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CURRENT APPROACHES TO RESILIENCE PROGRAMMING AMONG NONGOVERNMENTAL ORGANIZATIONS

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ACRONYMS

ACCRA	African Climate Change Resilience Alliance
AGIR	Global Alliance for Resilience Initiative
ASAP	Adaptation for Smallholder Agriculture Programme
BRACED	Building Resilience and Adaptation to Climate Extremes and Disasters
CM-DRR	community-managed disaster risk reduction
CRS	Catholic Relief Services
DFID	Department for International Development (UK)
DRR	disaster risk reduction
EC	European Commission
ECHO	European Community Humanitarian Office
EMMA	Emergency Market Mapping and Analysis
GRAD	Graduation with Resilience to Achieve Sustainable Development
IFAD	International Fund for Agricultural Development
IGAD	Intergovernmental Authority on Development
M&E	monitoring and evaluation
MFI	microfinance institution
MiCRO	Micro-insurance Catastrophe Risk Organization
NGO	nongovernmental organization
PRIME	Pastoralist Areas Resilience Improvement and Market Expansion
PROSAN	Programme de Sécurité Alimentaire et Nutritionnelle (Food Security and Nutrition Program)
PSNP	Productive Safety Net Programme (Ethiopia)
RAIN	Revitalizing Agricultural/Pastoral Incomes and New Markets for Enhanced Resilience and Recovery
REGLAP	Regional Learning and Advocacy Programme for Vulnerable Dryland Communities
RIASCO	Regional Inter-agency Standing Committee
RM-TWG	Resilience Measurement Technical Working Group
SHARE	Supporting the Horn of Africa's Resilience
SUR1M	Scaling-Up Resilience to Climate Extremes for 1 Million People
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VSLA	village savings and loan association

ABSTRACT

This paper seeks to enhance our understanding of resilience processes, activities, and outcomes by examining initiatives to enhance resilience capacity that are designed and implemented by nongovernmental organizations (NGOs). The paper begins with a review of the evolution in thinking about the concept of resilience that has occurred over the past five years. This is followed by a review of the wide range of strategies and interventions employed by NGOs to build resilience capacity. The paper then presents several case studies that highlight NGO efforts to enhance resilience either by focusing on a specific vulnerable population and shock or by integrating, sequencing, and layering activities to support and protect core programming goals (for example, food and nutrition security, poverty reduction) while contributing overall to enhanced resilience capacity. Finally, the paper reviews measurement issues related to resilience, the challenges encountered by NGOs, and lessons learned. The paper concludes with a number of recommendations for improving NGO resilience programming.

Keywords: NGOs, resilience, programming

EXECUTIVE SUMMARY

In recent years, increasing discussion and policy debate have centered on the concept of resilience. This paper seeks to enhance our understanding of resilience processes, activities, and outcomes by examining initiatives to enhance resilience capacity that are designed and implemented by nongovernmental organizations (NGOs). The paper discusses the theories of change developed by various NGOs that support resilience programming, the means by which NGOs are measuring program outcomes and impact, the challenges encountered, and the lessons learned. The paper also identifies potential opportunities for effective resilience programming and highlights implications for policy and remaining knowledge gaps.

The paper begins with an overview of the recent evolution of conceptual issues related to resilience in development practice. Over the past five years considerable work has gone into developing resilience conceptual frameworks that help users understand how shocks and stresses affect livelihood strategies and household well-being, and that help identify the key leverage points to be used in a theory of change, which in turn informs programming designed to enhance resilience. Resilience frameworks have integrated livelihoods, disaster risk reduction, and climate change adaptation approaches into a single framework for assessing resilience. Thinking on resilience has also evolved from a characteristic- or attribute-based approach to a capacity-focused approach. Building the resilience of individuals, households, communities, or higher-level systems to deal with shocks and stresses requires improving three distinct but interrelated capacities (absorptive, adaptive, and transformative), which are mutually reinforcing and exist at multiple levels.

A number of principles are embedded in the resilience programming of many NGOs. As described in the literature (Constas, Frankenberger, and Hoddinott 2014; Constas and Barrett 2013; Gunderson, Allen, and Holling 2010), these principles include a focus on shock dynamics, resilience as a multidimensional capacity, resilience functions to prepare for and respond to disturbances, resilience as a capacity that is indexed to a given well-being outcome, and resilience as a multilevel construct. These five principles, well substantiated in the theoretical literature on resilience, can be used to examine a selection of interventions implemented by NGOs. The extent to which a given NGO intervention or program can be said to use a resilience perspective to address the challenges of poverty, food insecurity, health, or another well-being outcome can be judged in relation to these five principles.

Other common themes and approaches are emerging from the initiatives that NGOs promote to build resilience capacity. These include comprehensive risk analysis, integrated and holistic approaches, regional resilience strategies, complementary partnerships and knowledge management within these relationships, and a social capital focus.

Next, the paper reviews a number of case studies of projects implemented by NGOs focused on building resilience. Strategies for enhancing resilience are as diverse as the regional, national, and local contexts in which they are implemented and in which individuals, households, and communities make response decisions. NGOs employ a wide range of strategies and interventions to build resilience capacity. The paper highlights NGO efforts to enhance the resilience capacity of a specific vulnerable population to a specific shock as well as those that integrate, sequence, and layer activities such that they support and protect core programming goals (for example, food and nutrition security, poverty reduction) and contribute overall to building resilience through improved absorptive, adaptive, and transformative capacity of chronically vulnerable populations. The case studies highlighted are the PRIME[1] project in Ethiopia that is implemented by

[1] Pastoralist Areas Resilience Improvement and Market Expansion.

Mercy Corps and CARE, the PSNP Plus / GRAD[2] project implemented by a consortium of NGOs led by CARE in Ethiopia, projects implemented by Concern Worldwide in the Horn of Africa and the Sahel, Welthungerhilfe's project in Haiti, a Catholic Relief Services project in Niger, and a World Vision Secure Africa's Future project in Tanzania.

The next section of the paper examines resilience measurement practices employed by NGOs. To date, NGOs and their research partners have proposed a number of approaches for measuring resilience. Given that many NGOs work with vulnerable populations in predominantly agricultural or pastoral societies, many of their measurement models focus on shocks and stresses that directly affect food and nutrition security. In such contexts, resilience is a concept that focuses on the relationship between shocks and future states of well-being. The ability to measure this relationship requires that information be collected on a number of indicators, including initial- and subsequent-state measures (well-being outcomes), disturbance measures (shocks and stresses), and capacity measures. Other important features of measurement that need to be taken into account are the scale of measurement (individual, household, community, systems), the temporal aspects of measurement (frequency, specific timing, and duration) and the type of measurement (objective, subjective, qualitative, quantitative). In terms of common practice among NGOs, they all collect information on the initial- and subsequent-state measures (the outcomes of interest), some collect information on disturbances (but this is often collected retroactively), and few collect information on all the capacities that contribute to resilience. The dominant scale of measurement is the household or community level, and rarely the higher systems level.

A number of challenges face NGOs in doing resilience programming. These challenges include a limited ability to facilitate transformational capacity change at the national level, funding constraints that prevent NGOs from programming over a long period in the same area, competition among NGOs that can hinder collaboration across NGOs on resilience programming, limited flexibility in project design due to donor requirements, and donor-government relationships that can constrain NGO activities.

A number of opportunities have the potential to positively influence and shape NGO approaches to enhancing resilience capacity. Given the global expansion of interest in the concept of resilience among humanitarian and development actors over the past 5–10 years, there is currently enormous opportunity for NGOs to obtain funding for resilience programming. The UK Department for International Development, the European Commission, the US Agency for International Development, the International Fund for Agricultural Development, and the Rockefeller Foundation are all committed to funding resilience programming. In addition, widespread interest in resilience has spurred tremendous interest in and opportunity for collaborations and partnerships between donors and governments that support the integration of humanitarian and development strategies. Examples of collaborative approaches to building resilience capacity at regional levels that involve governments, donors, UN organizations, and NGOs include AGIR-Sahel;[3] the IGAD[4] conference "Resilience and Growth in the Horn: Enhanced Partnership for Change"; and RIASCO.[5] In addition, a number of learning and knowledge management consortia have been formed to identify and replicate activities that have proven effective in enhancing resilience capacity. Prominent examples of collaborative approaches to resilience knowledge management by NGO consortia include REGLAP;[6] ACCRA;[7]

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[2] Productive Safety Net Programme Plus / Graduation with Resilience to Achieve Sustainable Development.

[3] Global Alliance for Resilience Initiative—Sahel.

[4] Intergovernmental Authority on Development.

[5] Regional Inter-agency Standing Committee.

[6] Regional Learning and Advocacy Programme for Vulnerable Dryland Communities.

[7] Africa Climate Change Resilience Alliance.

the Resilience Learning Consortium; and the regional CM-DRR[8] Learning Alliance launched by Catholic Relief Services.

The paper concludes with a number of recommendations that NGOs can focus on to improve resilience programming. These include a reemphasis on the key programming themes that contribute to good resilience programming (such as comprehensive assessment and holistic problem analysis), getting better at using a theory of change to inform resilience programming, collaborating in a more strategic way with other development actors to address transformative capacity, using a program approach to commit to a given region for a long period of time, getting better at measurement through investment in capacity, and developing regional strategies to align resources and staffing to regional contextual issues.

[8] Community-Managed Disaster Risk Reduction.

1. INTRODUCTION

In recent years, increasing discussion and policy debate have centered on the concept of *resilience*. This conceptual shift—and the resulting changes to donor and implementing partner strategies—has largely been the result of recognition that although previous humanitarian assistance efforts and development initiatives have saved lives and contributed to improved well-being outcomes, they have not increased the capacity of vulnerable populations to adapt to dynamic social, economic, and environmental change in a manner that substantially reduces the risks associated with future shocks and stresses. Particularly in the wake of the 2011 droughts that affected the food and nutrition security of millions in the Horn of Africa and the Sahel, resilience has become a new buzzword used by different actors to portray a more coordinated and effective response to large-scale events (such as drought, conflict, political instability, and price increases) in a manner that purports to bridge the divide between emergency and development silos.

The increasing focus on resilience among donors, governments, and other policy actors has also been fueled by funding scarcity and the limited cost-effectiveness of emergency assistance in response to large-scale disaster. The call for a shift in aid architecture toward greater support for longer-term initiatives to build resilience capacity has been fueled by studies demonstrating that the cost of immediate damage to life and property, coupled with the resources spent on emergency response, can be several times greater than effective disaster risk management and development programming (Venton et al. 2012).

Although no single definition of resilience has yet to be adopted by all development and humanitarian actors, there appears to be general agreement that resilience is more than just the ability of a system (such as a household or community) to bounce back to its predisaster state. Rather, a more integrated and holistic concept of resilience focuses not only on a system's ability to withstand (absorb) shocks and stresses but also its ability to adapt to dynamic conditions and put in place mechanisms that enable longer-term, systemic responses to the underlying causes of vulnerability (Barrett and Constas 2013). Thus, the definition adopted here is the one recently developed by the Resilience Measurement Technical Working Group (RM-TWG) (Constas, Frankenberger, and Hoddinott 2014, 6).

> ***"Resilience is the capacity that ensures adverse stressors and shocks do not have long-lasting adverse development consequences."***
>
> —RM-TWG (quoted in Constas, Frankenberger, and Hoddinott 2014, 6)

PURPOSE OF THE PAPER

This paper seeks to enhance our understanding of resilience processes, activities, and outcomes by examining initiatives to enhance resilience capacity that are designed and implemented by nongovernmental organizations (NGOs). The paper examines the theories of change developed by various NGOs that support resilience programming, the means by which NGOs are measuring program outcomes and impact, the challenges encountered, and the lessons learned. To demarcate resilience as a distinctive approach to development, the paper also reviews a set of basic principles, which are then used to illustrate how a selection of NGOs have implemented programs that demonstrate practical enactment of one or more of the resilience principles. Based on these analyses, the paper identifies potential opportunities for effective resilience programming and highlights implications for policy as well as remaining knowledge gaps.

KEY QUESTIONS

The development of this paper is guided by several key questions related to activities implemented by NGOs at the field level for building resilience capacity:

- How do NGOs and their implementing partners conceive of resilience programming?
- Why are NGOs promoting resilience approaches over other approaches?

- What types of activities are NGOs engaging in to promote resilience?
- How can NGOs be more effective in their resilience programming?

ORGANIZATION OF THE PAPER

The paper begins with an overview of the recent evolution of conceptual issues related to resilience in development practice, providing insight into distinct and complementary theoretical orientations, regional and national differences in resilience dynamics, and various issues related to resilience analysis and programming frameworks adopted by NGOs. Section 3 builds on this contextual analysis to examine more closely the different types of resilience capacity–building programs being developed and implemented by NGOs at the ground level and the degree to which these are appropriate to the operational context and reflective of institutional strategies. This section of the paper also provides insight into the technical issues related to resilience measurement and the steps different actors are taking to utilize monitoring and evaluation (M&E) systems to inform resilience programming. Section 3 concludes with a discussion of some of the primary challenges NGOs have encountered in designing, implementing, and monitoring resilience programs and the lessons learned in responding to these challenges. Finally, Section 4 concludes by summarizing findings of the paper and mapping out important next steps for improving the effectiveness of resilience-building initiatives by NGOs.

2. OVERVIEW OF CONCEPTUAL DEVELOPMENTS IN THE FIELD

As interest in resilience grows among implementing agencies, donors, and other stakeholders, so too does the need for agreement on a conceptual framework that provide**s** a comprehensive picture of the specific elements contributing to resilience. A resilience conceptual framework helps users understand how shocks and stresses affect livelihood outcomes and household well-being, and it helps identify the key leverage points to be used in developing a theory of change, which in turn informs programming designed to enhance resilience. Ultimately, a conceptual framework for resilience assessment can help determine whether households, communities, and higher-level systems (national, regional, global) are on a trajectory toward greater vulnerability or greater resilience (DFID 2011; Frankenberger, Spangler, et al. 2012).

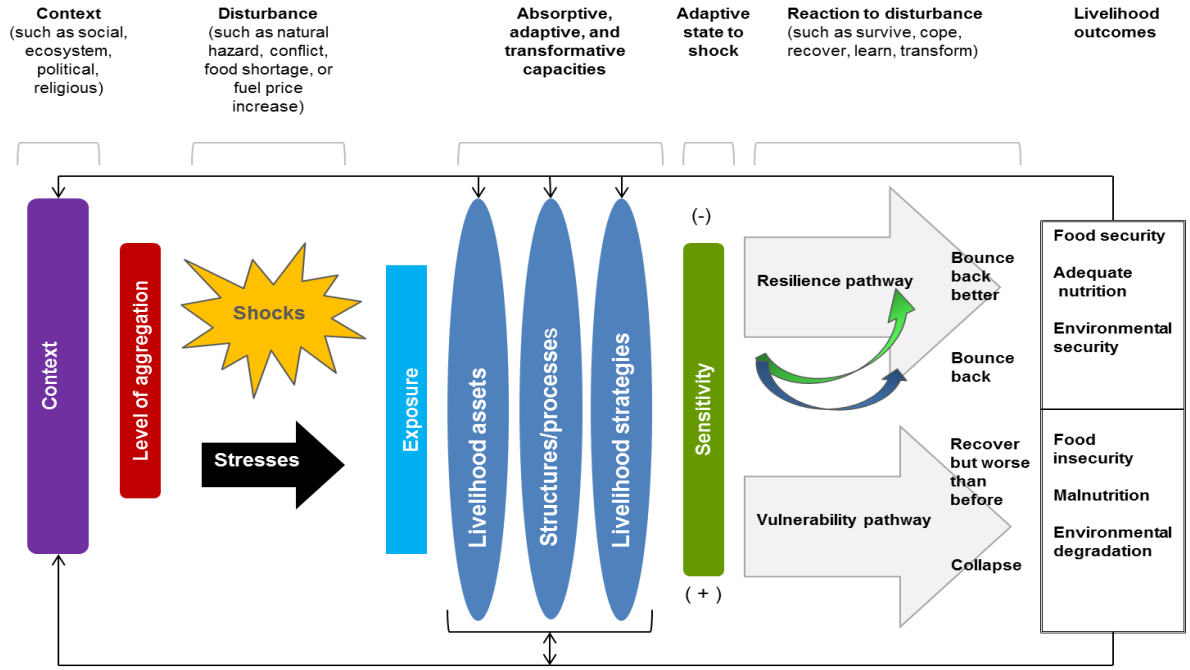
Resilience thinking has evolved considerably, even over the past five years. The disaster resilience framework promoted by the UK Department for International Development (DFID 2011) involved four elements that described resilience: context, disturbance, capacity to deal with disturbance, and reaction to disturbance. This approach considers resilience of whom (for example, individuals, households, communities, national governments), resilience to what (the shock or stress to which the system is exposed), the degree of exposure (large-scale versus differential exposure), sensitivity (ability to cope in the short term), ability to adapt both in anticipation of and in response to changing conditions over the long term, and how the system responds to the disturbance (for example, survive, cope, recover, learn, transform) (Brooks, Aure, and Whiteside 2014).

While DFID's framework approached resilience primarily from a disaster risk reduction (DRR) perspective, other approaches have included climate change adaptation (ACCRA 2012; Oxfam 2011) and improved livelihoods (Alinovi et al. 2010). One of the challenges of a DRR-centered approach was the short funding cycle (often less than two years), which limited the ability of resilience programming to sufficiently promote and improve adaptive capacity or to address longer-term enabling conditions necessary to remove structural causes of vulnerability. A longer-term approach was needed that would combine emergency aid with development programming, would be multisectoral, and would promote synergistic partnerships/alliances between NGOs and other actors.

The resilience framework presented by Frankenberger, Spangler, and others (2012)—and updated here—builds on these qualities and integrates livelihoods, DRR, and climate change adaptation approaches into a single framework for assessing resilience (Figure). This integrated approach emphasizes the importance of access to productive assets; institutional structures and processes; household livelihood strategies; and preparedness, prevention, response, and recovery activities formulated in response to shocks and climate-related changes.

Thinking on resilience has also evolved from a characteristics approach to a capacity-focused approach. Promoted by Oxfam GB (Hughes 2012) and the African Climate Change Resilience Alliance (ACCRA 2012), the characteristics approach attempts to identify reliable determinants of household and community-level resilience that can be assessed prior to shocks' occurring and focuses on asset-based approaches as well as intangible processes and functions that support adaptive capacity. A significant limitation to the characteristics approach, however, is that it does not address whether the characteristics identified are actually relevant when a shock eventually occurs (Frankenberger and Nelson 2013). As the work of Béné and colleagues (2012) highlighted, resilience is a process rather than a static state, and as such, its determinants are constantly changing as the social, economic, and environmental landscapes within which households and communities operate also change. Building resilience of individuals, households, communities, or higher-level systems to deal with disturbance requires improving three distinct but interrelated capacities (absorptive, adaptive, and transformative), which are mutually reinforcing and exist at multiple levels (Figure).

Figure 2.1 Resilience conceptual framework



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

Although a resilience approach can bridge the gap between humanitarian aid and development activities, it must also provide clear guidance on resilience programming that is different from existing sector-specific approaches (Mitchell 2013). Mitchell (2013) suggested that the added value of a resilience approach combines core programming with risk management approaches that build absorptive, adaptive, and transformative capacities. Thus, resilience is not the primary program objective (the *what*) but rather defines *how* programming for achieving the primary objective is implemented. This view is consistent with the resilience framework presented in Figure in that the success of the intervention is measured not by resilience per se but by attainment of certain positive livelihood outcomes (for example, food security, adequate nutrition). It also underscores another shift in resilience thinking over the past few years: measuring improved resilience capacity is best done with multiple types of indicators, including those that measure the shock(s) and stresses that occur, rather than with single outcome indexes. Resilience indexes are not defined for different types of shocks and stresses. Guidance from the RM-TWG suggests that resilience is a "normatively indexed capacity"; that is, it can be measured as a capacity that enables households and communities to maintain a minimum threshold condition when exposed to shocks and stresses (Constas, Frankenberger, and Hoddinott 2014).

3. PROGRAMMING

This section describes common themes and characteristics of the resilience programming models and measurement approaches currently being used by NGOs. This overview begins with a discussion of a review framework that describes resilience principles. To illustrate how the principles are enacted, activities from a sample of NGOs are briefly reviewed. To add further detail to the brief review, a second section consolidates core tenets, ideas, and strategies that NGOs are applying to improve navigation through their theories of change. This section then provides more detailed examples of the types of resilience programming being implemented by NGOs, highlighting differences in how each contributes to enhancing resilience through improved absorptive, adaptive, and transformative capacities.

RESILIENCE PRINCIPLES AND NGO APPLICATIONS

Many development stakeholders take as a statement of fact that resilience is an important innovation for development, one that should inform the conceptual frameworks that define practical aspects of programming. The assertion that resilience represents a genuinely innovative approach to conceptualizing programmatic strategies in development must be supported by a clearly articulated set of principles that describes analytical characteristics of resilience. The principles are important because they provide criteria with which to review activities across a selection of NGOs. Building on the principles introduced by the RM-TWG and outlined by a common analytical model for resilience measurement, the following five principles highlight the distinctiveness of the resilience concept (Constas, Frankenberger, and Hoddinott 2014):

- **Focus on shock dynamics:** Resilience as a capacity is exercised, in connection with some disturbance, in both a preparatory and a responsive manner. The focus on shocks or disturbances includes large-scale disturbances (covariate shocks) such as catastrophic weather events, geologic events, pests that threaten crops, and epidemic diseases, as well as more localized or individual events (idiosyncratic shocks). Recognizing that more detailed knowledge of shocks and stressors should be incorporated into resilience programming is fundamental. The opportunity to understand the way in which a unit (such as a household, community, or institution) or a process (for example, market access by farmers' groups) is able to respond to a shock requires a thorough analysis of the type of shock *and* the effects of the shock (both objective and subjective). Temporal features of shocks are also important. The timing of a given shock with respect to a critical event (for example, planting, growing, harvesting) is important, as is the duration of the shock.

- **A multidimensional capacity:** As is the case with most complex constructs, resilience is multidimensional. Resilience is a capacity that draws on an array of resources, including human, social, economic, physical, programmatic (for example, safety nets), and ecological. As a multidimensional capacity, resilience draws attention to the need to understand the optimal configuration of capacities for a given shock at different levels of aggregation, in a given context, for particular target populations.

- **Resilience functions:** Preparing for and responding to a particular type of disturbance or configuration of disturbances may require different types of absorptive, adaptive, and transformative capacities. Although absorptive capacity is occasionally excluded from the functions served by resilience, withstanding the effect of a shock is often the only option available, and the capacity to do so is essential for survival.

- **Outcome-indexed capacities:** Resilience should be indexed to a given well-being outcome, and the specific capacities drawn upon for resilience may vary depending on the outcome of interest. The outcome of interest would typically include, for example, some dimension of well-being such as basic health, food security, or poverty status.

- **A multilevel and systems-based approach:** Resilience is observed at a given level (such as household or community) but is understood as a multilevel construct. Therefore interventions should be sensitive to nested dependencies between, for example, households and communities or communities and regions. Dependencies that involve higher-level features such as macroeconomic policies implemented at the national level may also be considered.

Although these five principles are well substantiated by the theoretical literature on resilience (Gunderson, Allen, and Holling 2010), they remain abstract and detached from the everyday practical work of NGOs. They can, however, be used to examine a selection of interventions implemented by NGOs. The extent to which a given NGO intervention or program can be said to be using a resilience perspective to address the challenges of poverty, food security, health, or another well-being outcome can seemingly be judged in relation to the above principles.

NGO initiatives illustrate the various resilience principles in a number of ways. For the sake of illustration, we consider Mercy Corps, Catholic Relief Services (CRS), CARE, and World Vision initiatives that include one or more of the resilience principles. A later section of this paper provides more detailed analyses.

- **Mercy Corps:** Mercy Corps' project titled Revitalizing Agricultural/Pastoral Incomes and New Markets for Enhanced Resilience and Recovery (RAIN) used assets and a livelihoods diversification approach to protect against future shocks, thereby contributing to both absorptive and adaptive capacities. Mercy Corps' Micro-insurance Catastrophe Risk Organization (MiCRO), implemented in Haiti, provides another example of how data on shocks are used as integral parts of programming. Within MiCRO, insurance payouts are explicitly linked to shocks, thereby providing an opportunity to observe the effect of shocks mediated by an intervention that is meant to enable absorptive capacity as part of enhanced resilience capacity. Mercy Corps has also recently made use of cell-phone platforms to collect real-time data on the impact of shocks, thereby enabling more focused interventions and more precise measurement of the effects of and response to shocks. This strategy represents a significant improvement over the typical approach of recalling shocks that are often many months removed from the moment of reporting.

- **Catholic Relief Services:** Working in Garissa County, Kenya, with the Fafi Integrated Development Association and the Relief, Reconstruction and Development Organization, CRS assessed the impact of droughts on livestock and its related effects on livelihoods. Restoration of goat herds lost as a consequence of drought was a major focus of the project and represents an example of how strengthening absorptive capacity can lead to positive results. To strengthen adaptive capacity for reducing environmental degradation, CRS implemented an integrated watershed management program in Harbu, Ethiopia. With a focus on climate change adaptation, the program promotes on-farm tree planting to help protect against extreme winds and as shade to protect crops from excessive heat. CRS is investigating ways to use its Integral Human Development Framework as a platform on which to base resilience programming and measurement. The framework's multidimensional discussion of assets provides a productive point of departure for thinking about resilience capacities, and its inclusion of structure and systems provides a potentially good point of reference to translate the multilevel resilience principle into a programmatic objective.

- **CARE:** Building on Ethiopia's Productive Safety Net Programme (PSNP), CARE's Graduation with Resilience to Achieve Sustainable Development (GRAD) program is designed to build adaptive capacity by focusing on vulnerability in food-insecure regions that are affected by climate change. Exemplifying a multilevel approach, the GRAD program considers connections between households and the markets in which they work. CARE's Adaptation Learning Program also addresses shocks and stresses associated with climate change. The Pathways to Empowerment program works to build

resilient livelihoods among women smallholder farmers and exemplifies how investing in human capital, with a special focus on women, is a key dimension of resilience capacity.

- **World Vision:** World Vision has combined a DRR approach with conflict sensitivity and climate change adaptation to conceptualize programs focused on resilience. Its Somalia Holistic Rangeland Management Project, implemented in Mudug, Nugal, and Goldogbo, exemplified the multilevel principle of resilience. By working with local actors, government officials, and institutions, the program demonstrated how the effects of drought could be mediated.

This brief review of the initiatives of four NGOs indicates how the basic principles of resilience have been enacted programmatically. It is important to note that this brief analysis does not represent a comprehensive review of NGOs or a comprehensive treatment of interventions and programs within NGOs.

DETAILED ANALYSIS: CENTRAL THEMES, PRINCIPLES, AND APPROACHES

Common themes, principles, and approaches emerging from the initiatives to build resilience capacity promoted by NGOs include comprehensive risk analysis, integrated and holistic approaches, regional strategies, complementary partnerships and knowledge management within these relationships, and a social capital focus.

COMPREHENSIVE RISK ANALYSIS

Designing interventions to address resilience requires good program design. Good program design depends on a theory of change that correctly identifies appropriate leverage points needed to effect desired change, which in turn depends on a thorough multihazard, multisector assessment of all the contextual factors that affect the system(s) under study. Analysis begins with a comprehensive understanding of the environmental, political, social, economic, historical, demographic, religious, conflict, and policy conditions that affect, and are affected by, how households, communities, and governments prevent, cope with, and recover from shocks and stresses. A comprehensive assessment is necessary to fully understand the constantly changing relationship between risk and vulnerability on the one hand and livelihood outcomes and resilience on the other (Figure 3.1).

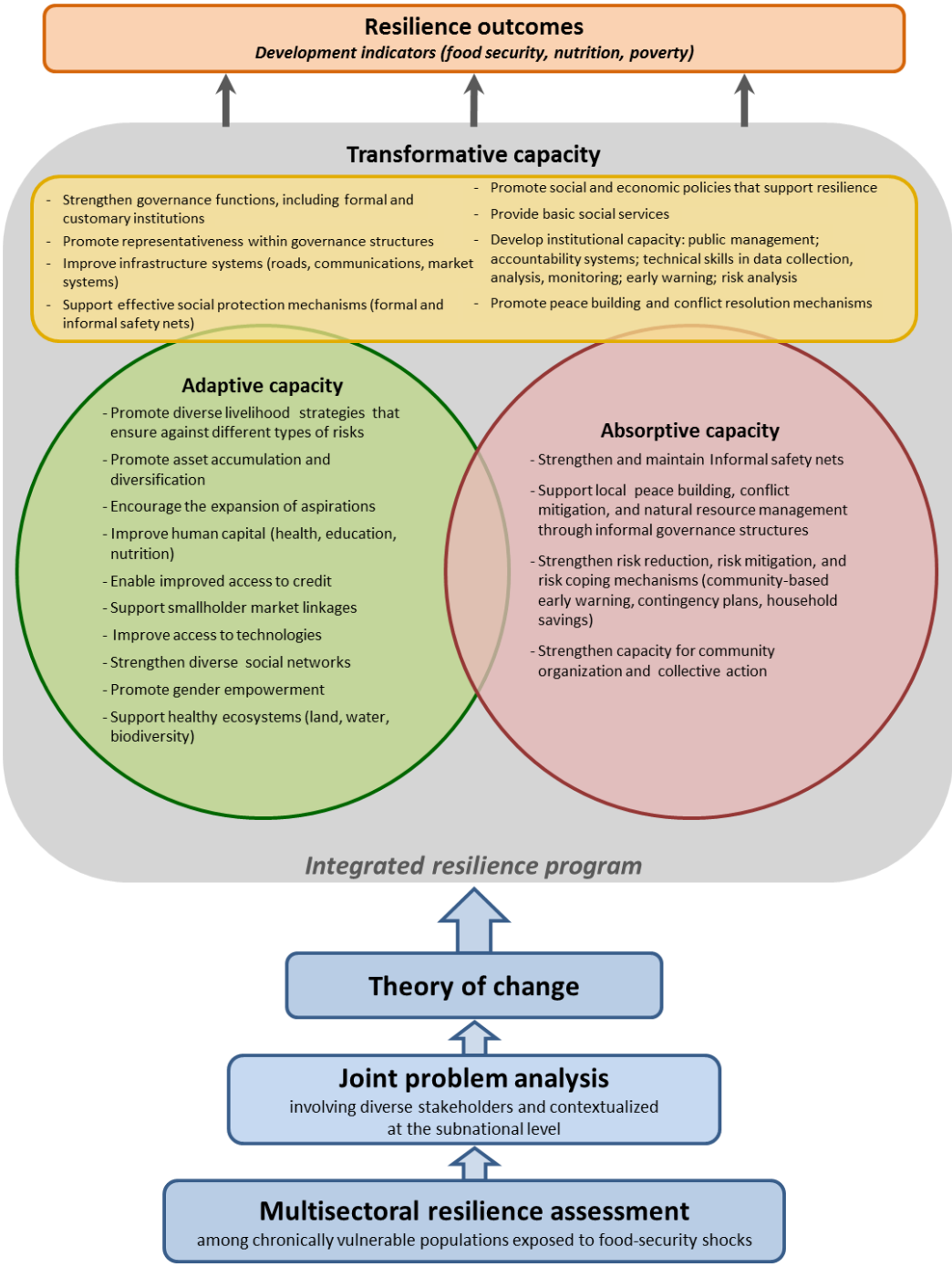
NGOs often begin program design with a holistic assessment of risk and vulnerability. Examples of NGOs that based their resilience capacity–building initiatives on comprehensive analysis are presented below, some of whom specifically used a resilience framework to design programs that are risk informed (that is, reflect that shocks and stresses were included). Others carried out comprehensive, contextually specific risk and vulnerability analysis—at many levels of society—even though their conceptual framework was not specifically considered a resilience framework (that is, a resilience lens was used). Hypotheses about the most vulnerable populations and the primary constraints to their absorptive, adaptive, and transformative capacities were then used to develop theories of change that identify key leverage points (“domains of change”) for enhancing resilience, and to illustrate the causal mechanisms through which project activities would lead to the achievement of strategic objectives. Theories of change are a critical outcome of a comprehensive risk analysis in that they allow for an iterative, adaptive, and nonlinear approach that is necessary for resilience programming.

Although ample lip service is often given to conducting comprehensive analysis, many NGOs rely heavily on participatory rural appraisal methods. Such reliance on qualitative data means they miss out on capturing important contextual information that is often available through secondary sources. For example, economies can improve or decline, environments can become degraded or be restored, and long-term weather patterns can change, all of which may be quantified by national or regional market surveys, political economy studies, or early warning systems. An example of going beyond mere qualitative data is CARE’s Climate Vulnerability and Capacity Analysis tool, which integrates community knowledge with scientific data,

providing a deeper understanding of climate change impacts at the local level from both a cultural and a scientific perspective (CARE International 2009).

Unfortunately, comprehensive risk analyses are costly, and even though effective program design depends on such analysis, many NGOs are hesitant to incur such costs with no guarantee of future funding for programming. One approach for dealing with this conundrum is DFID's Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED), a program to build the resilience of vulnerable populations, particularly women and children, to climate extremes (for example, drought, floods). The award is made in two phases, the first for designing risk-informed programming and the second for implementation. Such an approach helps ensure that program design is actually based on comprehensive risk analysis.

Figure 3.1 Resilience programming framework



Source: Authors.

INTEGRATED APPROACHES

Resilience building relies on integrated programming—a cross-sectoral approach with a long-term commitment to improving the three critical capacities: absorptive capacity (disaster risk management), adaptive capacity (longer-term livelihood investments), and transformative capacity (improved governance and enabling conditions) (Béné et al. 2012). Programs with an integrated approach ensure that partners and sectors work together to address key leverage points and adopt complementary, synergistic strategies to

promote resilience; that is, cross-sectoral programming supports and protects a core programming focus (for example, food security, poverty, peace building), ultimately strengthening resilience.

While many NGOs claim their programs are integrated, not all integrated approaches are equal. UNICEF suggests that cross-sectoral outcomes are a critical element when considering how to integrate program initiatives (UNICEF 2014). Multisectoral programming often includes layering or sequencing of interventions, or implementation of activities in the same geographic location. However, effective integration requires more than simply combining cross-sectoral interventions in either time or space, because such approaches do not necessarily result in the synergistic effects expected from programming whose interventions in one sector actually interact with—and depend on—those in another sector in order to effect desired change outcomes. Co-location of program interventions in the same area, commonly practiced by NGOs and encouraged by donors in order to get "more bang for the buck," makes certain sense. Again, however, interventions may or may not be operating in concert with each other and thus may not be "integrated" to maximal effect.

A common strategy employed in NGO resilience-enhancing programs is to emphasize improving the absorptive, adaptive, and transformative capacity of households, communities, and higher-level systems affected by shocks and stresses. NGO programming to strengthen *absorptive capacities* at the household or community level promotes initiatives that minimize exposure to shocks and stresses (ex ante) where possible and assist with quick recovery after exposure (ex post), in essence preserving the stability of livelihood systems (Béné et al. 2012). To strengthen *adaptive capacity* at the household or community level, NGO resilience capacity–building initiatives help households and communities learn from past experiences and make adjustments that reduce their vulnerability to future shocks. Given the predominance of agricultural and pastoral livelihoods in many disaster-prone areas of the world, many NGOs promote climate change adaptation. Others—depending on their institutional mandates and operating environments—emphasize the capacity to adapt to different shocks and stresses, including conflict, political instability, population pressure, and global financial crises. NGO efforts to strengthen adaptive capacity often include adoption of "climate-smart" agricultural practices, improved access to markets and information, education and skills training to enable off-farm income generation, provision of infrastructure (for example, roads, water), and improved local governance based on effective participation of vulnerable populations (women, ethnic minorities, the poor, and others).

While NGO initiatives can be successful at enhancing absorptive and adaptive capacities of individuals, households, and communities, and enhancing transformative capacity at the local level, it appears less common (and more difficult) for them to emphasize initiatives that enhance *transformative capacities* at the country level, which would be needed in order to facilitate systemic changes in the structural constraints (such as those of ecological, political, economic, or social structures) contributing to food and livelihood insecurity. NGOs may influence transformative capacity at the district level by working with local governments, but they are typically not well placed to impact national government policies, processes, and systems, where the changes are often most needed. Rather, other stakeholders, such as UN actors and donors, may be better placed to address various aspects of transformative capacity. Efforts to enhance country-level transformative capacity can be more effectively implemented where NGOs are part of a larger task force that includes such stakeholders.

REGIONAL STRATEGIES

Though not yet widely adopted by NGOs, a regional strategy may enhance the effectiveness and efficiency of resilience capacity–building programming. Mercy Corps recently developed regional resilience strategies for West and central Africa (TANGO International 2013b) and for East Africa (TANGO International 2013a). CRS has also developed a regional strategy for West Africa, as evidenced through its Scaling-Up Resilience to Climate

Extremes for 1 Million People (SUR1M) project, implemented as part of the DFID-funded BRACED initiative[9] and consisting of a consortium of international and national agencies, coordinated with the national governments of Burkina Faso, Mali, and Niger.

Regional strategies may allow NGOs to align resources, build staff capacity, and address cross-country themes that require systems thinking and approaches (for example, cross-border conflicts, large-scale natural disasters, transboundary migration). While a global strategy supports the regional strategy, it tends to be thematic, focusing on broad themes that might be relevant anywhere (for example, capacity building, integrated programming, partnerships). A regional strategy may better allow for contextualization of a defined area, which is required for good problem analysis (particularly at a systems level) and programming. Because many different actors often implement similar program initiatives within a single region, a regional strategy provides significant opportunities for cross-learning. There are, however, limits to what should constitute a region, such as physical or political boundaries, agroecological zones, culture, language, and so on. Thus, regional strategies are likely to differ from each other based on contextual factors unique to each.

COLLABORATIVE PARTNERSHIPS AND APPROACHES TO KNOWLEDGE MANAGEMENT

Moving beyond conceptual and sector-specific debates related to resilience capacity, many NGOs have joined development policy and research organizations in acknowledging that it is impossible for any single actor to facilitate comprehensive, cross-sectoral action at each layer of society to effectively respond to complex and rapidly evolving risk landscapes (TANGO International 2011). In response, NGOs have entered into strategic partnerships with each other, with donors, and with policy organizations (such as the Resilience Learning Consortium and the Community-Managed Disaster Risk Reduction Learning Alliance; see Opportunities section below) to clarify programming priorities based on primary research. The common purposes of these collaborations are to integrate resilience theory into program design, test the efficiency and effectiveness of implementation at the ground level, and forecast the longer-term impact of different approaches to enhancing resilience among vulnerable populations. In this sense, knowledge management is different from traditional M&E in that rather than focusing on specific indicators of project performance, it looks to capture important lessons learned from complementary sectoral interventions, context-specific research, development policies, and funding priorities.

STRENGTHENING SOCIAL CAPITAL

Previous research demonstrates that the extent and application of social capital is an important element in determining the nature of resilience at the community level (Aldrich 2012; Krishna 2002; Magis 2010; Narayan 1999), and a number of NGOs in this review include initiatives to strengthen social capital in program design and implementation. Project activities encourage collective action, collaboration, and self-organization. Examples vary, from establishing village savings and loan associations (VSLAs), which promote self-sufficiency, enhance decision-making, and increase asset bases (TANGO International 2011), to facilitating interclan social relationships that broaden the networks from which communities may draw in order to cope with complex shocks (TANGO International 2013d).

CASE STUDIES: RESILIENCE STRATEGIES AND ACTIVITIES IMPLEMENTED BY NGOs

Given the context-specific and dynamic nature of resilience, there are no “resilience” interventions per se. Rather, resilience programming should prioritize contextualized approaches that address resilience of whom (for example, households, communities, women, the elderly) and resilience to what (for example, drought, food insecurity, poverty). Strategies for enhancing resilience will be as diverse as the regional, national, and

[9] See www.gov.uk/government/uploads/system/uploads/attachment_data/file/288291/Projects-Organisation-Consortium-march2014.pdf.

local contexts in which they are implemented and in which response decisions are made by individuals, households, and communities. NGOs employ a wide array of strategies and interventions to build resilience capacity, a number of which are detailed below; some examples highlight NGO efforts to enhance the resilience capacity of a specific vulnerable population to a specific shock while others highlight programs that do not address resilience per se as an overarching goal but instead integrate, sequence, and layer activities such that they support and protect core programming goals (for example, food/nutrition security, poverty reduction) and contribute overall to building resilience through improved absorptive, adaptive, and transformative capacity of chronically vulnerable populations. No formal cost-benefit analyses were carried out for any of the case studies, though information on total project costs, number of beneficiaries, or cost per beneficiary might provide some insights into replicability for those governments potentially interested in pursuing similar approaches.

PASTORALIST AREAS RESILIENCE IMPROVEMENT AND MARKET EXPANSION

Led by a consortium of NGOs,[10] the Pastoralist Areas Resilience Improvement and Market Expansion (PRIME) project aims to mitigate the causes of vulnerability at the community and household levels for pastoralists and those transitioning out of pastoralism in the Afar, Oromia, and Somali regions of Ethiopia. The objectives of PRIME (2012–2016) are to increase household incomes and enhance resilience to climate change. Market linkages are the primary venue through which PRIME intends to realize project objectives, and implementation includes both "push" and "pull" interventions to ensure that resources important to the livelihoods of pastoralists are available and accessible (Mercy Corps 2012). PRIME supports its push-pull strategy through complementary partnerships with a number of other programs and stakeholders, including the Livestock Growth Project; Knowledge, Learning, Documentation, and Policy; the Ethiopian Land Administration Program; Ethiopian government ministries (such as Agriculture, and Trade and Industry); and other major livestock projects in the region. Such coordination should theoretically contribute to complementarity of the project's resilience-building efforts and learning.

Prior to project design, PRIME partners conducted a holistic risk assessment that built on existing evidence including policy research, strategic impact inquiry by consortium members, and lessons learned in relevant programming efforts carried out by consortium members (examples include Mercy Corps' RAIN and Strengthening Institutions for Peace and Development programs, as well as the PSNP Plus / GRAD program led by CARE). Partners then used holistic analysis to form evidence-based hypotheses about the primary constraints to absorptive, adaptive, and transformative capacities for populations practicing and transitioning out of pastoralism.

> ***Resilience is "the capacity of communities in complex socio-ecological systems to learn, cope, adapt, and transform in the face of shocks and stresses."***
>
> —Mercy Corps (2013, 1)

Additionally, PRIME incorporated comprehensive and ongoing risk analysis, including an Emergency Market Mapping and Analysis (EMMA) and gender analyses. Ongoing risk analysis includes the involvement of local government institutions in the climate vulnerability and capacity analysis and participatory scenario development processes, which the project hopes will contribute to enhanced transformative capacity via commitment to and ownership of the project's natural resource management activities.

PRIME's integrated and holistic programming approach employs integrated, layered, and sequenced cross-sectoral initiatives (for example, nutrition, early warning systems, skills transfer including literacy and numeracy) that support and protect core programming activities (market linkages) and strengthen the

[10] Consortium members include Mercy Corps, CARE, Kimetrica, SOS Sahel, Pastoralist Concern, Haramaya University, the Afar Integrated Sustainable Development Association, and the Aged and Children Pastoralist Association.

resilience of pastoralist households and those transitioning out of pastoralism through their increased absorptive, adaptive, and transformative capacities.

PRIME initiatives designed to preserve the stability of pastoral livelihoods by improving their absorptive capacity include developing early warning criteria and indicators, piloting fodder insurance during times of stress, and supporting national institutions to improve pastoralist early warning systems. Planners expect these efforts, if sustained, to contribute to transformative capacity by stimulating systemic change for early warning policy and procedures. Absorptive capacity is also expected to be strengthened by increasing market access through improved linkages between producers, retailers, wholesalers, and government structures, which also contributes to enhanced transformative capacity within large-scale marketing structures.

Resilience-building efforts designed to improve adaptive capacity include promoting nonpastoral livelihood strategies for populations who are transitioning out of pastoralism (for example, life and business skills, financial literacy, technical/vocational capacity) and improved access to climate information. Such solutions are implemented through community action planning and linkages to economic opportunities. PRIME also partners with public and private service providers to make small business start-up easier for transitioning populations.

Generally, the project's approach to increasing resilience by stimulating systemic change in pastoral Ethiopia revolves around supporting government bureaus to streamline and clarify the systems and roles required for the livestock industry's growth, as well as around strengthening private-sector trade associations and disseminating targeted policy research.

Recognizing social capital as a vital element in strengthening resilience at the community level, PRIME promotes positive socioeconomic relations among diverse clans and ethnic groups by supporting their communities to develop shared arrangements around access to and management of key resource areas, market centers, and service posts. This initiative may prove to be quite challenging: during baseline data collection, major conflicts within *woredas* (districts) negatively impacted data collection.

PRIME has compiled a variety of indicators to measure changes in resilience over time and has incorporated them into various systems for continual resilience monitoring. For example, the Crisis Modifier Committee is developing early warning criteria linked to *woreda*-specific weather data and a set of predictive indicators concerning nutrition, livestock, and markets. Specific action steps are outlined for when criteria are triggered. PRIME aims to strengthen the capacity of government-sponsored business service centers to recommend alternative livelihood strategies using indicators that rank these livelihoods in terms of their resilience or adaptive capacity to climate change. Finally, PRIME is facilitating annual workshops with stakeholders representing various ecosystems (including cross-border participants when appropriate) to review monitoring information, track changes at the ecosystem level, and assess any ecosystem-level impact (positive or negative) of local development plans.

As a recently initiated effort, the PRIME project offers limited opportunity for assessing challenges and limitations experienced by NGOs in implementing programming to enhance resilience capacity. However, even in its short life-span, local and regional conflict in one of its areas of implementation (the Somali region of Ethiopia) has challenged effective implementation, making it very difficult—and dangerous—to mobilize resources, collect data (for example, conduct the baseline survey), conduct M&E, and implement programming.

THE PRODUCTIVE SAFETY NET PROGRAMME PLUS / GRADUATION WITH RESILIENCE TO ACHIEVE SUSTAINABLE DEVELOPMENT

PSNP Plus (now GRAD), funded by the United States Agency for International Development (USAID) and led by CARE, has overarching impact themes of enhancing social protection (humanitarian focus) and livelihood assets (longer-term development focus) for chronically food-insecure households.

> ***Resilience is "reducing vulnerability of households and communities to climate-related shocks and strengthened capacity to cope with (absorb) and recover from economic shocks (income and market related), food and production shocks and health related shocks."***
>
> —CARE Ethiopia (2011, 14)

Though PSNP Plus predates the growing trend of resilience programs, the project is an excellent example of how the resilience of chronically food-insecure households to food shortages (often triggered by drought) can be strengthened using integrated programming that combines a focus on the underlying structural causes of food insecurity with an overall value chain approach and an emphasis on fostering the enabling environment. Originally a pilot project implemented by a consortium of international and national NGOs in drought-prone rural areas of Ethiopia,[11] PSNP Plus integrated, sequenced, and layered cross-sectoral initiatives including drought-tolerant asset transfers, improved production techniques, value-chain participation, financial literacy, and linkages to informal and formal savings and credit. GRAD, also implemented by the consortium,[12] targets former PSNP Plus participants and builds on the evidence and success of PSNP Plus, while also correcting the earlier project's strategic deficiencies. GRAD's combination of push and pull strategies provides an integrated package of initiatives (improved opportunities for on- and off-farm income, increased access to financial products, demand-oriented extension services, and strengthened community resilience to shocks). A strong element of the PSNP Plus / GRAD resilience approach is the graduated link between the two projects. Rather than offering single short-term projects, the consortium deliberately uses a longer-term, multisectoral program focus that combines emergency aid with development programming and promotes synergistic partnerships between participating NGOs, the government of Ethiopia, and other actors.

PSNP Plus incorporated VSLAs into its overall design—a popular model introduced by NGOs to strengthen social capital and household absorptive capacity by allowing participants to draw on savings in times of shock. At the end of the project, PSNP Plus was credited with greatly increasing the number of households with savings (from 10 percent to 75 percent) (Burns and Alemayehu 2011a–c; TANGO International 2011). Furthermore, quantitative data demonstrate that while many households sold livestock assets in order to cope with the effects of the 2009 drought, much of this asset loss was recovered through the use of VSLAs facilitated by project activities.

The VSLA members were also encouraged to establish "social funds" through complementary, voluntary contributions. Typically via a weekly contribution of 1–2 Ethiopian birr per group member, social funds were set aside to cover emergency expenses that members encountered. Respondents reported that healthcare expenses, educational costs, and orphan care were the most common uses of the interest-free disbursements of social funds. In another example of increased absorptive capacity, access to these social funds mitigated the need for members to resort to asset sales or high-interest loans from moneylenders during periods of financial stress (JOCA-MOS International 2011).

[11] The PSNP Plus consortium included CARE, CRS, Relief Society of Tigray, Save the Children–United Kingdom (SAVE-UK), the Netherlands Development Organization, and Tufts University.

[12] New consortium members include the Organization for Rehabilitation and Development in Amhara and the Netherlands Development Organization. PSNP Plus partner SAVE-UK is not a part of the GRAD program.

PSNP Plus helped to build flexibility (adaptive capacities) into household economies via the transfer of drought-tolerant assets (goats, improved seeds, beehives) to chronically vulnerable households. Asset recipients received relevant technical training, such as in the use of improved seeds and livestock fodder, pest management, and product quality assurance. Importantly, the program sequenced its initiatives strategically, using VSLAs as stepping stones for production and marketing groups. By learning the basics of saving and lending on a small scale, gaining experience in group governance and financial management, and drawing on the support provided by community facilitators, VSLA members acquired the necessary management skills to strengthen their capacity in production value chains. Qualitative data from the final evaluation of PSNP Plus confirmed previous quantitative findings of an increase in household income and assets as a result of participation in one or more of the selected value chains (TANGO International 2011).

PSNP Plus offers a good example of how NGOs can promote a transformational response on the part of governments and other structures that contributes to enhanced resilience for the poor. NGO consortium members persuaded microfinance institution (MFI) partners to extend credit to PSNP households for the first time by promoting MFI trust in the project's causal model[13] and providing "guarantee" or "seed" funds to lenders, which helped MFIs overcome resource limitations on extending credit to the poor. In a context in which MFIs had been highly regulated, including being restricted from providing loans to nonregistered groups such as VSLAs, CARE led other consortium members in sensitizing relevant government officials to the potential of the VSLA model for creating financial assets among chronically vulnerable communities. In response, rather than extending credit through the Ministry of Finance, the government's Household Asset Building Program now elects to promote financial services through existing MFIs and rural savings and credit cooperatives. MFIs also credit PSNP consortium members with establishing formal linkages with them and helping them tailor their lending terms to the needs of poor producers (for example, through reduced interest rates). The successful advocacy of the NGOs in PSNP Plus was bolstered by repayment rates of more than 90 percent (TANGO International 2011). MFIs also comment that the growing experience of savings group members encourages them to overcome risk aversion, a factor that has been seen as a significant impediment to household resilience (Bernard, Taffesse, and Dercon 2008; TANGO International 2011). By designing financial services initiatives to link with existing structures, CARE was able to successfully transform the way these structures value the participation of poorer borrowers—a group that often faces entry barriers to formal systems. The GRAD program builds on the success of PSNP Plus by increasing communication and coordination within the financial services sector and strengthening linkages between the microfinance industry and participating households.

The GRAD program also intends to make efforts to influence transformative capacities a step further. Based on its experience in PSNP Plus, the consortium will identify key policy issues that could extend the scale and impact of project interventions, and it will work with relevant stakeholders at all levels to prepare and execute policy changes. Finally, the GRAD resilience approach includes organizing learning tours and discussion forums with the government of Ethiopia, the private sector, and other NGOs to share outcomes of advocacy initiatives.

In summation, the combined impact of distinct project initiatives (for example, financial literacy training, formal links between VSLAs and MFIs, sensitization of government actors, and producer and marketing groups) demonstrates a well-designed long-term effort that stands to effectively strengthen the absorptive and adaptive capacities of participating households, and contribute to more enabling conditions for the poor within government systems.

[13] The causal model is based on the hypothesis that an appropriate combination of market-led interventions and increased access to financial products and services will lead to greater food and livelihood security, and ultimately to household graduation from the government safety net program (TANGO International 2011).

A project as complex as PSNP Plus is inherently difficult to coordinate, implement, monitor, and evaluate. The task was made even more challenging given the range of consortium members and institutional partners involved, as well as the difficulty of promoting effective engagement of chronically poor beneficiaries in private markets. Internal stakeholders acknowledged that most of the first year was "lost" due to challenges in building the capacity of consortium partners, establishing systems for project implementation in each of the targeted *woredas,* and reaching formal agreements with institutional partners (MFIs, agricultural research organizations, local government, and so on). Such challenges contributed to a delay in start-up, which proved a serious constraint for the three-year project. The five-year strategic framework for the GRAD program represents a more realistic time frame for testing a causal model that in all likelihood will take much longer to demonstrate concrete impacts.

Another major challenge to PSNP Plus was the capacity—or lack thereof—of beneficiaries to engage in selected value chains. While many beneficiaries were able to participate in individual value chains and access credit for the first time, participation in a single value chain was unlikely to lead to graduation[14] within the limited time frame of the project (essentially only two years).

CONCERN WORLDWIDE

In promoting community resilience to chronic food and nutrition insecurity in drought-prone areas such as the Horn of Africa and the Sahel, Concern Worldwide has adopted a five-step process that emphasizes multisector programming to strengthen community resilience to food and nutrition crises (Concern Worldwide 2013). As part of this process, Concern conducts extensive analysis of the key challenges and limitations communities face in achieving food and nutrition security and in protecting themselves from future risk. Because vulnerable groups rarely experience shocks and stresses as individual, isolated events, Concern adopts an integrated, holistic approach to resilience programming that focuses on five key pathways to enhancing existing community absorptive, adaptive, and transformative capacities: multisectoral initiatives to improve nutrition, strengthening of livelihoods and natural resource management, social protection, DRR and climate change adaptation approaches, and improved early response to early warning. Concern also recognizes the importance of an enabling environment in which "government policy and donor practice are aligned" (Concern Worldwide 2013, 7) so as to support long-term development programming that builds resilience among vulnerable populations and can respond quickly to shocks.

> ***"Community resilience to food and nutrition crises … [is] the ability of a community, household or individual to anticipate, respond to, cope with and recover from the effects of shocks and stresses that drive or exacerbate malnutrition in a timely and effective manner, without compromising their long-term prospects of moving out of poverty and hunger."***
>
> —Concern Worldwide (2013, 4)

Concern's approach to building resilience to food and nutrition insecurity in the Sahel involves a longer-term perspective in order to address both chronic and acute malnutrition through multisector programming that combines agriculture, nutrition, education, social protection, and health. Concern's efforts to build resilience to food and nutrition crises in Niger strengthen community absorptive capacity by reducing risks associated with child malnutrition and increasing community capacity to deal with and recover quickly from such risks. Nutrition interventions are maintained for at least three years (that is, the 1,000-day prenatal and early-childhood window of opportunity). Interventions also address maternal undernutrition (including micronutrient deficiencies); breastfeeding behavior; access to clean water, improved sanitation, and hygiene;

[14] Project beneficiaries (chronically food-insecure households) "graduate" when they transition out of the PSNP through enhanced livelihood options and improved household resilience.

access to preventive child and maternal health services (for example, vaccinations; prenatal services; and treatment of malaria, pneumonia, diarrhea, and AIDS); and education for women.

In partnership with the World Bank and UNICEF, Concern Worldwide uses cash transfers to promote human capital for building absorptive and adaptive capacity by making transfers conditional upon exclusive breastfeeding for children under six months, hand washing, addressing diarrhea and dehydration, sleeping under mosquito nets, using preventive health services, and increased spacing between births. A 2011 survey of cash transfer programs conducted by the National Institute of Statistics of Niger suggested that nearly three-fourths of households surveyed used the money to build their absorptive and adaptive capacities: build savings, invest in productive capital, and improve food and nutrition security (Niang, Mistycki, and Fall 2012).

To promote community adaptive capacity in its Niger program, Concern promotes a diversified agroecological farming system that incorporates food production, farmer-managed natural regeneration of trees, and livestock. When these strategies were combined with water-harvesting techniques and soil conservation strategies, according to preliminary findings, not only did crop yields and household income increase, but water levels were elevated and degraded soils restored. Together, these adaptive strategies seem to enhance resilience to food shocks by improving farmers' capacity to absorb and adapt to shocks in the future. Concern's resilience programming in Niger aims to enhance transformative capacity by helping to strengthen the government's healthcare system in providing child and maternal health services and by addressing cultural and gender constraints that limit child feeding and caring behaviors as well as women's control over household resources and workload.

Overall, Concern's core programming to build community resilience in the Sahel and Horn of Africa focuses on integrating humanitarian and development activities in order to prevent and treat—as well as address the root causes of—acute malnutrition through a multisectoral approach including nutrition-sensitive agriculture, diversifying livelihoods and assets, child and maternal nutrition behaviors, healthcare access, water and sanitation, and governance capacities. Part of Concern's approach to resilience programming in Kenya includes a comprehensive community-based early warning system that uses thresholds for certain indicators (such as rainfall) to trigger an emergency response (von Grebmer et al. 2013).

WELTHUNGERHILFE

Though not designed as a resilience program per se, Welthungerhilfe's project in Haiti is a good example of how integrated programming that combines addressing the underlying root causes of food and nutrition insecurity with the use of timely and flexible funding mechanisms for emergencies can strengthen resilience of smallholder farmers to food and nutrition shocks (von Grebmer et al. 2013). Given the precarious status of Haiti as "the country most at risk from climate change" (von Grebmer et al. 2013, 34), use of a resilience approach adds great value to the design of long-term programming, especially in light of the humanitarian mentality perhaps inadvertently promulgated by well-meaning NGOs in response to the 2010 earthquake that has left Haiti mostly dependent on foreign aid (von Grebmer et al. 2013).

Smallholder farmers in Haiti's North-West Department face a number of structural causes of vulnerability: inadequate infrastructure, inappropriate technologies, and markets that are difficult to access. Welthungerhilfe used a holistic approach focusing on watershed protection, ensuring market access to remote areas, providing irrigation and water supply systems, and food- or cash-for-work programs to protect against periodic food and nutrition shocks by improving the absorptive and adaptive capacities of communities to anticipate and minimize risks and to cope with and recover from natural disasters.

Welthungerhilfe's programming focused on improving availability of and access to food, with less emphasis on nutrition-related interventions per se. The program aimed to enhance community absorptive capacity to mitigate the risks of and recover from food and nutrition insecurity resulting from natural disasters through interventions that protected watersheds and crop production areas, developed rural roads connecting

to remote markets, and provided access to irrigation and safe household drinking water systems. Timely food- or cash-for-work programs during periodic emergencies were designed to help households avoid resorting to negative coping strategies (for example, sale of assets, use of destructive practices that further degrade the environment), allowing for quicker recovery times after a disaster. The program implemented soil conservation techniques and diversification of crop production to contribute to household and community capacity to adapt to a changing and unpredictable risk landscape.

In order to enhance transformative capacity, the program facilitated community-based committees (for example, water management) as a way to collectively mitigate and manage future risk, and it strengthened collaboration between local government and national ministries. The program was aligned with national policies on agriculture, rural development, drinking water and hygiene, food security, environmental protection, and DRR to help ensure an enabling environment that would facilitate rather than limit community resilience for smallholder farmers in the region.

CATHOLIC RELIEF SERVICES

CRS's approach to resilience programming relies heavily on comprehensive and participatory analysis of vulnerability to risks and shocks, including analysis sensitive to both time and scale (household, community, district, national). A comprehensive (multihazard, multisector) analysis is required for good problem analysis, which allows for developing a theory of change and identifying appropriate leverage points in order to effect the desired change(s). CRS's strategy for building resilience capacity comprises elements of emergency response, DRR, climate change adaptation, and livelihoods approaches to help vulnerable households and communities plan for and cope with shocks. This integrated approach is intended to allow households and communities to identify risks and prepare for potential shocks ahead of time, thereby reducing the risk from and impact of future shocks, as well as reducing the recovery time after a shock.

> ***"Resilience: The ability of people, households, communities, countries and systems to mitigate, adapt to and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth."***
>
> —USAID (quoted in CRS 2013, 1)

CRS promotes community-managed disaster risk reduction (CM-DRR) to build the absorptive, adaptive, and transformative capacities of communities to identify potential shocks, assess community vulnerability to these shocks, design and implement risk reduction strategies to mitigate and deal with such shocks, and utilize lessons learned to improve future CM-DRR activities. CRS's approach seeks to strengthen absorptive capacity by helping communities in preparing for and mitigating the impact of shocks through early warning systems and improved access to information (such as climate or marketing information). Interventions that promote risk-reducing livelihoods and income diversification, climate change adaptation (for example, tree planting, drought-resistant crop varieties and livestock breeds), and utilization of assets and services (such as those for health, education, nutrition, water, and sanitation) contribute to community capacity to adapt to future shocks and stresses. CM-DRR aims to facilitate mobilization of local resources and linkages to national government agencies and external development partners (Delve et al. 2013). It also endeavors to help enhance transformative capacity through improved governance and its ability to deliver services and systems, including improved democracy and transparency; improvements to health, education, and other services/infrastructure; search and rescue mechanisms; and savings and credit initiatives. Building on learning and innovation interventions that promote sharing of lessons learned and best practices among implementers and donors, CRS has launched the CM-DRR Learning Alliance, intended to improve partner and staff skills for helping communities identify their DRR needs and develop disaster risk management plans (CRS 2013).

In Niger, CRS's 2007–2012 Food Security and Nutrition Program (known locally as Programme de Sécurité Alimentaire et Nutritionnelle, or PROSAN) used a multisectoral approach that aimed to strengthen livelihoods, improve health and nutrition status of children, and enhance resilience through improved

community capacity to identify and respond to recurrent shocks. Preliminary findings suggested that protecting assets and promoting positive coping strategies, as well as investing in natural resource management, soil fertility, and food or cash for work, contributed to increasing the absorptive capacity of households and communities. These findings also suggested that adaptive capacity was enhanced through livelihood diversification, use of drought-tolerant crop varieties, literacy training, livestock restocking, adoption of sustainable farming practices (for example, soil conservation practices, improved cropping practices), and small irrigation systems. The program is perceived to have contributed to community transformative capacity through good governance, management, and transparency at the village level by emphasizing village committees (for example, village development committees, early warning groups) and farmers' groups. Communities are seemingly better able to mobilize resources in order to both sustain and expand activities (TANGO International 2013c). Such interventions reinforce the community-level structures and processes that enable communities to mitigate the risk of, deal with, and recover from shocks and stresses.

For many NGOs, including CRS, there is concerted pressure from within—but also from donors and host governments—to reach as many beneficiaries as possible, particularly in light of recurrent shocks. Large numbers of beneficiaries are not necessarily problematic in and of themselves, but the program must be sufficiently resourced—in terms of both funding and staff capacity—in order to effectively achieve its desired goals. Being spread too thin (having an insufficient concentration of resources) makes it difficult to achieve impact.

SECURE AFRICA'S FUTURE

As our final case study, World Vision's Secure Africa's Future project in Tanzania offers a good example of a cross-sectoral, long-term approach to building resilience to economic and climatic shocks. Secure Africa's Future focuses on three critical pillars of rural livelihoods: smallholder farming, natural resource management, and social safety nets. As part of this process, World Vision conducts extensive preliminary analyses of internal and external stakeholder engagement, the key opportunities for enhancing resilience, and the critical limitations that communities face in supporting child and household well-being and caring for the environment. By clearly outlining the methodology for analysis across all levels of the organization (headquarters to field office) prior to program design, the program makes a concerted effort to correctly identify appropriate leverage points needed to effect desired change. Following analysis, integrated, long-range programs are designed; various complementary projects are part of a phased rollout (Folkema and Fontaine 2011).

> ***"Resilience: The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure."***
>
> —World Vision Tanzania (quoted in Folkema and Fontaine 2011, 5)

Market-led agricultural programs are the centerpiece of Secure Africa's Future. Through these programs, World Vision organizes farmers into groups, helping them access the most effective planting supplies and providing training in the use of better planting methods. The program also helps farmers pool their yields and transport their harvest to lucrative markets for sale at significantly higher prices. A critical element of this initiative is the concerted effort to enhance the connections between farmers, traders, and buyers. Local partnerships provide farmers with the financing to pay for planting supplies through small loans and at the same time provide training in financial management. Through partnerships, the programs offer crop insurance in case of flooding or drought. As a whole, the integrated and sequenced activities offer good potential for improving farmers' absorptive and adaptive capacities.

As part of the effort to enhance community resilience, the Secure Africa's Future initiative is piloting innovative funding mechanisms. These include a shift from small, short-term grants to large, long-term grants; a shift from limited grant funding to unlimited investment funding; and a transition from a philanthropic-giver orientation to a strategic-investor orientation (Folkema and Fontaine 2011). The basic components of the

proactive fundraising process include a commitment to be accountable to and encourage participation of both beneficiaries and funding partners.

MEASUREMENT ISSUES

In general, NGOs' measurement practices are designed to inform the objectives of specific programs, to satisfy requirements related to accountability and impact assessment, or both. More recently, however, there has been a call for measures used across a range of programs and settings to be sensitive to resilience dynamics. Measurement, perhaps more than any other aspect associated with adoption of the resilience concept, represents an emergent area of work.

RESILIENCE MEASUREMENT

Despite the nascent state of resilience measurement and the numerous challenges encountered in developing robust, accurate, and contextually appropriate measures of community and household resilience, donors and policymakers have been supportive of such efforts, given the importance of M&E for demonstrating impact and ensuring accountability. To date, NGOs and their research partners have proposed a number of approaches for measuring resilience (Frankenberger and Nelson 2013). Given that many NGOs work with vulnerable populations in predominantly agricultural or pastoral societies, many of their measurement models focus on shocks and stresses that directly affect food and nutrition systems. At the same time, efforts are being made to expand the scope of resilience measurement to account for different contexts and other forms of risk (Mitchell 2013). For example, Oxfam has developed methods for measuring resilience regardless of the nature of the shock by specifying particular characteristics of a system (such as a household or community) that are assumed to be associated with coping or adaptation success. Likewise, ACCRA promotes an approach to resilience measurement that is consistent with its Local Adaptive Capacity Framework (ACCRA 2012), which identifies specific elements related to adaptive capacity. As part of the USAID-funded Resilience and Economic Growth in the Arid Lands project in northern Kenya, Kimetrica is measuring resilience as a function of income and expenditure outcomes. Save the Children is using household economy analysis to model resilience and compare costs of different response scenarios in pastoral areas of Ethiopia and Kenya. Mercy Corps supports an approach to resilience measurement in the Horn of Africa that accounts for the impact of conflict on vulnerable communities and the role of improved market access and value chain participation in promoting resilience.

ANALYSIS OF RESILIENCE MEASURES: ASSESSING THE EFFECTIVENESS OF SHOCK-RESPONSE DYNAMICS

The ability to measure the relationship represented by resilience (that is, the relationship between shocks, responses, and future states of well-being) requires that a number of substantive dimensions and structural features be present. Substantive features highlight the specific indicators considered and data collected so that insights related to resilience dynamics can be measured. Structural and methodological features highlight the way in which data will be collected. Table 3.1 presents a summary of three substantive features and three structural-methodological features important for resilience.

As noted in Table 3.1, substantive features comprise initial- and end-state measures, disturbance measures, and capacity measures. Structural-methodological features introduce questions about the scale of measurement, the timing of measurement, and the types of measurement employed to measure resilience. For each set of features (that is, substantive and structural-methodological), a number of dimensions and examples are introduced. The combination of substantive and structural-methodological features provides a framework of questions that may be used to analyze the collection of practices and technical properties

associated with resilience measurement.[15] Rather than provide a critique of individual measures used by specific NGOs, the approach used here is to comment on dominant patterns of practice in resilience measurement across NGOs and to recommend areas where general practices can be improved. The set of substantive and structural-methodological questions introduced in Table 3.1 will be used to frame this discussion.

Table 3.1 Analysis of resilience measurement practices

Orienting question	Potential dimensions	Examples of measurement dimensions
Substantive features of resilience measurement		
Initial- and subsequent-state measures What is the outcome of interest?	• Dimensions of well-being • Contextual factors • Systems	• Poverty, food security, health, social connectedness • The contexts and systems that enable attainment of targeted outcomes
Disturbance measures To what set of conditions is resilience a response?	• Covariate shocks • Idiosyncratic shocks • Stresses • Cumulative effects of stresses	• Catastrophic events, climate change, sociopolitical events, health events, agricultural events, economic events
Capacity measures What resources and responses are included as measures of resilience capacities?	Resources: • Human-social • Economic-financial • Political-institutional • Material-physical • Agroecological • Ecological	• Individual capacity, social cohesion, asset holdings and productive assets, markets, stability of government and institutions, physical infrastructure (roads, electricity, and the like), resources to support agricultural production, natural resources
Structural-methodological features of resilience measurement		
Scale of measurement For whom or for what entities will the capacity for resilience be examined?	• Individuals • Households • Communities • Institutions and governments • National economies	• Individual demographic subcategories (such as women, children, displaced persons, a community), geographic subcategories (such as urban, peri-urban, rural), institutional functioning, components of national economy (such as trade)
Temporal aspects of measurement At what points in time will data be collected?	• Frequency • Specific timing • Duration	• Quasi-arbitrary points (such as baseline, midline, endline), developmentally sensitive, episodically determined (such as the occurrence of a shock event)
Type of measurement What types of data are included as part of resilience measurement?	• Objective and subjective • Qualitative and quantitative	• Factual records of shocks • Perceptual data on well-being • Projective data on future states • Rating scales, interviews, ethnographic observations

Source: Constas et al. (forthcoming).

- **Initial- and subsequent-state measures:** The dominant practice in resilience measurement is to collect data on outcomes of interest and on program-related factors that are seen as producing or

[15] Author Mark Constas is preparing such a framework, titled "Resilience Sensitivity Analysis: A Review Framework for Resilience Measurement."

mediating those outcomes. Two elements of initial- and subsequent-state measures that are typically underrepresented and in need of improvement are context and systems. While context is regularly highlighted as important, a more disciplined approach to measuring those aspects of context that are important for resilience is needed. More closely related to theoretical foundations for resilience, the way in which systems are portrayed and measured needs further attention.

- **Disturbance measures:** NGOs commonly measure shocks by retroactively asking respondents to recall events (and their reactions to events) related to a shock. To collect more accurate data on the occurrence and impact of shocks, the latency period between the occurrence of a shock and the collection of data should be minimized. Data on ongoing stresses, many of which may be as damaging as larger-magnitude shocks, should also be collected.

- **Capacity measures:** A number of NGOs provide good examples of how the array of resources (human, social, material, physical, and so on) that are used to model resilience capacity may be organized into a coherent model. There is, however, a tendency to focus the greatest amount of attention on those capacities that align with an NGO's theory of change. The tendency to adhere too strictly to a given change model could result in an underspecified model of resilience dynamics.

- **Scale of measurement:** Households and communities are the most common scales of measurement used in emergent measures of resilience. While this practice makes sense from a targeted-beneficiary perspective, it is important to use more fully developed multilevel and systems-oriented approaches to development. More fully developed approaches would include higher-level indictors, such as trade and price policies, that might affect the ability of households and communities to be resilient in the face of shocks that threaten food security.[16]

- **Temporal aspects:** As noted in Table 3.1, there is a tendency to collect measurement data in a quasi-arbitrary manner. It is common for NGOs to collect data at points in time that support accountability.

In addition to the above recommendations for improved resilience measurement, it is important to make sure that "resilience measurement" is more than a simple relabeling of existing measures. A review of some measurement activities revealed that long-used measures, such as the Coping Strategies Index (Maxwell and Caldwell 2008), were being used as measures of resilience. This tendency was, however, more commonly found in earlier work on resilience. More recent attempts to measure resilience treat it as a unique construct, one that requires a distinct approach to measurement.

CHALLENGES

A number of contextual challenges influence and shape NGO strategies for enhancing resilience capacity at the operational level. NGOs will not be able to transcend a number of these challenges without change on the part of donors, governments, and other high-level stakeholders.

LIMITED ABILITY TO FACILITATE TRANSFORMATIONAL CHANGE

While NGOs' resilience-building approaches typically include strengthening absorptive and adaptive capacities, the ability of most NGOs to improve transformative capacity, particularly at a national level, is often limited by external factors beyond their control. Interventions designed to influence transformative capacities often include institutional reforms, improved service delivery plans, catalyzing cultural change, support for appropriate processes of decentralization, or devolution of local land governance to increase security of property rights. Resilience programming initiatives must take into account linkages to the systems, structures,

[16] Much of this information relates to transformative capacity, which is not always easy for NGOs to engage with effectively (see Challenges, below).

and processes that limit or expand the types of positive coping mechanisms an individual, household, or community may adopt in response to specific shocks. Strong barriers to transformation exist, given that such changes typically require alteration of systems that are maintained and protected by influential stakeholders (Béné et al. 2012). While NGO programming may be quite effective in promoting transformative capacity at a local level, other actors (for example, governments, UN agencies, donors) are often better placed to address transformative capacity at national and regional levels. Thus, NGO efforts to build resilience capacity may be greatly enhanced through participation in higher-level task forces that include government, UN actors, and donors (for example, the Regional Inter-agency Standing Committee [RIASCO], the Food Security Information Network, the Food Security Network, and Kenya's Food Security and Nutrition Working Group).

There are, however, positive exceptions to the limitations many NGOs face in promoting transformative capacity, such as the PSNP Plus and GRAD projects, which promote a transformational response on the part of the government of Ethiopia and other financial structures, ultimately contributing to enhanced resilience for the poor. Another example of collective effort by NGOs to improve governance and enabling conditions is evidenced by the work of the Regional Learning and Advocacy Programme for Vulnerable Dryland Communities (REGLAP) consortium, which aims to influence the development and implementation of national and regional DRR and related policies. If successful, these efforts could lead to systemic changes in the structural constraints contributing to household and community vulnerability to shocks.

FUNDING MECHANISMS

Hindering many NGO efforts to enhance the resilience capacity of vulnerable populations is their focus on short-term, stand-alone projects rather than on longer-term programs that comprise multiple, integrated, complementary, and often sequential projects, all working toward a cohesive goal. Although change is afoot, much of the short-term project focus can be traced to funding mechanisms. Financing for development efforts still predominantly focuses on demonstrating impact in the short term even though effective resilience programming integrates short- and longer-term programming based on analysis of the underlying causes of chronic vulnerability to recurrent shocks and stressors. Short funding cycles, such as those that typify humanitarian responses and DRR-focused initiatives, often do not allow the time required to effectively promote and improve adaptive and transformative capacities, particularly those that address longer-term enabling conditions necessary to remove structural causes of vulnerability.

As an example of the longer-term focus resilience requires, World Vision employs long-term area development programs to address root causes of chronic vulnerability. The area development program approach involves community assessment of needs and long-term programming (typically three consecutive program cycles of approximately five years each) to allow communities time to become sufficiently empowered to "manage, monitor, and evaluate progress" (Brennan 2013, n.p.) toward their goals after World Vision phases out. CARE is also shifting to a longer-term program approach in order to achieve sustainable impact on the root causes of poverty, particularly by empowering marginalized women and girls.

As a strategic approach, resilience programming is best funded through a combination of short-, medium-, and long-term funding streams that allows programs the flexibility to adapt to an evolving risk landscape. For example, Welthungerhilfe's long-term presence in Haiti (almost 40 years), which includes a 21-year focus on a specific food-insecure region (the North-West Department), has allowed the NGO to purposefully link sequential projects that focus on relief, rehabilitation, and development. In a 10-year span (2000–2011), Welthungerhilfe implemented 21 projects funded by diverse donors, effectively constituting an integrated program approach to food security (von Grebmer et al. 2013).

Differences in programming timelines and procurement processes between humanitarian assistance and development interventions also hamper efforts to adopt a combined approach to enhancing resilience (Haver et al. 2012). Resilience-focused programming in the Horn of Africa and elsewhere has been successful

in part because of innovative approaches to funding (for example, donor sequencing, crisis modifiers, risk pooling) that allow for quick access to humanitarian funding in response to periodic emergencies without undermining development initiatives.

COMPETITION AMONG NGOs

Limited financial resources can result in competition between NGOs and other actors, a situation only made worse by existing difficulties linking humanitarian and development funding mechanisms and activities (Frankenberger, Langworthy, et al. 2012). Thus, joint donor action in program analysis, planning, and implementation will be required in order to push forward a "resilience agenda that promotes a holistic vision of risk management implemented by actions linked across sectors working in partnership" (Mitchell 2013, 3). Only through coordinated effort—particularly at the donor level—to build and strengthen resilience capacity can the global need for external humanitarian aid after a shock be substantially reduced. By using resilience as a competitive edge against each other, NGOs and other stakeholders that promote individual interventions as a resilience "carrot" for donors undermine the need for truly integrated and synergistic interventions whose effects are felt across sectors.

TOP-DOWN PROCESSES

NGO efforts to enhance resilience capacity are, at times, constrained by inflexible donor templates that mandate various elements of project design. These prescriptive templates assume a menu of key development leverage points that are appropriate in all contexts. Donor-prescribed project proposal templates, often dictated by an organization's desire to distribute specific commodities (such as food), can limit an NGO's ability to include strategic resilience-building activities. Additionally, prescriptive templates may promote the inclusion of shocks as assumptions or risks, rather than as an integrated element of the project's theory of change.

As mentioned, effective programming to enhance resilience requires in-depth, cross-sectoral assessments that consider all contextual factors affecting resilience for a target population. These comprehensive assessments inform a theory of change that is adaptive, iterative, and nonlinear in its hypothesis of what is needed for resilience goals to be achieved. When donors box in acceptable responses and predetermine the types of initiatives they will fund, they undermine the utility of using a resilience framework to assess current vulnerability and to map out an integrated approach to improved resilience.

Opportunities to mitigate this top-down template challenge exist, as modeled by BRACED, DFID's new program to build the resilience of vulnerable populations to natural hazards. By funding in two phases, DFID purposefully promotes comprehensive risk analysis prior to any proposed initiatives. The first funding tranche is specifically allocated to holistic assessment and a responsive program design; the second is for program implementation. Also notable is the intentional emphasis BRACED places on funding NGO consortia, alliances, and partnerships. This focus opens up opportunities for stakeholders to combine their various areas of expertise (food security, peace building, natural resource management, climate change, finance, and so on) in order to design and implement integrated resilience programs.

DONOR-GOVERNMENT RELATIONSHIPS

One of the challenges NGOs face in implementing programs for enhancing the resilience capacity of the chronically vulnerable is that such programs are typically shaped by donor-government relationships. According to Mitchell, "the relationship between international donors/investors and government" (2013, 25) has a critical impact on programming and can undermine the impacts of development initiatives in addressing root causes of vulnerability (poverty, food and nutrition security, conflict, and the like). Donors may perceive that they have limited influence on government development agendas and that as a result, governments are simply "chasing money" rather than proposing initiatives based on comprehensive risk and problem analyses.

Not surprisingly, donor support is often geographically biased according to government priorities, which can limit programming efforts by NGOs. The separation of humanitarian and development efforts into nonoverlapping geographic regions means that recurrent humanitarian crises are more likely to occur in highly vulnerable areas, which in turn makes it less likely for needed private-sector investment to occur. Governments may also be hesitant to publicly acknowledge crises (and thereby admit the need to invest in infrastructure, policies, and systems to prevent them) because doing so essentially confirms that their economic growth and poverty reduction policies are not working (Gubbels 2011).

Additionally, the technical (and administrative) capacities of government ministries and agencies to develop, implement, coordinate, and monitor resilience programming, as well as manage it financially, often need strengthening and differ at different levels of government. In particular, lower levels of government (local and district levels) often do not have the capacity or resources to implement national-level strategies for enhancing resilience or reducing risk. As a result, program implementation lags and donors who are under pressure to exhaust their development budget lines may seek "easier" opportunities to deplete their budgets, such as through humanitarian activities (Mitchell 2013).

Given the increasing frequency and severity of climate-related crises, governments and donors often push programs to simply reach more people, often putting at risk the quality of interventions by spreading implementing partners—especially NGOs—too thin. NGO programming often attempts too much in what it intends to do (number and type of interventions), the number of beneficiaries it attempts to reach, or both. Effective integration of synergistic, cross-sectoral initiatives that have cross-sectoral outcomes is difficult without sufficient investment of time and effort by NGOs' implementing partners, and lack of such integration is not likely to boost the impact of resilience capacity–building initiatives.

OPPORTUNITIES

Although there are numerous challenges to NGO resilience programming, there are also a number of opportunities that have the potential to positively influence and shape NGO approaches to enhancing resilience capacity and to increase NGO engagement in efforts to build resilience capacity.

DONOR FUNDING

Given the global expansion of interest in the concept of resilience among both humanitarian and development actors over the past 5–10 years, there is currently enormous opportunity for NGOs and others to obtain funding for resilience programming. The aid structure within donor agencies is evolving as barriers begin to fade. New flexible funding mechanisms are enabling NGOs to link humanitarian and development activities. Examples from DFID, the European Commission (EC), USAID, the International Fund for Agricultural Development (IFAD), and the Rockefeller Foundation highlight a commitment to funding resilience programming, which shows promise for incentivizing NGOs to further integrate a resilience approach into their current efforts.

- **UK Department for International Development:** As a result of the increasing frequency and devastating effects of natural and man-made disasters occurring around the globe, the UK government responded to the independent 2011 Humanitarian Emergency Response Review by putting resilience front and center (DFID 2011) and committing to mainstreaming efforts to enhance resilience capacity in all DFID country programs by 2015. The policy also calls for integrating resilience into climate change and conflict prevention work as well as using resilience approaches to improve the coherence of DFID's development and humanitarian work. By providing consistent financing (for example, through pooled funds) and innovative two-stage funding mechanisms such as those used in the previously discussed BRACED programs, DFID plays a potentially important role in helping NGOs to fully understand risk contexts and implement appropriate initiatives in response.

- **European Commission / European Union:** The EC has recently sought to link and coordinate the arms of development and humanitarian aid in an effort to increase the resilience capacity of vulnerable populations. In 2007, the EC transferred the responsibility for humanitarian food aid from the EuropeAid Directorate-General to the European Community Humanitarian Office (ECHO) Directorate-General (Haver et al. 2012). As a result, emergency livelihood interventions focused on reducing food insecurity became more prominent in ECHO's portfolio of activities. Formal communications expanded on this change and provided clarification on how ECHO-funded humanitarian activities could go beyond providing for immediate emergency needs and include programming to assist affected populations to rebuild in ways that protect them from future shocks or crises.

  Coordination of the two arms continues to evolve. Two EC/EU resilience-building initiatives—the Global Alliance for Resilience Initiative (AGIR) Sahel and Supporting the Horn of Africa's Resilience (SHARE)—are mobilizing substantial resources (€750 million[17] over the next three years and €270 million in 2012 and 2013, respectively) to increase the coordination between humanitarian and development assistance (European Commission 2013). In March 2012, a new resilience communication outlined 10 steps to enhance resilience capacities that will build on the successes of AGIR Sahel and SHARE. The communication represents a commitment to prioritize funding for initiatives that enhance resilience capacity over the period 2014–2020 and, importantly, to mix short-term and medium- to long-term funding streams (European Commission 2012). A recent example of the commitment to fund resilience-building initiatives is the €3.65 million grant provided to three consortia (led by Action Aid, Save the Children, and Caritas) to increase resilience of vulnerable communities in Bangladesh to natural hazard risks (ReliefWeb 2013).

- **United States Agency for International Development:** USAID has also recently demonstrated greater commitment to supporting resilience programming. In response to the crisis in the Horn of Africa, USAID began to implement country-level joint planning cells involving USAID missions, the Office of US Foreign Disaster Assistance, and Food for Peace in order to eliminate the gap between emergency and development responses.

  This strategic commitment to improved coordination of funding streams allows for integration of emergency responses with longer-term resilience programming (for example, augmenting development initiatives with crisis modifiers) (USAID 2012).

- **International Fund for Agricultural Development:** IFAD has recently developed several multiyear financing windows designed to scale up and integrate resilience programming across its investment portfolio. One such effort is the Adaptation for Smallholder Agriculture Programme (ASAP), which improves production while increasing smallholder farmers' capacities to manage short- and long-term climate risks and reduce losses from weather-related disasters (IFAD 2014a). Launched in late 2012, ASAP has become the largest global financing source dedicated to enhancing the resilience of poor smallholder farmers to climate change (IFAD 2014b). Finance reports from 2013 show US$298 million geared toward programming in Asia and the Pacific, Africa, and Central and South America.

- **Rockefeller Foundation:** In late 2013, the Rockefeller Foundation, in collaboration with DFID and the Asian Development Bank, launched a trust fund to enhance urban climate change resilience in 25 Asian cities. The Urban Climate Change Resilience Partnership commits to funding planning and projects that will help increase the resilience of city populations, particularly the urban poor, to climate change and the overwhelming in-migration from rural areas. The fund comprehensively strengthens resilience by supporting grants to projects that reduce exposure to risk via physical

[17] € = euros.

investments (for example, drainage, housing and flood protection, wastewater systems) as well as projects that enhance resilience capacities (such as early warning systems, regulation reform, and water and land use planning).

The foundation recently awarded Mercy Corps US$1.2 million in support of scaling up urban climate change resilience in Indonesia, with a primary focus on enhancing transformative capacities. Mercy Corps will use the grant to engage with national policy, develop guidelines and a national platform for learning and exchange, and strengthen the capacity of city-level stakeholders to develop city resilience strategies, as part of the Asian Cities Climate Change Resilience Network (Rockefeller Foundation 2014).

COLLABORATIONS/PARTNERSHIPS

Widespread attention to resilience programming has spurred tremendous interest in and opportunity for collaborations and partnerships between donors and governments that support integration of humanitarian and development strategies and the flexible donor funding mechanisms required (for example, longer-term funding, crisis modifiers, risk pooling) at a regional level. Such collaborations require regional coordination of approaches to building resilience capacity that focus on cross-border issues (for example, conflict, flooding, drought, markets) that contribute to household and community vulnerability within different governmental jurisdictions. Examples of collaborative approaches to building resilience capacity at the regional level that involve governments, donors, and NGOs include (but are not limited to) the following:

- **AGIR Sahel:** AGIR Sahel was established in June 2012 by the European Union, USAID, and other international development leaders to build community resilience to withstand the impact of recurrent food and nutrition crises, and to more effectively extend resources given the increasing pressure on aid budgets. The alliance is charged with enhancing coordination among development partners, encouraging economic growth, forging private-sector partnerships, and increasing food availability. AGIR Sahel aims to improve food access, support in-country early warning systems, and promote regional cooperation using short- and long-term funding.

  AGIR Sahel intends to build on and reinforce existing regional strategies and international efforts such as the G20 initiative on food security, food price volatility, and regional stocks. AGIR Sahel's initial task was to establish a detailed overview of vulnerabilities and risks, from which a roadmap for strengthening the resilience of the most vulnerable households was drafted (and adopted in April 2013), focusing on social protection programs. The roadmap provides the basis for operationalizing a regional vision for enhanced resilience at national and community levels, including development of national resilience plans (ECHO 2013).

- **Intergovernmental Authority on Development / Resilience and Growth in the Horn—Enhanced Partnership for Change:** The Intergovernmental Authority on Development (IGAD) coordinates efforts to develop and build resilience against future drought disasters in the Horn of Africa, in part by leading a regional platform to promote development of country-level investment plans (Abdi 2011). The alliance is developing a common framework for ending drought emergencies in the Horn of Africa that addresses both the short-term humanitarian crisis and the medium- and long-term development efforts required to deal with drought emergencies and to help align country- and regional-level programs with donor programming.

  The Technical Consortium for Building Resilience to Drought in the Horn of Africa is supporting IGAD in the development of M&E tools for measuring the impact of resilience programming, which can be used to assess investment planning, prioritization, and return on investment.

- **Regional Inter-agency Standing Committee:** In light of constantly evolving regional contexts and the need to better link humanitarian and development stakeholders and activities in southern Africa,

RIASCO's resilience framework promotes joint contextual analysis, people-centered and multilevel approaches, holistic and comprehensive risk analysis, sustainability and cost-efficiency, and enhanced partnerships. The resilience initiative supports regional bodies and intergovernmental teams (such as the Southern African Development Community and the East African Community) to link humanitarian and DRR stakeholders with development actors for more effective planning and implementation of resilience activities that focus not only on shocks but also on chronic stresses.

PRIVATE-SECTOR INVESTMENT

When resilience programming is properly aligned with a country's national strategies, significant benefit can result from strategic partnerships with the private sector. Low public investment in marginalized areas, which are often less productive economically and more vulnerable to shocks, has resulted in a critical lack of basic infrastructure (roads, communications, and the like) and services (extension agents, health centers, communications, credit, and so on). Government initiatives to spur economic growth and reduce poverty often exclude these areas because short-term economic returns are more likely to be realized when invested in more productive (and often less vulnerable) areas (Frankenberger, Spangler, et al. 2012).

Partnering with private interests may prove an effective avenue for advocating for infrastructure investment in underserved areas in a manner that delivers long-term benefits to vulnerable populations. Public-private partnerships—and clustering of donor, government, and private-sector investments—can maximize the potential of investments in agricultural markets, household and public assets, social protection, climate change adaptation, DRR, the financial sector, and climate-proof infrastructure that connects drought-prone regions with distant markets.

The private sector may help reduce competition, particularly between NGOs, for limited donor resources and help facilitate a move toward longer-term programming. Nontraditional private-sector partners (for example, private equity firms, corporations with strategic investments) might be important stakeholders to help leverage government action in geographic areas or for certain subpopulations not currently being served by government. Negotiations, particularly over natural resource concessions, between the private sector, communities, and governments should be structured to leave as much wealth as possible within a community. A recent example of this approach is the close working relationship formed between World Vision Tanzania and Pegasus Private Equity Group in support of smallholder farmer engagement in agricultural value chains (TANGO International 2012). Likewise, the World Economic Forum's Grow Africa initiative is a public-private partnership platform to accelerate investments in agriculture leading to transformative change (ATA 2012).

Opportunities for private investment in many disaster-prone regions are needed and are likely to increase as monetization of local economies, international trade, rural-urban interactions, and the emergence of larger middle-income social groups continue to grow. Investment opportunities include

- ***commodity bulking in agricultural value chains,***
- ***service provision (agricultural and health extension, possibly education services), and***
- ***financial services and communication and transportation networks.***

LEARNING AND KNOWLEDGE MANAGEMENT CONSORTIA

Donors, implementing agencies, and national governments are eager to identify and replicate activities that have proven effective (or show promise) in enhancing resilience capacity and particularly in achieving wide-scale and sustainable impact. Although there has been an exponential increase in interest in resilience programming over the last few years, a robust body of evidence-based documentation on what works and what doesn't, and how to measure success, remains elusive—but is emerging. As a result, NGOs eager to share experiences and learn from each other are forming learning and knowledge management consortia. Prominent examples of collaborative approaches to resilience knowledge management by NGO consortia include (but are not limited to) the following:

- REGLAP[18] aims to reduce the vulnerability of pastoral communities to drought and unpredictable rains through policy and practice change in the Horn and East Africa. A key aspect of the consortium's resilience approach is to promote the integration of humanitarian assistance with development interventions by actors at multiple levels (governments, donors, and national and international civil society organizations) (Oxfam 2013).

  REGLAP contributes to improved adaptive, absorptive, and transformative capacities by enhancing civil society's ability to document and share lessons learned; conducting advocacy work around increasing resilience; and disseminating existing knowledge, good practice, and lessons learned from community-based actions to key practitioners. These efforts allow stakeholders to build a shared understanding of what constitutes good practice for building resilience capacity and to promote improved implementation. Key to improving transformative capacity are REGLAP's efforts toward policy dialogue. Consortium members use holistic learning to influence the development and implementation of national and regional DRR and related policies.

- The NGO consortium ACCRA[19] aims to inform the development of resilience initiatives as a technical approach. ACCRA promotes evidence-based design and implementation of humanitarian and development interventions (Oxfam 2011), with research focused on understanding how social protection, livelihoods, and DRR projects build adaptive capacity to climate change. The consortium uses those results to help donors, development partners, and governments plan and implement initiatives that increase communities' resilience.

- The Resilience Learning Consortium[20] was formed to develop a common, evidence-based resilience framework and to work with research partners to provide a clearer understanding of how to operationalize resilience and how to measure it. The consortium seeks to ensure rigor and quality of research while also taking into account the resource limitations (for example, financial, time, human) common to NGOs.

- Launched by CRS, the regional CM-DRR Learning Alliance focuses on improving the skills of staff members and partners through shared learning and experience in order to assist communities in identifying their DRR needs and in developing their disaster risk management plans (CRS 2013). The alliance provides in-country trainings and has produced a facilitator's guide to CM-DRR.

NGO interest in these learning consortia results in part from the fact that organizations still compete with each other for limited programming opportunities. By sharing experiences and information with each other, each can theoretically improve the effectiveness of its own programming initiatives and enhance its own ability to secure funding. Ironically, entrenched competition between NGOs appears to work in opposition to the fundamental concept of resilience: cross-sectoral initiatives with multiple stakeholders who have different and complementary comparative advantages relative to each other. Thus, donors need to be aware of—and look for opportunities to address—their support of processes that may be counter not only to resilience thinking but to the intended purpose of the learning and knowledge management consortia, from which everyone—especially the chronically vulnerable—could benefit.

[18] REGLAP is a consortium including CARE International, Cordaid, Save the Children UK, Vétérinaires sans Frontières–Belgium, the Resource Conflict Institute (RECONCILE), Oxfam GB, the UK Overseas Development Institute, and the International Institute for Environment and Development.

[19] ACCRA is a research and capacity-building consortium of Oxfam GB, the Overseas Development Institute, CARE International, Save the Children, and World Vision International.

[20] The Resilience Learning Consortium includes Mercy Corps, CRS, CARE, and World Vision.

4. CONCLUSIONS/RECOMMENDATIONS

Examination of initiatives designed and implemented by NGOs to enhance the resilience capacity of the chronically vulnerable provides certain lessons that can help improve the implementation and effectiveness of future programming and enhance impact. Following are some recommendations for future NGO resilience capacity–building initiatives:

- **Risk-informed program design:** Effective interventions for addressing resilience require well-designed programs based on a theory of change that correctly identifies appropriate leverage points needed to effect desired outcomes. Good program design for building resilience capacity requires a comprehensive multihazard, multisector assessment of all the contextual factors that affect the system(s) under study, which then informs the theory of change. A comprehensive assessment is necessary to fully understand the constantly changing relationship between risk and vulnerability on the one hand and livelihood outcomes and resilience on the other.

- **Investment in M&E capacity for measuring resilience:** Comprehensive risk analyses are costly, and NGOs often do not have the capacity to conduct such detailed analyses (especially for quantitative data)—or to design appropriate M&E systems. Pay scales at many NGOs are not adequate for recruiting and retaining highly qualified staff. Many NGOs also rely on M&E systems heavily biased toward participatory processes to gather qualitative data and thus potentially miss important quantitative information found in secondary data and other sources. More innovative donor funding mechanisms, such as DFID's BRACED initiative, are needed in order to support NGOs' capacity to conduct comprehensive risk analysis, develop meaningful theories of change, design appropriate interventions to address underlying causes of vulnerability and risk, and design effective M&E systems to monitor progress and impact.

- **Long-term, integrated approaches to resilience programming:** A cross-sectoral approach with a long-term commitment is required in order to improve the absorptive, adaptive, and transformative capacities of vulnerable populations to shocks and stresses. Programs with an integrated approach for improving cross-sectoral outcomes ensure that partners and sectors work together to address key leverage points and adopt complementary, synergistic strategies to promote resilience. Cross-sectoral programming needs to support and protect core programming (for example, food security, poverty, peace building) that contributes to strengthened resilience. NGOs need to shift from implementing short-term, stand-alone projects to focusing on longer-term programs that involve multiple, integrated, complementary, and often sequential projects all working toward a single, overarching goal.

- **Strategic collaboration to enhance transformative capacity:** NGOs are often limited in their ability to improve transformative capacity at the national level, though they can be effective at the local level. Collaborative efforts, alliances, or high-level task forces that involve donors, UN agencies, governments, and NGOs (for example, RIASCO, AGIR Sahel) can more effectively improve transformative capacity at national or regional levels, greatly enhancing NGO initiatives to improve the resilience capacity of individuals, households, and communities.

- **Regional resilience strategies:** Use of a regional strategy can enhance the effectiveness and efficiency of NGOs' resilience capacity–building programming. Regional strategies allow NGOs to align resources, build staff capacity, and address cross-country themes that require systems thinking and approaches. Such strategies allow for contextualization of a broader geographic area that contributes to problem analysis and programming at the country level. For example, NGOs can better determine how regional issues (such as cross-border conflicts, large-scale natural disasters, or transboundary migration) might affect individual country initiatives.

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