as well as access to services, infrastructure and information.

**Qualitative data overview:** Male FGDs in multiple communities claimed that the community has no information about markets and prices, though there is access to markets. The sources of information about market prices are typically traders and individual visits to the market place prior to making a decision to sell. They are not in a position to make contact with traders due to limited road and telephone infrastructure. As a result, they are often persuaded to sell livestock to brokers below fair market prices. FG participants talked about the multiple negative consequences of limited access to roads, particularly on women's health and on market access. In one region, men mentioned that lack of transportation limits access to emergency services, health services (especially for pregnant women), purchase of food and implementation of development activities.

*"The health post, school and veterinary clinic are not prepared with professionals or equipment. We travel to the main city for medical support. Even pregnant and bleeding mothers travel too far for treatment."* –Male FGD participant

In terms of disaster planning, some communities report that they receive warning from NGOs and government that rainfall is declining and a dry period is coming, and they need to sell their animals

before losing them. Others claim they have little or no advance information from the government or any other agency related to impending drought. Instead, respondents in some male FGs say they obtain information from elders with special talents who make forecasts. “The information they provide is sometimes true and sometimes not true.”

Female FGD respondents in agro-pastoral areas say that community members cooperate to prevent and recover from damage caused by flooding. During the last flood, the community came together to prevent flood waters from entering the community center to protect the community school exercise books from being damaged. Female FG participants in another community had a similar response – they come together to decide on a course of action for approaching government with requests for assistance. They also reportedly work collectively to prepare sandbags and other flood mitigation activities aimed at preventing damage to farm land.

**Table 26: Access to Markets**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
<b>Normal place of sale for livestock products (percent)</b>				
This village	9.5	6.5 <sup>a</sup>	9.2 <sup>b</sup>	15.6 <sup>ab</sup>
Another village	11.3	12.4	11.5	9.0
Local market town	62.2	70.6 <sup>a</sup>	62.1 <sup>a</sup>	47.1 <sup>a</sup>
District town	13.5	8.8 <sup>a</sup>	14.0 <sup>a</sup>	20.6 <sup>a</sup>
Other	3.6	1.7 <sup>a</sup>	3.2 <sup>a</sup>	7.7 <sup>a</sup>
<b>Normal place of sale for agricultural crops (percent)</b>				
At farm	4.2	3.1 <sup>a</sup>	3.2 <sup>b</sup>	8.9 <sup>ab</sup>
In village	12.2	9.1 <sup>a</sup>	12.7	16.2 <sup>a</sup>
Local market	75.4	80.3 <sup>a</sup>	75.7 <sup>b</sup>	66.1 <sup>ab</sup>
Regional market	3.3	2.6	3.5	3.9
Other	4.9	4.9	5.0	4.8
Percent preferring to sell at a different market	44.6	46.7 <sup>a</sup>	46.3 <sup>b</sup>	37.5 <sup>ab</sup>
<b>Reason for not selling at preferred market (percent, multiple responses possible)</b>				
Transport cost too high	28.4	28.6	26.0 <sup>a</sup>	33.9 <sup>a</sup>
Too long to reach market	53.4	48.2 <sup>a</sup>	57.9 <sup>a</sup>	53.0
Unsure of prices in market	18.1	21.0 <sup>a</sup>	19.2 <sup>b</sup>	9.3 <sup>ab</sup>
Other	4.6	3.4 <sup>a</sup>	4.3 <sup>b</sup>	8.1 <sup>ab</sup>
<b>Normal place for purchase of agricultural and livestock inputs (percent)</b>				
At farm	3.9	1.4 <sup>a</sup>	4.0 <sup>a</sup>	9.9 <sup>a</sup>
Village shop	8.2	6.4	8.9	10.9
Local market	82.4	87.0 <sup>a</sup>	81.0 <sup>b</sup>	75.3 <sup>ab</sup>
Regional market	3.5	3.4	3.9	2.6
Other	1.9	1.9	2.3	1.3
Percent preferring to purchase at a different market	53.1	56.3	52.1	47.9
<b>Reason for not purchasing at preferred market (percent, multiple responses possible)</b>				
Transport cost too high	29.1	33.3	23.9	32.2
Too long to reach market	41.2	35.3 <sup>a</sup>	44.0	50.3 <sup>a</sup>
Unsure of prices in market	25.7	27.3 <sup>a</sup>	29.1 <sup>b</sup>	11.2 <sup>ab</sup>
Other	4.0	4.1	3.0	6.4

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 27: Livestock market participation: stocks, purchases and sales in the last year**

Indicator (mean tropical livestock units)	All	Pastoralist status		
		Pastoralist	Agropastoralist	Non-pastoralist
Animals owned one year ago	7.2	10.9 <sup>a</sup>	5.6 <sup>a</sup>	3.3 <sup>a</sup>
Animals purchased in the last year	0.16	0.19 <sup>a</sup>	0.14 <sup>a</sup>	0.12 <sup>a</sup>
Animals sold in the last year	0.71	1.17 <sup>a</sup>	0.52 <sup>a</sup>	0.25 <sup>a</sup>
Animals dying an unplanned death in last year	0.91	1.20 <sup>a</sup>	0.86 <sup>a</sup>	0.47 <sup>a</sup>
Animals owned now	7.0	10.6 <sup>a</sup>	5.6 <sup>a</sup>	3.2 <sup>a</sup>
<b>Market participation indicators</b>				
Percent of households buying or selling any animal in the last year	61.9	75.0 <sup>a</sup>	58.7 <sup>a</sup>	43.6 <sup>a</sup>
Market participation index <sup>c/</sup>	6.43	6.67	6.11	6.73

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>c/</sup> Average of the percent of animals owned a year ago that were sold and the percent of animals currently owned that were purchased.

**Table 28: Access to animal health services**

Indicator	All
<b>Percent of households with animal services in their area (from household survey)</b>	
Vaccination, dipping inoculation	55.7
Treatment for diseases	49.2
Animal de-worming	26.5
Breeding services	0.8
Commercial feed supply	0.9
Veterinary store with vaccines	10.4
Veterinary store with de-worming supplies	6.6
Veterinary store with antibiotics	6.6
Veterinary store with salt licks/mineral supplements	3.4
Other	5.5
<b>Percent of communities with animal services (from community survey)</b>	
Livestock vaccinations	50.7
Livestock antibiotics	37.8
De-worming	33.4
Dipping inoculation	4.4
Other treatment for diseases	38.5
Supplemental feeding	4.0
Other	11.7

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 29: Access to and usage of credit and saving support**

Indicator	All	Pastoralist status		
		Pastor- alist	Agro- pastor alist	Non- pastor alist
<b>Usage of credit support</b>				
Percent of households taking out a loan in the last year	44.6	52.5 <sup>a</sup>	43.1 <sup>a</sup>	35.6 <sup>a</sup>
Source of loans				
Money lender	3.5	2.7	4.5	3.1
Friend/neighbor	65.0	66.8	61.8	68.1
Family member	3.2	2.4	3.7	4.3
Micro credit	4.0	4.2	3.4	4.6
Savings group	21.3	21.2	24.3 <sup>a</sup>	14.7 <sup>a</sup>
Other	3.0	2.7	2.3	5.4
Households taking out a loan as a percent of those in need of one	57.5	69.2 <sup>a</sup>	54.7 <sup>a</sup>	45.8 <sup>a</sup>
<b>Reasons given for not taking out a loan when needed one</b>				
No loan that met my needs <sup>c/</sup>	8.4	7.7	11.0 <sup>a</sup>	5.2 <sup>a</sup>
Afraid I couldn't pay back	39.4	48.1 <sup>a</sup>	33.3 <sup>a</sup>	41.4
No loan providers in my area	51.3	43.6 <sup>a</sup>	55.0 <sup>a</sup>	51.9
Other	0.9	0.6	0.7	1.5
<b>Access to savings support</b>				
Percent of communities with a savings group	40.4	-	-	-
<b>Usage of savings support</b>				
Percent of households with cash savings	13.9	18.3 <sup>ab</sup>	12.3 <sup>a</sup>	10.3 <sup>b</sup>
Place where savings are held				
In cash at home	32.1	39.0	25.5	28.1
With savings group or micro-finance institution	58.7	51.6 <sup>a</sup>	73.0 <sup>ab</sup>	44.1 <sup>b</sup>
With bank	7.6	8.1 <sup>a</sup>	1.5 <sup>b</sup>	20.8 <sup>ab</sup>
Other	1.7	1.2	0.0	7.0

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

<sup>c/</sup> I.e., is appropriate in terms of size, terms, sharia-compliant, etc.

**NOTE:** Blank cells indicate that results are not statistically representative (n<=30).

**Table 30: Percent of households with access to various sources of information**

Type of information	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
Long term changes in weather patterns	35.3	42.2 <sup>a</sup>	35.5 <sup>a</sup>	24.6 <sup>a</sup>
Rainfall prospects	47.0	55.6 <sup>a</sup>	47.4 <sup>a</sup>	33.3 <sup>a</sup>
Local water prices and availability	54.2	58.3 <sup>a</sup>	58.3 <sup>b</sup>	40.8 <sup>ab</sup>
Methods for animal health/husbandry	37.2	44.9 <sup>a</sup>	39.3 <sup>a</sup>	21.4 <sup>a</sup>
Livestock disease threats	39.7	48.4 <sup>a</sup>	40.3 <sup>a</sup>	25.1 <sup>a</sup>
Current market prices for animals in the area	55.7	62.4 <sup>a</sup>	60.0 <sup>b</sup>	37.8 <sup>ab</sup>
Market prices for animal products	50.4	57.7 <sup>a</sup>	53.8 <sup>b</sup>	33.0 <sup>ab</sup>
Grazing conditions in nearby areas	57.9	67.8 <sup>a</sup>	60.4 <sup>a</sup>	37.9 <sup>a</sup>
Conflict or other restrictions in access to grazing	45.2	52.1 <sup>a</sup>	46.6 <sup>b</sup>	32.0 <sup>ab</sup>
Business and investment opportunities	13.7	17.7 <sup>a</sup>	13.8 <sup>a</sup>	7.6 <sup>a</sup>
Opportunities for borrowing money	21.6	27.0 <sup>a</sup>	21.7 <sup>b</sup>	13.2 <sup>ab</sup>
Market prices for food	51.2	55.4 <sup>a</sup>	54.6 <sup>b</sup>	38.6 <sup>ab</sup>
Child nutrition and health info	43.9	54.9 <sup>a</sup>	40.7 <sup>a</sup>	32.9 <sup>a</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 31: Availability of infrastructure and services in communities**

Indicator	All
<b>Infrastructure (percent of communities)</b>	
Piped water used by at least half of households	3.4
Electricity used by at least half of households	0.0
Cell phones used by at least half of households	46.8
A public telephone is available within 5 km	46.6
The community can be reached by a paved road	18.1
Public transportation available within 10 km	47.0
<b>Services</b>	
A primary school is available within 5 km	92.9
A secondary school is available within 5 km	14.7
Adult education is available	48.3
A health center is available within 5 km	79.8
Animal services are available within 5 km <sup>c/</sup>	74.6
Agricultural extension services are available	76.4
Security or police can reach community within one hour	43.4
Availability of institutions that provide assistance in times of need	
Food assistance	44.9
Housing materials and other non-food items	19.3
Assistance due to losses of livestock	14.9

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons across columns.

<sup>c/</sup> Veterinary center, abattoir or dairy processing facility.

**Table 32: Percent of communities with disaster planning and response services**

Indicator	All
Disaster planning service	20.6
Government planning service	15.1
NGO planning service	11.7
Disaster response service	18.7
Government response service	14.3
NGO response	10.7

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

## Resilience Capacities Indices

This section provides quantitative and qualitative data on the resilience capacities. Building resilience requires an integrated approach, and a long-term commitment to improving these three critical capacities. Examination of mean values of indexes of the capacities across groups confirms that pastoralists are more resilient than agro-pastoralists. Non-pastoralists tend to be the least resilient.

### Qualitative data overview:

**Absorptive capacity.** FG participants gave many examples of how they now take preventive measures based on what they have learned from previous shocks. Female FG participants provided examples of how they have adapted to the threat of floods by building terraces on agricultural land and creating drainage canals for flood water. Other women have built a water reservoir for their cattle, and now will now take animals to the to the animal health post when they are sick. The female FG participants further discussed how previously, they migrated in response to drought, but now they work together to protect their farm and animals from drought and flood. Other women say that households in their community organize into groups of five to 10 households to plough fields together. Additionally, a group of women started saving but claim that thus far it has not been effective as follow up and support was not there. The women said that there were many of them when starting the saving, but now there are only about nine who keep on saving even though they do not know what to do with the savings.

Male FG participants in agro-pastoral areas report that the community came together to plan a course of action in response to unpredictable rainfall and drought. They decided irrigation was the best solution and dug about 15 wells. However, they lack pumps to get the water to the crops or cement to line the wells. In a pastoral area, communities try to develop traditional water wells during droughts, and they are reportedly increasingly willing to involve elders and government to solve conflicts.

**Adaptive capacity:** FG discussions with community members showed that people are taking action to adapt to changing economic and environmental conditions. Female FGD participants claim that in the past they engaged in small-scale agriculture on their own lands and had no other livelihood strategies. Now, they've begun to sell cattle and rent additional parcels of land that they cultivate simultaneously in case the crop on their own land is insufficient or lost. They also claim that hunger is no longer common in their community, even during periods of drought. Rather than "sitting and waiting for help" during drought, they are more likely to go to the mountains to collect firewood which they then sell in the city. Alternatively, they might work as maids in the city. The men observed that when drought comes some

people are better able to cope in drought seasons and times of hardship because they have diversified their livelihoods and they are flexible in responding to the shocks.

Men in one community reported having better access to cattle and grain prices via brokers on mobile phones compared to without mobile phones. They said that access to mobile phones is increasing but there is currently no government or NGO involvement in boosting access.

Several FGD participants (male and female) identified greater willingness to support school attendance and other trainings as an important means of adaptation to changing economic and environmental conditions. Female FGD participants also said in addition to greater support for children’s education, women are prepared to seek out educational opportunities for themselves. Doing so makes them feel better prepared to directly address problems in society.

**Transformative capacity:** According to FG participants in an agro-pastoral area, government officials (teachers, extension agents, health extension workers, district administrators) and NGOs are often the facilitators of collective community actions that can bring about the system-level changes that underlie transformative capacity. Collective action is coordinated by tribal leaders as well as government structures at various levels, and the leaders of groups of households, who convey various messages about collective action as well as emergency warnings. Many communities say they have good links with government. When a need arises, communities report to the government and if government can’t offer support, it will link them to NGOs. Government representatives have also worked to formally facilitate women’s empowerment by raising awareness of their rights to equality and ownership of assets. Women also participate in trainings both from NGOs and government, and some women have organized in groups to save and borrow money, though inclusivity of such groups is reportedly a challenge.

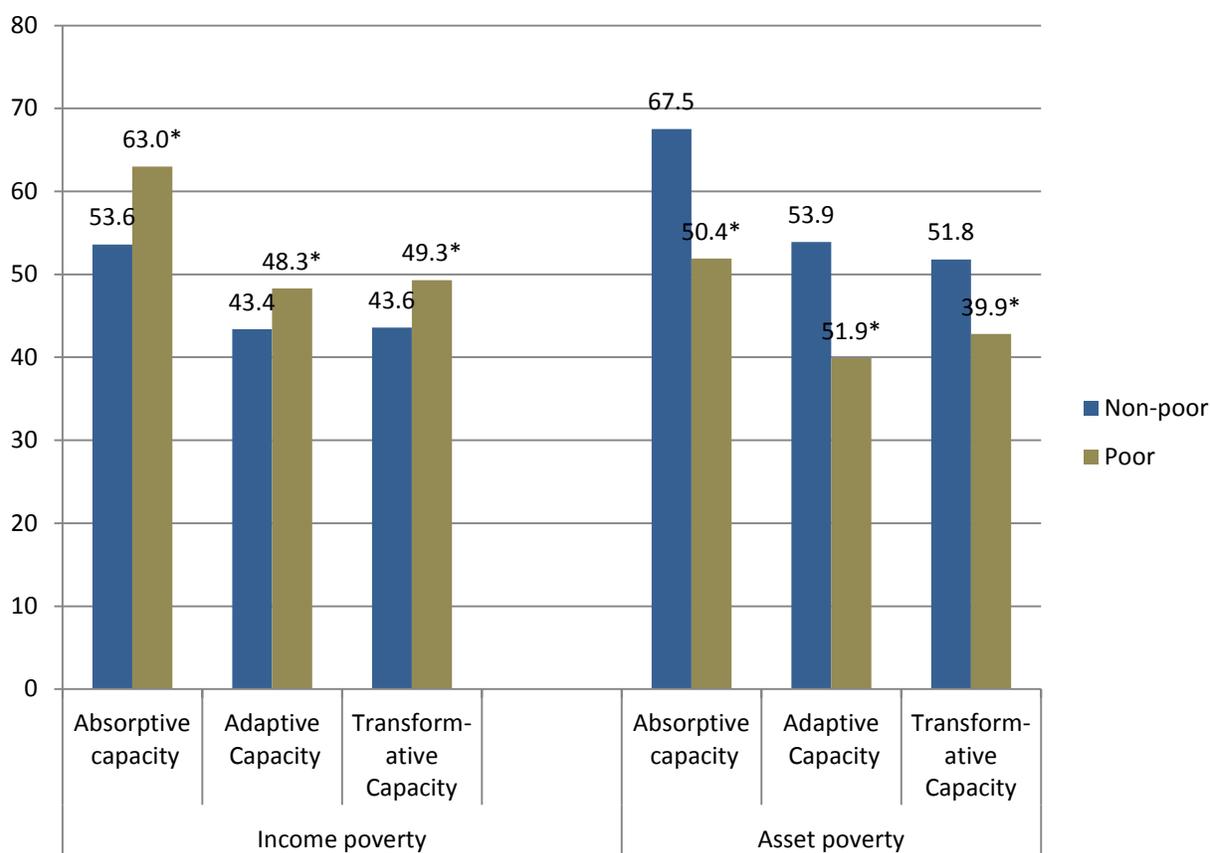
FG respondents in a pastoral area also report that relations with the government have gone from very little contact to what is now a “useful” relationship in terms of social protection and conflict mitigation. Women in one community say that the government has supported them by providing farm inputs and information, and advice on which vaccinations to obtain for their animals. However, male FGD participants talked about their dissatisfaction with a water reservoir under construction whose design will not meet the water needs of the community.

**Table 33: Indices of absorptive, adaptive and transformative capacity**

Indicator	All	Pastoralist status		
		Pastoralist	Agro-pastoralist	Non-pastoralist
Index of absorptive capacity	58.8	65.2 <sup>a</sup>	58.9 <sup>a</sup>	49.4 <sup>a</sup>
Index of adaptive capacity	46.1	52.1 <sup>a</sup>	45.7 <sup>a</sup>	38.3 <sup>a</sup>
Index of transformative capacity	46.8	51.9 <sup>a</sup>	45.4 <sup>a</sup>	42.0 <sup>a</sup>
Resilience Capacity	49.2	55.2 <sup>a</sup>	48.5 <sup>a</sup>	41.8 <sup>a</sup>

<sup>a,b</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Figure 1: Indexes of absorptive, adaptive and transformative capacity (means), by poverty status**



## Community Resilience

This section provides quantitative and qualitative data on community resilience. Community resilience is the capacity of communities to absorb change, seize opportunity to improve living standards, and to transform livelihood systems while sustaining the natural resource base. It is measured in this study in relation to five types of collective action that a community can engage in: disaster risk reduction, conflict mitigation, social protection, natural resource management, and managing and maintaining public goods (e.g., schools, health clinics, roads). The quantitative data are provided for the full sample only.

**Qualitative data overview:** Female FG participants portray their community as relatively cohesive in terms of management of water access. “When we use communal properties like water we use them properly . . . To minimize conflict there is a controller who makes us keep our queue.” They are led by community elders and religious leaders during times of stress but will come together as an entire community to discuss responses/solutions. According to female FG participants, women in the community also help one another in the event of conflict by sharing food among households. Several

respondents noted that women in their communities had initiated informal savings groups without external assistance as a means of supporting particularly needy households during difficult times.

Female FG participants in one agro-pastoral community report that conflict occurs occasionally between community members regarding management of agricultural land. In such cases community elders try to resolve the problem, and, if deemed necessary will levy fines against guilty farmers. They further explained that if the situation gets out of hand the elders will take the issue to local government leaders in pursuit of justice.

Informal social protection mechanisms extend to households in other communities. For instance, according to FG participants, when farms in another community were flooded, contributions were solicited from every household in both kebeles to rent a tractor need to back fill the land that was washed away by the flood. In the case of shocks the community may request support from educated community members who are living far away and they often respond to such requests. However, FG discussions about relations with other groups and communities frequently highlighted conflict over pasture and water, especially when migration occurs in response to drought stress.

*“We need to work together as a group and get out of poverty.”* –Male FGD participant

**Table 34: Community organizations available**

Type of organization	All
Water users' group	46.1
Grazing land users' group	41.4
Disaster planning group	23.4
Credit or micro-finance group	37.0
Savings group	40.4
Zakat	40.5
Mutual help group	52.3
Trade or business associations	21.6
Civic group	19.5
Charitable group	10.0
Religious group	48.1
Political group	75.0
Women's group	72.4
Youth group	61.1

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

**Table 35: Community resilience**

Indicator	All
Community resilience index	43.8
Index components	
Number of natural resource management groups (mean) b/	1.2
Disaster risk reduction index	0.4
Social protection index	0.6
Presence of a civic (“improving community”) group	19.5
Conflict mitigation: Percent of households in community that received information on conflict in the last year	41.8

<sup>ab</sup> Subgroups with the same superscript are significantly different at the 0.05 level. Comparisons are across columns.

## Regression Analysis

**Table 36: Regression analysis: Relationship between well-being outcomes and shock exposure**

	Food security (consumption indicators)		Food insecurity (experiential indicators)		Child nutritional status (< 5 yrs.)	
	Per-capita calorie consumption	Dietary diversity score	HFIAS <sup>a/</sup>	Household hunger scale	Weight- for- height z-score	
Shock exposure	-1.3	0.010 **	0.225 ***	0.031 ***	-0.002	
Adult equivalents	-415.9 ***	-0.184 *	0.385	0.023	-0.061	
AE-squared	25.3 ***	0.013	-0.024	-0.002	0.005	
<b>Demographics and education</b>						
Females 16-30	-1.9	0.005 **	-0.005	-0.001	0.001	
Females 30 plus	3.5 *	0.009 ***	-0.025 ***	-0.005 **	-0.007	
Males 16-30	10.1 ***	-0.004	-0.015	0.000	-0.003	
Males 30 plus	5.8 ***	-0.007 *	-0.003	-0.002	0.001	
Education: None						
Primary	104.8 **	0.097	0.269 ***	-0.077 *	0.173	
Secondary	258.0 ***	0.364 **	0.460 **	-0.142 *	0.372 **	
Female-adult-only hh	136.8	-0.152	0.653	0.102	-0.191	
<b>Pastoralist status</b>						
Non-pastoralist						
Agro-pastoralist	214.6 ***	0.444 ***	-0.256	-0.187 **	-0.020	
Pastoralist	29.5	0.070	-0.424	-0.125	-0.051	
Asset index	27.2 ***	0.056 ***	-0.189 ***	-0.024 ***	-0.016	

**NOTES:** Community fixed-effects regression. *t*-statistics are robust to heteroskedasticity. Stars represent statistical significance at the 10 (\*), 5 (\*\*\*) and 1 (\*\*\*) percent levels.

<sup>a/</sup> Household food insecurity access scale.

**Table 37: Regression analysis: Relationship between well-being outcomes and household resilience capacity**

	Food security (consumption indicators)				Food insecurity (experiential indicators)				Child nutritional status (< 5 yrs.)
	Per-capita calorie consumption		Dietary diversity score		HFIAS <sup>a/</sup>		Househol d hunger scale		Weight-for- height z-score
Resilience capacity	13.0	***	0.021	***	-0.112	***	-0.010	***	0.003
Adult equivalents	-401.8	***	-0.125		0.325		0.021		-0.097
AE-squared	23.9	***	0.007		-0.013		-0.002		0.007
<b>Demographics and education</b>									
Percent females 0-16	-1.8		0.005	*	-0.011		-0.001		0.002
Females 16-30	2.2		0.008	**	-0.014		-0.004	*	-0.011
									*
Females 30 plus	4.6	**	0.005		0.005		0.002		-0.019
Males 0-16									*
Males 16-30	11.5	***	-0.002		-0.026	**	-0.001		0.001
Males 30 plus	8.2	***	-0.005		-0.012		-0.003		0.004
									*
Primary	84.2		0.063		-0.485		-0.012		0.242
									*
Secondary	228.7	***	0.350	**	-1.050	**	-0.141	*	0.403
Female-adult-only hh	209.2	**	-0.121		-0.009		0.078		-0.075
									*
<b>Pastoralist status</b>									
Non-pastoralist									
Agro-pastoralist	175.4	***	0.450	***	0.579		-0.061		-0.017
Pastoralist	-16.4		-0.010		0.879	*	0.058		-0.103
Asset index	21.2	***	0.044	***	-0.112	***	-0.013	***	-0.013

**NOTES:** Community fixed-effects regression. *t*-statistics are robust to heteroskedasticity.

Stars represent statistical significance at the 10 (\*), 5(\*\*) and 1(\*\*\*) percent levels.

<sup>a/</sup> Household food insecurity access scale.

**Table 38: Regression analysis: Relationship between well-being outcomes and household absorptive, adaptive and transformative resilience capacity**

	Food security (consumption indicators)				Food insecurity (experiential indicators)				Child nutritional status (< 5 yrs.)
	Per-capita calorie consumption		Dietary diversity score		HFIASa/ <sup>a/</sup>		Household hunger scale		Weight- for- height z-score
Absorptive capacity	5.8	***	0.006	**	-0.070	***	-0.009	***	0.002
No. of observations	2,963		2,901		2,843		2,915		2,410
R-squared	0.26		0.23		0.19		0.18		0.19
Adaptive capacity	10.6	***	0.020	***	-0.089	***	-0.006	***	0.003
No. of observations	2,997		2,936		2,874		2,947		2,440
R-squared	0.28		0.24		0.19		0.16		0.18
Transformative capacity	14.3	***	0.025	***	-0.120	***	-0.009	***	0.003
No. of observations	2,851		2,789		2,730		2,801		2,321
R-squared	0.27		0.24		0.19		0.16		0.19

**NOTES:** Community fixed-effects regression. t-statistics are robust to heteroskedasticity.

All independent variables controlled for are listed in the previous regression tables.

Stars represent statistical significance at the 10 (\*), 5(\*\*) and 1(\*\*\*) percent levels.

<sup>a/</sup> Household food insecurity access scale.

**Table 39: Regression analysis: Relationship between well-being outcomes and community resilience capacity**

	Food security (consumption indicators)		Food insecurity (experiential indicators)			Child nutritional status (< 5 yrs.)			
	Per-capita calorie consumption	Dietary diversity score	HFIASa/ <sup>a/</sup>	Household hunger scale	Weight-for- height z-score				
Community resilience capacity	-4.3	*	0.006	-0.024	-0.007	**	0.004		
Adult equivalents	-435.0	***	-0.176	0.706	**	0.086	-0.102		
AE-squared	28.4	***	0.014	-0.048		-0.007	0.013		
<b>Demographics and education</b>									
Females 16-30	-2.1		0.005	*	-0.006	-0.001	0.001		
Females 30 plus	2.8		0.011	***	-0.013	-0.004	*	-0.007	
Males 16-30	10.1	***	-0.004		-0.020	*	-0.001	-0.003	
Males 30 plus	6.3	***	-0.006	*	-0.003	-0.002		0.003	
Primary	73.6		0.118		-0.792	**	-0.084	*	0.110
Secondary	173.1	**	0.388	***	-1.031	*	-0.167	**	0.240
Female-adult-only hh	70.3		-0.097		0.228		0.104		-0.027
<b>Pastoralist status</b>									
Agro-pastoralist	195.9	***	0.359	***	0.094	-0.135	*	-0.115	
Pastoralist	-86.3		0.099		0.265	-0.013		-0.012	
Asset index	27.2	***	0.060	***	-0.182	***	-0.024	***	-0.011
<b>Regional effect</b>									
Borena (vs. Jijiga)	-421.6	***	0.486	*	1.315	-0.090		-1.574	***
Number of observations	3058		2985		2920	2994		2486	
R-squared	0.20		0.14		0.06	0.09		0.13	

**NOTES:** t-statistics are robust to heteroskedasticity. Stars represent statistical significance at the 10 (\*), 5(\*\*) and 1 (\*\*\*) percent levels.

<sup>a/</sup> Household food insecurity access scale.

**Table 40: Regression analysis: Does greater resilience capacity reduce the negative impact of shocks on well-being outcomes?**

	Food security (consumption indicators)		Food insecurity (experiential indicators)		Child nutritional status (< 5 yrs.)				
	Per-capita calorie consumption	Dietary diversity score	HFIASa/ <sup>a/</sup>	Household hunger scale	Weight- for- height z-score				
Household resilience capacity	13.1	***	0.022	***	-0.051	***	0.005	*	0.001
Shock Exposure	-1.3		0.012		0.459	***	0.083	***	-0.007
Resilience capacity*Shock Exposure	-0.007		0.000		-0.005	***	-0.001	***	0.000
Number of observations	2696		2640		2591		2657		2204
R-squared	0.27		0.23		0.30		0.24		0.20

**NOTES:** Community fixed-effects regression. *t*-statistics are robust to heteroskedasticity.

All independent variables controlled for are listed in Table 7-1.

Stars represent statistical significance at the 10 (\*), 5(\*\*) and 1 (\*\*\*) percent levels.

<sup>a/</sup> Household food insecurity access scale.



# Annex 7: Sample Shock Monitoring Instruments

## Sample Shock Monitoring Instrument: Quantitative Instrument

This questionnaire is meant to provide information about pastoralist households in program areas

### MODULE 1: HOUSEHOLD IDENTIFICATION COVER SHEET

101: Region	102: Zone	103: District	104: Village	105: Cluster	106: HH No.	107: GPS UNIT (UTM reading)								108: Enumer Code	109: Super Code
						WP	ELEV	Easting				Northing			
<b>110: Name of Household Head</b>			<b>111: Name of Respondent</b>				<b>112: Serial Number of Respondent</b>				<b>113: Date of survey <i>dd/mm/year</i></b>				



## MODULE 2. SHOCKS

	201	202	203
	<p>In the past 12 months did your household experience any of the following events?</p> <p>1= Yes 2 = No &gt;&gt; Next event</p>	<p>How severe is the impact on your income and food consumption?</p> <p>Enter code from list</p>	<p>How confident are you that you will recover?</p> <p>Enter code from list</p>
<b>Climatic shocks</b>			
a. Excessive rains			
b. Too little rain/drought			
c. Livestock/crop disease			
d. Very bad harvest			
e. Landslides/erosion			
<b>Conflict shocks</b>			
f. Theft of money			
g. Theft of crops			
h. Theft or destruction of assets			
i. Theft of livestock (raids)			
j. Destruction or damage of house due to violence			
k. Loss of land due to conflict			
l. Violence against household members			
<b>Economic shocks</b>			
m. Food price inflation			
n. Unavailability of agricultural or livestock inputs			
o. No demand for agricultural or livestock products			
p. Increase in price of agricultural or livestock inputs			
q. Drop in price of agricultural or livestock products			
r. Death of household member			

## SHOCKS CODE LIST

202	203
Severity of impact	Recovery
1. None 2. Slight impact 3. Moderate impact 4. Strong impact 5. Worst ever happened	1. Will not recover 2. Will recover some, but will be worse off than before [event] 3. Will recovered to the same level as before [event] 4. Will recover and be better off 5. Will not be affected by [event]

### 204. How will you cope with the stressful events you are experiencing? Will you.... (check response)

	YES	NO		YES	NO
<b>LIVESTOCK AND LAND HOLDINGS</b>			<b>COPING STRATEGIES TO GET MORE FOOD OR MONEY</b>		
a. Send livestock in search of pasture			l. Take up new wage labor		
b. Sell livestock			m. Sell household items (e.g., radio, bed)		
c. Slaughter livestock			n. Sell productive assets (e.g., plough, water pump)		
d. Sell land			o. Take out a loan from an NGO		
e. Lease out land			p. Take out an loan from a bank		
<b>MIGRATION</b>			q. Take out a loan from a money lender		
f. Migrate (only some family members)			r. Take out a loan from friends or relatives		
g. Migrate (the whole family)			s. Send children to work for money (e.g., domestic service)		
h. Send children or an adult to stay with relatives			t. Receive money or food from family members		
<b>COPING STRATEGIES TO REDUCE CURRENT EXPENDITURE</b>			u. Receive food aid from the government		
i. Take children out of school			v. Receive food aid from an NGO		
j. Move to less expensive housing			w. Participate in food-for-work or cash-for-work		
k. Reduce food consumption			x. Use money from savings		
			y. Get money from a relative that migrated (remittances)		

### MODULE 3. FODDER AND WATER AVAILABILITY

<b>301</b>	Do you own any livestock?	1 = Yes 2 = No
<b>302</b>	Fodder/feed availability compared to this time last year	<ol style="list-style-type: none"><li>1. less available than last year</li><li>2. about the same as last year</li><li>3. better than last year</li><li>4. not in the same location as last year</li><li>5. I do not know</li></ol>
<b>303</b>	Water availability compared to this time last year	<ol style="list-style-type: none"><li>1. less available than last year</li><li>2. about the same as last year</li><li>3. better than last year</li><li>4. not in the same location as last year</li><li>5. I do not know</li></ol>

## MODULE 4. FOOD INSECURITY COPING STRATEGIES

	401
In the past 7 days, if there have been times when you did not have enough food or money to buy food, how many days has your household had to:	Number of days out of the past seven  <b>(Use 0 – 7 to answer number of days. Use 99 for not applicable)</b>
a. Rely on less preferred and less expensive foods?	
b. Borrow food, or rely on help from a friend or relative?	
c. Purchase food on credit?	
d. Gather wild food, hunt, or harvest immature crops?	
e. Consume seed stock held for next season?	
f. Send household members to eat elsewhere?	
g. Limit portion size at mealtimes?	
h. Restrict consumption by adults in order for small children to eat?	
i. Feed working members of HH at the expense of non-working members?	
j. Reduce number of meals eaten in a day?	
k. Skip entire days without eating?	

## MODULE 5: HOUSEHOLD DIETARY DIVERSITY

Now I would like to ask you about the types of foods that you or anyone else in your household ate yesterday during the day and at night. Please include all food eaten both at your home or away from home.

**Read the list of foods---replace with culture specific foods. Choose “yes” if anyone in the household ate the food in question. Choose “no” if no one in the household ate the food.**

501	Any bread, rice, pasta, biscuits, or other foods made from barley, millet, sorghum, maize, rice, wheat?	1. Yes 2. No
502	Any foods made with potatoes, yams, sweet potatoes, irish potatoes, manioc, cassava	1. Yes 2. No
503	Any food made with vegetables such as onions, cabbage, green leafy vegetables, gathered wild green leaves, tomato, cucumber, pumpkin, mushroom, kale, leak, green pepper, beat root, garlic, or carrots?	1. Yes 2. No
504	Any food or fruit juices made from fruits such as mango, banana, oranges, pineapple, papaya, guava, avocado, wild fruit, or apple?	1. Yes 2. No
505	Any food made from beef, lamb, goat, rabbit, wild game, chicken, duck, or other birds, other meats?	1. Yes 2. No
506	Any eggs?	1. Yes 2. No
507	Any fresh fish, smoked fish, fish soup/sauce or dried fish or shellfish?	1. Yes 2. No
508	Any foods made from beans (white, brown, horse), peas, lentils, chick peas, rape seed, linseed, sesame, sunflower, soybean flour or nuts (groundnuts, groundnut flour)?	1. Yes 2. No
509	Any cheese, yogurt, milk, powder milk, butter milk or other milk products?	1. Yes 2. No
510	Any foods made with oil, margarine, fat, or butter?	1. Yes 2. No
511	Any sugar, sugar cane, or honey?	1. Yes 2. No
512	Any other foods, such as condiments, traditional beer, beer, wine, coffee or tea?	1. Yes 2. No

## MODULE 6: HOUSEHOLD HUNGER

<b>601</b>	In the past four weeks, did you worry that your household would not have enough food?	1. Yes 2. No <b>(Skip to 602)</b>
<b>601a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)
<b>602</b>	In the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	1. Yes 2. No <b>(Skip to 603)</b>
<b>602a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)
<b>603</b>	In the past four weeks, did you or any household member have to eat a limited variety of foods due to a lack of resources?	1. Yes 2. No <b>(Skip to 604)</b>
<b>603a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)
<b>604</b>	In the past four weeks, did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	1. Yes 2. No <b>(Skip to 605)</b>
<b>604a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)
<b>605</b>	In the past four weeks, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	1. Yes 2. No <b>(Skip to 606)</b>
<b>605a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)
<b>606</b>	In the past four weeks, did you or any other household member have to eat fewer meals in a day because there was not enough food?	1. Yes 2. No <b>(Skip to 607)</b>
<b>606a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)

<b>607</b>	In the past four weeks, was there ever no food to eat of any kind in your household because of lack of resources to get food?	1. Yes 2. No <b>(Skip to 608)</b>
<b>607a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)
<b>608</b>	In the past four weeks, did you or any household member go to sleep at night hungry because there was not enough food?	1. Yes 2. No <b>(Skip to 609)</b>
<b>608a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)
<b>609</b>	In the past four weeks, did you or any household member go a whole day and night without eating anything because there was not enough food?	1. Yes 2. No <b>(End survey)</b>
<b>609a</b>	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks) 3 = Often (more than ten times in the past four weeks)

**\*\*THANK YOU\*\***

**After the interview thank the respondent for giving you his/her time and for the co-operation in providing the information. Inform them that you will be returning to collect more information in two weeks. At this point invite the respondent to ask you any questions that he/she might have. Answer where you can. If you do not know the answer(s), tell the respondent that his/her questions will be forwarded to a relevant person who can respond.**

## **Sample Shock Monitoring Instrument: Qualitative Monitoring Interview**

### **Qualitative Monitoring focus group interview (men and women separately)**

#### **1. Shock**

A. In what ways is the shock affecting the entire community?

#### **2. Community Response**

A. What actions are members of the community taking to support each other to respond to the shock?

#### **3. Behavior**

A. How is the shock affecting relationships within the community?

B. How is the shock affecting relationships with other communities?

#### **4. Participation**

A. Are community leaders effective at organizing support for all members of the community? Why or why not?

B. What collection action is the community taking to protect or maintain resources important to the whole community? Which resources and why?