

**Rights for Resilience:
Bringing Power, Rights and Agency into the Resilience Framework**

Marygold Walsh-Dilley, Wendy Wolford, and James McCarthy

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EXECUTIVE SUMMARY

This report brings together insights from the literature on resilience and vulnerability with the experiences and claims of rural social movements to create a theoretical, methodological, and practical language that addresses rural wellbeing. We explore the potential of ‘resilience thinking,’ finding that contemporary frameworks for resilience contain promising elements and directions, but need to be reworked to include rights, power and agency. These changes are not simply additions to the concept; they constitute a dramatic revision. We call this revised vision a ‘rights-based approach to resilience’ and argue that attention to local context and social relations will bring out the transformative potential of resilience thinking.

This report begins with a brief review of the concept of resilience, focusing on its emergence in the late 1990s when a new consensus emerged around the understanding of the dynamics of linked social-ecological systems, which has been termed “resilience thinking.” We assess the potential advantages and disadvantages of the concept and argue that resilience thinking can be improved by incorporating insights from studies of vulnerability as well as lessons from civil society actors themselves who are struggling for more resilient livelihood spaces. From the literature on vulnerability, we draw a theory of structural differentiation and change that helps to imbue resilience with a framework for understanding and promoting positive transformations (generating and supporting resilient livelihoods that are *good*). From social movements, we build in an emphasis on local capacity and the importance of rights as a way of reshaping entrenched power relations that can thwart the attempts of the poorest to forge healthy, stable, meaningful, and resilient livelihoods.

This is not simply an academic exercise. Resilience is a popular buzzword in development thinking and its usage signals productive concerns with volatility, sustainability and wellbeing. At the same time, if resilience thinking is to impact livelihoods (particularly of the poorest) in a positive way, then significant deficiencies need to be addressed. We argue that Oxfam America’s historical concern for rights and power relations position the organization in a good place to carry this conversation forward. As with all such concepts, resilience is a political term and space; it is defined, invoked, and applied in settings shaped by multiple, cross-cutting power relations and social and material circumstances. It should always be used with the outcome in mind – resilience for a good, secure life. Achieving resilience is a process of learning, organization, and adaptation taking place across scales that enables people to respond to and cope with internal and external stresses and build and defend healthy, happy, and meaningful lives and livelihoods.

I. INTRODUCTION

Global discourses of scarcity in relation to resources such as land, water and energy are as problematic as they are widespread; scarcity exists, of course, but the focus of development practice and policy should be oriented less to the global availability of resources and more towards the insecurity of people who struggle for access (McCarthy and Wolford 2011). Hunger, malnutrition, poverty and other conditions of marginality are more closely related to access or entitlements to resources than to availability per se (Sen 1991). Recognizing this is key to developing appropriate policies. In this report, we examine the conditions under which access to resources can be strengthened. We explore the potential of so-called “resilience thinking” and argue that a rights-based approach to resilience may provide scholars and practitioners with a framework for both analysing and addressing issues of access to resources.

Resilience is an increasingly popular framework for thinking about rural development, particularly among development agencies, policy makers, and practitioners. It is a response to the perception that increased volatility— both social and ecological—is a key challenge for development and that improving wellbeing will necessarily require a greater ability to anticipate, respond to, and cope with episodic shocks and long-term structural conditions of social and ecological change. Resilience frameworks focus on understanding and promoting the capacity of local communities to respond to, negotiate, and transform shocks such that disturbances do not initiate a downward spiral and may even provide opportunities for improvement. As such, promoting resilience is seen as a way to connect short-term disaster-response and humanitarian interventions with long-term development programming. In this report, we argue that there are productive aspects to this (renewed) interest in resilience, but that there are also real shortcomings and significant challenges.

In an effort to recognize the potential of a resilience framework while responding to these challenges, we introduce insights from political economic and ecological studies of vulnerability as well as lessons from civil society actors themselves who are struggling for more resilient livelihood spaces. The studies on vulnerability provide a theoretical framework through which to analyse the relational, situated and dynamic nature of insecurity, providing a means to emphasize issues of access, power and inequality within resilience. A focus on resilience without attention to vulnerability risks reproducing the very institutional structures and conditions that created the problems being addressed. This is particularly so since much resilience thinking naturalizes socially created differential vulnerability (e.g., by gender, class, and so on), by positing that shocks are inevitable, and that we should focus more on weathering them than preventing or changing them. Conversely, a focus on vulnerability without attention to resilience may address the weaknesses of particular communities without promoting their capacity to respond or move forward.

Resilience thinking has the potential to introduce significant shifts into development policy and practice but we need to be cautious about the privileging of “local capacity” in resilience accounts. The focus on local capacity is intended to make human systems more flexible and adaptive, but there is also the danger that this shift is a new way to place the responsibility (and blame) for poverty and inequality on local people. As many others have pointed out, a potential

result of this framework is that those with the least power and fewest resources are held responsible for their own destinies, while those with the most power and resources – governments and large corporations, for example – are implicitly absolved of responsibility for them. Therefore, in thinking about how to build local capacities, attention must also be paid to the basic sources of these capacities, such as education and the distribution of resources across sometimes much larger scales.

We suggest that a productive definition of and justification for local capacity comes from contemporary social movements that have come together over the past decade to fight for secure access to resources. These movements have emphasized the rights of individuals and communities to hold their government and civil institutions accountable for supporting resilience building. They argue that local people need secure rights—to land, water, education, political enfranchisement—in order to develop the capacities they need to become resilient. While some of the concepts and claims from these movements have been articulated at a rhetorical level, and have therefore been off-putting to policy-makers and development practitioners in the North, these movements are important actors and collaborators, with their knowledge of local conditions and attention to issues of poverty, vulnerability and marginalization (de Janvry, Sadoulet and Wolford 2001). Social movements such as the ones we describe in the report struggle to make markets and governments work for people instead of the other way around (as Karl Polanyi put it fifty years ago). Analysing successful campaigns helps to tease out key elements for a rights-based resilience framework and makes the exercise more relevant to concrete local struggles and even policy.

By integrating the three fields of *resilience*, *vulnerability*, and *rights-based struggles*, we hope to create a theoretical, methodological and practical language to analyse rural wellbeing. We hope that this approach to resilience will allow stakeholders working with and within Oxfam America to use resilience thinking to complement the organization's long-standing commitment to human rights and social justice, particularly in relation to rural wellbeing.

To write this report, we have reviewed the extensive literature on resilience, vulnerability and rural development. We have also conducted in-depth interviews with 13 key experts in the field, both development practitioners and scholars. These experts were asked to reflect on contemporary uses of resilience in development policy and programming, to identify the advantages and disadvantages of these uses and how the challenges might be addressed. We also solicited discussion of the resilience concept in development practice and feedback on an initial draft of this report at a meeting of over thirty development practitioners and resilience experts, which was hosted by Oxfam America in March 2013. These discussions were incorporated into the final draft of this report. Finally, we draw upon our own experience as researchers and scholars of rural development in theory and practice.

The report is structured as follows: we first review the literature on resilience, pulling out the most useful components of the framework and identifying the key lessons of resilience thinking for rural development. We then outline some of the most prominent critiques of resilience that have emerged from social scientists and development practitioners. Secondly, we review the work on vulnerability, and identify the concepts that may enable us to address the failings of resilience thinking as it currently stands. Third, we turn to successful social movements that have

mobilized rights-based frameworks to advocate for social justice, particularly in the rural sector. By presenting several case studies of “success stories” in social mobilization, we identify the intersection between our rights-to-resilience framework and the concepts and framing of social justice advocacy within particular contexts. In the penultimate section of this paper we discuss the lessons learned from social movement campaigns for how to join social-ecological resilience and political ecological notions of vulnerability within a rights-based framework for resilience. Finally, we end by outlining the elements of a rights-based approach to resilience, identifying the construction and potential utility of such a framework.

II. RESILIENCE THINKING

A concept of resilience that is helpful for development policy and practice has been advanced in a number of different fields. While the most developed and influential approach has emerged out of attempts, primarily in the ecological sciences, to understand the dynamics of social-ecological systems, important insights also come out of work in psychology, hazard and disaster management studies and the social sciences. This section reviews the primary contributions of resilience thinking, first outlining the key concepts of social-ecological resilience, briefly highlighting the key lessons from psychological and disaster resilience literatures, and then highlighting some of the ways in which resilience thinking has been applied in development institutions. We then turn to the key critiques and amendments of resilience thinking that have emerged primarily from the social sciences before underscoring the key benefits and lessons of resilience for development work.

IIa. Social-Ecological Resilience

The social-ecological resilience framework builds on ideas from ecology, which has moved from a focus on equilibrium and persistence to incorporate the dynamic interplay of persistence, adaptability and transformability across multiple spatial and temporal scales and possible social-ecological regimes (Folke et al. 2010; Pendall et al. 2010; Holling 1973; 1996). The starting point of this framework is the idea that social and physical life is interconnected across scales and that systems are ever-changing in response to unexpected external disturbances and internal dynamics. Thus, resilience is a continual process of adaptation and transformation.

CS “Buzz” Holling proposed the idea of ecological resilience in 1973, suggesting that ecosystems are best thought of as characterized by change and adaptation, multiple possible equilibria, and non-linear development. He defined resilience as “a measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables” (1973: 14). He distinguished this from an approach oriented around stability, which conceives of systems as constantly returning to equilibrium after disturbances. Resilience and stability approaches lead to very different views regarding how to manage resources. An emphasis on stability suggests avoiding or reducing change, whereas a resilience approach sees change as inevitable and resilience as the measure of the degree to which a system can absorb and accommodate future events in whatever unexpected form they may take. Thus, resilience is not precisely about maintaining equilibrium, but rather about the persistence of systems in the face of unexpected change and disturbance (the theory assumes that changes and disturbances are inevitable, but that there is no predicting exactly what

they will be). From this point of view, variability, flexibility and heterogeneity (that is, the diversity of a population over time and space) lead to a greater likelihood of system persistence and resilience. Thus, unlike a stability approach, a resilience approach emphasizes “the need to keep options open, the need to view events in a regional rather than local context, and the need to emphasize heterogeneity” (21). Key in this approach is the assumption that exact nature of future events is unknown, but that changes of some sort are inevitable.

The proposal by Holling initiated a significantly different vision of ecology, which has been termed “the new ecology” (Scoones 1999; Zimmerer 1994). Over the past three decades, this approach has been applied in research on various ecosystems (reviewed in Folke 2006) and extended into formal models of ecosystem dynamics (Holling 1996). The implications of this approach, both epistemologically and for practice, are far-reaching. Old approaches to ecology lead to management techniques that seek efficient maximization of yield without disrupting equilibrium. These approaches remain dominant in ecology and ecosystems management, and continue to influence social science, environmental movements, and development narratives (Folke 2006; Scoones 1999). But from a resilience perspective, such top-down, command-and-control optimization techniques are highly inappropriate (Andereis et al. 2006). Even the idea of expertise is suspect; the certainty of unexpected future disturbances to a system means that scientific expertise must be conceived of as provisional, incomplete and fragmentary and that there may be multiple sources of expertise including from the lay public (see Scoones 1999). Thus, new ecological perspectives emphasize informal, on-the-ground adaptive management (Holling 1978; Scoones 1999).

By the 1990s, resilience thinking was increasingly applied outside of ecology (Gunderson and Folke 2011), in part because the emphasis on a multiple state reality, adaptability and change corresponded to shifting ideas in other disciplines as well. New ideas in anthropology, for instance, were challenging older conceptions of culture as an equilibrium-based system (Folke 2006; Vayda and Kay 1975), and scholars more generally were bringing together environmental and social science in order to transcend key dichotomies like the nature-culture divide (Scoones 1999). By the end of the 1990s, a considerable body of work investigated the ways that resilience could be applied to the dynamics of social systems (Adger 2000; see Scoones 1999 for a review). A consensus of sorts emerged around a framework for understanding the dynamics of linked social-ecological systems, which has been termed “resilience thinking” (Folke et al. 2010).

Iib. Social-ecological systems model of resilience

The most frequently cited definition of social-ecological resilience is “the capacity of a system to experience shocks while retaining essentially the same function, structure, feedbacks, and therefore identity” (Walker et al. 2006; see also Walker et al. 2004; Folke 2006). The basic assumptions of the social-ecological resilience literature are that: (1) humans and nature are inextricably linked in interdependent systems, (2) there are multiple interrelated systems at different scales across space and time, and (3) systems vary over time, with unexpected and unpredictable disturbances influencing the direction of change. The resilience framework is oriented towards examining how these systems dynamics play out. The theoretical framework focuses on three aspects of complex and dynamic social-ecological systems (SES): persistence, adaptability, and transformability. Here, resilience is seen as more of a process than as a property

of a system; within adaptive systems, resilience levels vary continually as the system adapts and changes (Pendall et al. 2010). This framework suggests that disturbances should be seen as an integral part of development and that threats and hazards can provide windows of opportunity for novelty and innovation (Folke 2006; Folke et al. 2010).

Persistence

Holling's original premise (1973) was that in order to persist over time, ecosystems must be resilient and adaptable. Persistence, however, refers not to remaining within a single stable equilibrium. Rather, persistence is seen as remaining within the basic 'regime', "retaining essentially the same function, structure, feedback, and therefore identity" (Walker et al. 2006; see Walker et al. 2004). As Holling indicated, what really mattered was the relationship *between* variables rather than the exact nature or content of each variable itself.

Robustness is a concept from engineering that was applied to SES dynamics to indicate "the maintenance of some desired system characteristic despite fluctuations in the behavior of its component parts or its environment" (Andereis et al. 2004). Robustness is a measure of the persistence of systems; "a SES is robust if it prevents the ecological systems upon which it relies from moving into a new domain of attraction that cannot support a human population, or that will induce a transition that causes long-term human suffering" (Andereis et al. 2004). A key message is that a robust system might not perform as well as others, but it is less vulnerable to shocks (i.e. its performance will not decline as readily when subjected to disturbances).

Adaptability

Adaptability refers to "the capacity of actors in a system to influence resilience" (Folke et al. 2010). Adaptation is the key mechanism of resilience. As unexpected disturbances are certain to impact SES dynamics, the ability to self-organize and respond to such surprises is essential to systems' resilience. Adaptation refers to change that shifts the system, but keeps it within the same regime or "domain of attraction"; that is, retaining the essential function, identity and relationships between system variables.

The most commonly cited theoretical model for adaptability within the resilience literature is the concept of Panarchy (Gunderson and Holling 2002; see Figure 1 in Folke 2006). Panarchy is a model of the interactive dynamic of a nested set of adaptive cycles. It frames systems dynamics as linked across scale, linking cycles that are small and fast to cycles that are large and slow. An adaptive cycle involves a looped set of phases (see Walker et al. 2006), namely: (1) the *growth* and exploitation phase (r), within which resources are readily available, structure accumulates, and there is high resilience. However, as the structure is built it becomes increasingly sclerotic and more resources are required to maintain them, so the system enters into the second phase, (2) *conservation* (K). Here, growth slows, and the system becomes more interconnected, less flexible, and increasingly vulnerable to external disturbances. Together, these two phases are the "fore loop." At this point, disturbances that overwhelm increasingly rigid system lead to the next phase, (3) *release*, wherein the accumulated structure collapses. This is followed by a period of (4) *re-organization*, in which new forms emerge and which leads to another growth phase in a new cycle.

The Panarchy model suggests that systems go through a series of adaptive cycles at different temporal and spatial scales. Smaller cycles tend to be faster whereas the larger cycles tend to be slower. These cycles are connected through feedback loops. The larger, slower moving cycles tend to provide a conservative influence—a “memory” which dampens tendencies towards adaptation. The smaller, quicker cycles tend toward movement and change, a tendency towards “revolt” moving up through the cycles and a pressure for grander transformation. It is the interplay between these two tendencies—memory and revolt—that influence whether a system will persist or if it will transform to a new regime.

The ability to respond to disturbances, adaptability, necessarily involves the learning capacity of actors within the system. It relies upon the ability of a system to self-organize, and adaptive governance is considered a key source of adaptive capacity (Folke et al. 2005). Social capital, which is defined in the resilience literature as trust and social networks, and social memory, including experience dealing with disturbances, are also necessary to deal with disturbances and adapt (see Folke 2006). Finally, adaptive capacity is enhanced by diversity and flexibility.

Transformability

Most definitions and invocations of resilience prize persistence and continuity, the ability to maintain a system within a current regime, or to return it to the same. Maintenance of the core ‘identity’ of the system is central to the common definitions cited above. Yet, a growing number of authors are attempting to include the capacity for transformation within the resilience framework, given that persistence is neither always possible, nor desirable. Transformability, then, refers to “the capacity to create a fundamentally new system when ecological, economic, or social (including political) conditions make the existing system untenable” (Walker et al. 2004). This can come into play when a disturbance goes beyond a critical threshold, beyond which a system will self-organize along a different trajectory towards a new domain of attraction or paradigm (see Folke 2010). While transformation is what happens when a system is unable to adapt to the given stressors (or when reflexive actors within it choose to change rather than adapt), a number of contemporary authors argue that transformation also activates and requires systemic resilience in order to create a desirable outcome. Creating a new paradigm that is desirable involves preparation for SES change, navigating the transition, often by making use of crisis as a window of opportunity, and building resilience within the new social-ecological regime (Folke et al. 2010). Thus, transformability draws upon social-ecological resilience across scales (Folke et al. 2010; Gunderson and Holling 2002).

Likewise, transformation may come about not because persistence proves impossible, but because it is not desired, and actors within the system work for change instead. In some instances, sub-optimal systems may be highly resilient, particularly in the social realm (e.g. highly unequal regimes, or highly egalitarian regimes with high levels of poverty, or regimes characterized by high degree of social control, low learning, etc.). The transformability component of resilience thinking reminds us that resilience is not a normative concept, though it is often used as such. Resilient persistence of an existing regime does not equate to wellbeing in any straightforward way; pursuing resilience often involves trade-offs and compromises at different scales and for different variables and groups (Coulthard 2012). Furthermore, there is the possibility that undesirable regimes and resilience may actually be positively correlated in the context of missing markets, inequality, missing information, low government capacity, etc.

Transformation to an alternative trajectory rather than adaptation within the existing regime may be a better outcome if, for instance, the features of a system tend to promote insecurity or produce risk. A narrow focus on persistence may draw attention away from the possibility of transformation, and the resilience literature is increasingly embracing transformation as an integral part of the resilience framework.

IIc. Psychological Studies of Resilience

In the fields of psychology and human development, the resilience concept refers to an approach that, reflecting its ties to positive psychology (Masten 2001), is characterized by a shift away from a psychological focus on maladjustment to consider the strengths and competencies of individuals in addition to their deficits (Luthar and Cicchetti 2000). Here, resilience refers to a dynamic process characterized by positive adaptation leading to good outcomes within the context of adversity (Luthar et al 2000; Masten 2001). This literature emerged in the 1970s, beginning with the studies of resilience among children in Hawaii by Werner and colleagues (Werner et al 1971; Werner and Smith 1977) and has largely focused on resilience trajectories of children who experience significant adversity or trauma. In the 1970s and 1980s this work led to a short list of commonly observed correlates of resilience, which has shown remarkable stability over time (Masten 2007). These factors include both attributes of the individual and environmental factors, including family characteristics and wider social environments as well (Luthar et al 2000). Some of the factors associated with resilience in children include connection to competent adults in the family and community, self-regulation skills, positive views of self, and motivations to be effective in the environment (Masten 2001). Intellectual functioning and effective parenting are frequently cited in studies that identify key variable influencing resilience processes. However, this research points out the multidimensional and intertemporal nature of resilience; children can manifest competencies in some domains and not others, or their competencies may shift over time (Luthar et al 2000).

An important shift in resilience research in psychology over the past four decades of resilience has led to a consensus around the important contributions of environmental factors to individual resilience capacity. While the research does identify key personal characteristics that correlated to resilience building, the literature reflects the recognition that personal characteristics of the individual are continually shaped by interaction with aspects of the environment (Luthar and Cicchetti 2000). As this literature moved into policy and intervention, it was increasingly recognized that attempts to improve isolated skills in children without consideration of the surrounding ecology are deeply misguided (Pianta and Walsh 1998; Luthar and Cicchetti 2000). Increasingly, the understanding of resilience in psychology has come to take a more interactional and ecological approach, seeing that “resilience results from a cluster of ecological factors that predict positive human development (more than individual traits) and that the effect of an individual’s capacity to cope and the resources that he or she has is influenced by the nature of the challenge the individual faces” (Ungar 2012: 14). This approach has led to a more comprehensive conception of well-being that recognizes the importance of collective as well as individual strengths (Murray and Zautra 2012). Furthermore, the approaches to resilience from ecology have become influential in psychological studies of resilience as well. As a result, there has been a tendency to pay greater attention to the multiscale dynamics of individual resilience,

including the influence of genes, social networks, and interactions with the media, among other factors (Masten 2007).

The resilience concept marks a shift in emphasis to encompass prevention rather than simply treating maladjustment or pathologies after they have already crystallized (Luthar and Cicchetti 2000). The literature suggests that resilience is a common phenomenon arising from ordinary human adaptive processes—“ordinary magic” that enables good outcomes despite significant adversity or trauma (Masten 2001). The environmental correlates that have been identified in the literature tend to be community based, such as the family, the classroom, or the school. Interventions are most effective when they are integrated into the local-level social and cultural contexts (Luthar and Cicchetti 2000; Pianti and Walsh 1998). Fostering existing mechanisms can be much more effective than interventions from outside the community or that seek to dramatically shift existing strengths and capabilities (Martin-Breen and Andereis 2011).

IId. Disaster Resilience

The disaster resilience approach has its roots in the work on disaster risk reduction (DRR) and hazard mitigation. These literatures frame disasters as socio-economic and political in origin, a significant departure from the previous view that saw disasters as unavoidable ‘natural’ events that needed to be managed (Mercer 2010). This approach identifies two components of disaster resilience: on one hand, pre-event measures that reduce or prevent hazard related damages and losses (risk management and preparedness), and post-event strategies that help cope with and minimize the impact of the disaster (Cutter et al. 2008). Thus, while other approaches to resilience highlight adaptive capacity, this perspective emphasizes mitigation as the key mechanism to build resilience. Hazard mitigation is any action taken to reduce or avoid risk of damage from hazard events (ibid.). Here, understanding, managing and reducing disaster risk is the key to building resilience (CINRHD 2012).

Disaster risk is the potential for severe alterations in the normal functioning of a community or a society due to a particular hazardous event, which is derived from a combination of physical hazard and vulnerable social conditions (IPCC 2012; CINRHD 2012). Disaster risk management involves a set of processes to design, implement, and evaluate strategies, policies, and measures to improve understanding, foster risk reduction, and promote preparedness, response and recovery efforts (ibid.). According to the Committee on Increasing National Resilience to Hazards and Disasters of the National Academy of Sciences (CINRHD 2012), disaster risk management involves a continuous and reinforcing process including, principally, the identification of hazards and assessing the risks that such hazards pose. Risk management also involves establishing the goals, values and objectives of affected and interested parties; developing, implementing and adjusting risk management policies and strategies; and continuous review and evaluation of strategies. There will always be some degree of hazard risk, even with effective hazard mitigation and management. A diverse portfolio of risk management measures is important to provide options for risk managers and decision makers (ibid.)

The DRR literature emphasizes the use of scientific knowledge and technology development as a means to monitor, forecast and manage risks (CINRHD 2012; Thomalla, et al. 2006). Recent DRR research, however, is also beginning to recognize the benefits of indigenous and local

knowledge for disaster risk management. This work argues that hazard mitigation is improved when site-specific, indigenous knowledge and scientific knowledge are integrated, and when top-down strategies are linked with grassroots strategies and local government intervention (Mercer et al. 2010; Mercer 2010).

Ii. The Contribution of Resilience Thinking

Resilience thinking has several attributes that we argue make it potentially fruitful for development work. We must find new meanings and methods to define, evaluate and promote global development today given that the promises of modernity as an endless era of “high mass consumption” are unrealistic and dangerous in a world with finite resources and crippling levels of inequality. The key contribution is the recognition that “business as usual is no longer an option” (IAASTD 2008). Resilience thinking has the potential to move development policy and practice forward in a responsible way, but this depends on how resilience is specified. The focus on resilience moves the discussion away from simply one of economic growth, highlighting the need for sustainability. However, resilience moves beyond the sustainability discourse because it provides a dynamic paradigm rather than a static one of maintenance. Resilience focuses on people in particular environments in an increasingly volatile world.

Resilience thinking also brings together the social and the ecological, and highlights interaction between the two. This is related to a shift in the academy that embraces multi- and interdisciplinary scholarship as well as to the changing context which presents problems such as climate change that increasingly force us to understand how social and ecological systems are linked. Political ecology, which also seeks to link the society and ecology, is critiqued for not focusing enough on ecological or environmental factors. The concept of resilience encourages a deeper engagement with ecological systems and the broader physical environment within which human interactions take place. Furthermore, resilience thinking, much like the idea of assemblages emerging from actor-network theory (Latour 2005), recognizes that non-human entities enable and constrain human actions and interaction with nature in very particular ways.

At the same time as resilience thinking casts a wider net in particular places, it also engages with cross-scalar interactions, recognizing that particular actors or sets of actors and actions exist within larger systems, and paying attention to how interactions emerge across time. This is a productive counter to emphases on either local *or* global development, placing, for instance, community-driven development within a nested set of smaller and larger systems.

Resilience thinking also has the potential to bridge the humanitarian-development divide. It avoids the false dichotomy that a shock or disaster is disassociated with long-term development or the longer term coping capacity of households or other social groups. It potentially provides a useful framework to link relief and recovery dimensions with development, emphasizing that vulnerability to shocks is directly linked to the lack of development and underdevelopment. That is, from a resilience perspective, responding to shocks is not just about mitigating effects today, but trying to contribute to the ability to do so in the future.

From the review of the literature and the various efforts by different multilateral institutions and organizations, we pull out several key components of resilience that are useful for re-thinking development (see Bahadur et al. 2010):

A high degree of diversity, broadly defined, including ecological diversity, and diversity of risk management and livelihood strategies. Diversity reduces risk; it helps people respond to perturbations and deal with failure. Risk is minimized because diverse sets of livelihood strategies, for instance, will be less susceptible to any given shock than a strategy highly dependent upon a single mechanism that may be compromised. Diversity helps people respond to disturbances or stresses because it provides options and fosters a range of knowledge and learning opportunities that can be harnessed to respond to hazards. Diversity also potentially provides processes and pathways through which coping can take place. Redundancy, too, can contribute to adaptive capacity.

Capacity to learn. The ability to learn from the past as well as the ability to utilize a variety of sources of knowledge towards creating novel solutions and developing creative coping strategies are important to resilience. Formal strategies to support this capacity include universal education, but informal strategies, such as measures that value and support indigenous or local knowledge, also increase the capacity of local people and communities to learn. Government and civil institutions play a key role in facilitating learning and translating various types of knowledge between stakeholders.

Effective governance, institutions, and control mechanisms. Decentralized and adaptive governance is a strong theme running through the resilience literature; governance institutions must be flexible, adaptive, and in touch with local realities and the needs of the people. They also must be able to be quickly reorganized in response to a disturbance. Democratic engagement and participation is a key aspect of effective adaptive governance, at all scales. Effective, adaptive governance is fostered through improved oversight of natural resources by local users.

Preparedness planning and readiness. Communities and regions that work towards preparedness, including planning for failure, are more resilient. This involves accepting that both unexpected and foreseeable change will occur, and instituting processes and pathways, including redundancy and contingency plans, through which coping can take place.

Equity. A high degree of equity and the equitable distribution of risk from disturbances are important to building resilience. Systems that do not take issues of justice and equity into account are less resilient (see Nelson et al. 2007).

Finally, *shared social values and ethics*. Groups with higher degrees of trust are better able to reach agreement and distribute resources equitably during crisis. Social capital, dense social networks, and social solidarity contribute to adaptive capacity, providing another reason why equity, democratic and civic engagement, and civic institutions are key to building resilience.

Many of these insights are neither new nor unique to the resilience literature. Planting a diversity of crops to minimize the chances of catastrophic agricultural failure based on weather, infestations, and so forth has long been recognized as a paradigmatic example of using diversity

to hedge against risk. Many scholars and practitioners have recognized, celebrated, and advocated the existence and value of indigenous, local, and informal knowledges. Scholars of common property have spent decades delineating why institutions matter, and why rights, equity, democratic engagement and participation, flexibility, and the ability to adapt to changed circumstances are all central to successful institutions for managing commons. Resilience thinking is perhaps itself resilient because it brings together some of the most productive elements of other approaches.

Iif. Resilience Thinking in Development Policy and Practice

In 2005, delegates at the World Conference on Disaster Reduction, held in Hyogo, Japan, adopted the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. This framework promotes a strategic and systematic approach to reducing vulnerabilities and risks to hazards, emphasizing resilience as a key mechanism through which this could be achieved (UNISDR 2005). The Hyogo Framework marked the beginning of an increasingly intense interest in promoting resilience for both long-term development programming as well as humanitarian interventions and disaster response. Since 2005, resilience promotion has become central to many development strategies. Resilience is seen to have the advantage of being able to link humanitarian and development efforts to improve coordination in both planning and response. It is also part of a desire to focus on reinforcing positive capabilities and opportunities rather than simply reducing threats.

In spite of its widespread use, there is little consensus regarding the definition of resilience, or the factors that contribute to resilient households, communities, or regions (see Mackinnon and Derickson 2012: 4). In the Hyogo Framework, resilience is defined as “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. This is determined by the degree to which the social system is *organizing itself* to increase the capacity for learning from past disaster for better future protection and to improve risk reduction measures” (UNISDR 2005). While there are common elements regarding resilience, institutional approaches differ with regards to which aspect of resilience they emphasize. For instance, the FAO approach to resilience to food security shocks emphasizes stability, while the World Bank’s approach to social resilience seeks to highlight resilience as a forward-oriented possibility for reorganization and development (see review, below).

The term resilience is increasingly employed by development agencies and organizations, and is used in a variety of ways. Here we outline some of these uses, focusing in particular on those most relevant for rural development:

The World Bank

The Social Development Division of the World Bank, through its Social Resilience and Climate Change cluster, is working towards an understanding of what they call social resilience. Moving beyond a conservative perspective, they see resilience as forward-moving (Robin Mearns, personal communication, 15 November 2012), defined as “the ability of societies or groups within society (e.g. families, communities) to withstand, recover from, and reorganize in

response to crisis so that all members of society may develop or maintain the ability to thrive” (World Bank 2012). This approach suggests that building resilience requires multiple complementary actions at different geographic and institutional scales. They suggest, in particular, three broad categories for action: 1) supporting *community-driven development approaches* that give control over decisions and resources to community groups and local governments; 2) *enhancing social learning*, for example, by building capacity in participatory approaches to scenario-based planning; and 3) supporting communities to *increase diversity of livelihood options* (ibid). This cluster focuses on the equity and gendered dimensions of the climate change agenda within developing countries, suggesting that building resilience to climate change will necessitate a focus on gender, as women are disproportionately vulnerable to the impacts of extreme weather.

US Agency for International Development

In a report prepared for USAID, Frankenberger et al. (2012) reviews the characteristics and challenges of developing a new paradigm for development around resilience. They emphasize that a successful approach to building resilience must *transcend the false division between humanitarian efforts and longer-term development initiatives*, proposing social protection programs as a way to link the two. They argue that this paradigm must be oriented toward *facilitating resilient processes* rather than directing change toward intended outcomes. They identify six common characteristics of effective programming in support of resilience, including forging partnerships that integrate a range of actors with complementary capacities and skills; implementing projects at sufficient scale and over a long enough time period; the promotion of healthy ecosystems; supporting effective formal and informal governance; promoting gender equity; and supporting social protection programs. Frankenberger et al. propose a conceptual framework for resilience that integrates a livelihoods framework, a disaster risk reduction framework and elements of a climate change approach in order to address the underlying causes of vulnerability, from which they lay out a set of principles to guide practitioners, policy-makers, and communities in developing effective resilience programming.

The Food and Agriculture Organization of the UN

The FAO applies resilience specifically to food security, defining resilience within this context as “the ability of a household to keep with a certain level of wellbeing (i.e. being food secure) by *withstanding shocks and stresses*... This definition implicitly considers both (ex-ante) actions that reduce the risk of households becoming food insecure [i.e., reducing vulnerability], and the (ex-post) actions that help households cope after a crisis occurs.” This approach to resilience emphasizes stability (see FAO n.d.; Alinovi et al. 2010). They have developed a measurement tool that measures the factors that make households resilient to food security shocks and the stability of these factors over time. The quantitative resilience indicator combines the scores from the following components: income and food access, access to basic services, social safety nets, assets, and adaptive capacity, as well as a score for stability that includes factors such as the change in income, expenditures, employment, educational system, and the capacity to maintain stability in the future.

World Resources Institute

In the 2008 World Resource Report (Roots of Resilience: Growing the Wealth of the Poor), WRI, with the UNDP, UNEP, and World Bank propose an ecosystem-based approach to wealth creation and resilience. Given that natural resources remain the mainstay of rural economies, they argue that the scaling up of nature-based enterprises offers a clear route to building the resilience of rural communities, which is defined as the capacity to thrive in the face of challenge. The report identifies three factors required for community-driven natural resource management: ownership, capacity, and connection. *Ownership* has two aspects: the ownership of resource management processes, including participation and influence in the decision making process; and legal ownership or tenure including the recognized right to benefit from resource management. Ownership, thus, is related to the local stake in development and enterprise; ownership of both resources and the resource management process can give rise to local demand for better ecosystem management, the report argues. “When community members take on enforceable rights and the willingness and scope to exercise them, they become empowered ‘stakeholders’ (15). *Capacity* refers to the social, technical, and business skills needed to manage resources and establish enterprises, including capable local management institutions, community leadership, and appropriate intermediary support organizations to help build capacity and influence. Capacity follows power, the report argues; “when local people are given enforceable rights over resources of value, their capacities for resource management and entrepreneurship often quickly emerge” (15). Finally, *connection* refers to the available links to learning, support and commercial networks and associations, including horizontal links to other rural producers as well as vertical links to government and private sector. These community level factors, furthermore, require an *enabling environment* appropriate for scaling up, including a supportive policy, tax, and regulatory environment, technical, research and marketing support such as through an extension service, and the availability of financial services and funding.

Oxfam

Oxfam International has proposed “people-centred resilience,” which “requires building on the rights of vulnerable farmers to address key institutional issues within the agricultural system, as well as investments in sectors which support agriculture” (Oxfam International 2009: 18). They suggest that such a people-centred approach consists of five principles, including: 1) restoring and diversifying natural resources for sustainability; 2) responsive institutions grounded in the local context; 3) expanded and improved sustainable livelihood options, principally but not exclusively through markets offering diversified options and improved terms; 4) sound gender dynamics and gender equality; 5) farmer-driven decision, which requires enhancing the capacity of farmers to voice needs, demands, and choices. Our methodological component at the end of this report builds on the insights of these principles. They suggest that people-centred resilience should involve a focus on agro-ecological technologies and the institutions needed for them to be widely adopted—including secure property rights, and farmers associations, which can increase the political, economic, and social influence that vulnerable farmers can have on the programs and policies affecting their communities.

OxfamAmerica is also increasingly using resilience as a strategic initiative. Their R4 Rural Resilience Initiative focuses on building resilient livelihoods in response to a changing climate. This initiative builds upon the Horn of Africa Risk Transfer for Adaptation (HARITA) project,

and is focused on building resilience in Ethiopia, Senegal, and two additional countries. The key idea behind this Rural Resilience Initiative is the management of four risks, including: community risk, productive risk taking, risk transfer, and risk reserves.

CARE

CARE International has brought resilience into its work by making adaptation one of its five themes. They utilize an approach they call Community-Based Adaptation, which has the goal of “building the resilience of individuals, households, communities and societies from the ground up.”¹ This involves four interrelated strategies: 1) reducing the risk of climate-related disasters; 2) building climate-resilient livelihoods by focusing on the rejuvenation of traditional knowledge and the diversification of income sources; 3) enhancing local capacity; 4) addressing the underlying causes of climate vulnerability, including the promotion of a rights-based perspective and a holistic approach to reduce the underlying causes of vulnerability to climate change. At the very root of this work is the focus on issues of equity, particularly gender equity; CARE believes that more equal means more resilient.²

Table 1. Development Institutions: Definitions of and approaches to resilience

	Elements of resilience					
World Bank	Community driven development	Social learning	Diversity of livelihood options			
USAID	Forging partnerships between complementary actors	Implementing projects at scale	Healthy ecosystems	Effective formal and informal governance	Gender equity	Social protection programs
FAO (food security)	Income and food access	Access to basic services	Social safety nets	Assets	Adaptive capacity	Stability
WRI	Ownership	Capacity	Connection	Enabling environment		
Oxfam	Restoring and diversifying natural resources	Responsive institutions	Sustainable livelihood options	Gender equality	Farmer-driven decisions	
CARE	Reducing the risk of climate-related disasters	Traditional knowledge	Diversification of income sources	Enhancing local capacity	Addressing underlying causes of climate vulnerability	Equity and rights

Iig. Resilience Debates: Critiques, precautions, and responses

In this section, we outline the principal academic debates around resilience. There are many critiques of the initial SES resilience framework, particularly from the social sciences. This critical engagement has pushed resilience thinking forward in productive ways, pointing to conceptualizations or applications of resilience thinking that are highly problematic and which

¹ <http://www.careclimatechange.org/adaptationn/cba>

² <http://www.careclimatechange.org/gender-empowerment>

need to be addressed or avoided. Below, we outline some of the primary concerns about the resilience concept, point to some of the ways that these concerns have been addressed, and identify areas of weakness that our approach to resilience seeks to tackle. There are obviously many different ways to conceptualize resilience, and the debates outlined below offer some important guidance as to the consequences of different approaches.

First, some argue that the concept of resilience has become so broad, abstract and imprecise that it carries little specific and operationalizable meaning (see, for instance, Brand and Jax 2007). This concern was evident both in the expert interviews and in the literature. The concept is ambitious in seeking to link multiple temporal and spatial scales and treating social and ecological systems as indivisible. But in the ambition to apply the concept widely, there is the danger of using resilience to mean so much that in the end it means nothing. In the literature, resilience has become less of a desired *outcome* and more of a *process* to be encouraged (see Manyene 2007; Folke et al. 2010). For many, this means that resilience is little more than a vague, ill-specified concept not useful for concrete action. This critique of course parallels earlier ones of sustainable development and means that *it is difficult to know how to identify or evaluate resilience*. This is a considerable impediment in today's results-based, measurement-driven development paradigm. The real difficulty is not just that the right measurement for resilience has not yet been invented, but that resilience itself, as understood in the literature, may not be amenable to measurement.

Because resilience is often talked about in extremely general ways, some people propose instead a *specified resilience*. They suggest that shifting away from thinking about resilience in very general terms towards thinking about very specific forms of resilience, such as ecological resilience, livelihood resilience, or the resilience of specific social structures, would enable more precise definitions more amenable to measurement (Brand and Jax 2007). The FAO, as we described earlier, has developed a measurement of household resilience to food shocks (FAO n.d.; Alinovi et al. 2010), and Melissa Leach and her colleagues at the STEPS Centre (Leach et al. 2010) have drawn a distinction between the resilience of functions delivered by socioecological systems (e.g., ecosystem services) and the resilience of the social structures through which those services are accessed or provided. But, as Folke et al. (2010) argue, focusing on specified resilience too much is dangerous given the interconnection of systems and cycles; increasing resilience in some parts of the system, for instance, may lead to a loss of resilience elsewhere. Thus, measuring specified resilience (which is the only thing we can actually measure in any concrete way) might not be a measurement of the broader resilience of the system. Furthermore, we contend that there is no single objective resilience, as resilience itself is contested across stakeholders.

Second, the resilience framework sometimes fails to connect theory and practice effectively. At a broad level, the resilience framework can theorize the relationship between variables and the relationship between those variables and the system as a whole, but the framework does not include theoretical guidance for understanding those relationships in specific social and ecological settings. In other words, *the theoretical guidance is very vague* (e.g. diversity is good) and *does not easily support practitioners on the ground who want to apply resilience thinking towards specific goals* (see Miller et al. 2010).

The lack of a theoretical or critical framework is due, in part, to the emphasis on the maintenance of a system's defining function, structure, feedbacks, and thus identity over time, arguably giving the concept an *inherently conservative valence* – in the sense of a preference for keeping things as they are. Recent efforts to incorporate reflexivity and transformations notwithstanding, the central definitions and analogies of the resilience framework emphasize the persistence of systemic identities over time as the essence of resilience (Beymer-Farris et al. 2012: 283). This is remarkably reminiscent of earlier theories of cultural ecology, which tended to assume that local socioecological systems were oriented towards maintaining themselves in equilibrium – an analytical assumption freighted with strong normative presumptions that such equilibria were desirable. Just as persistence is now taken as evidence of resilience, cultural ecology often assumed that the mere existence of a socioecological system was evidence of its being a successful adaptation to a given environment (i.e., “it’s here, so it must be adaptive”). For those committed to progressive social change of entrenched structures of inequality and injustice, this is dangerous metaphorical ground; using theories of the resilience in and for projects of social transformation demands careful thought (see, e.g., Walker and Cooper 2011; Mackinnon and Derickson 2012).

Interestingly, and probably unintentionally, ideas such as Panarchy resonate with very different theoretical paradigms from the social sciences. Analyses of capitalism as a specific economic system, for example, have emphasized cycles (from business cycles, to Schumpeterian creative destruction and innovation, to Kondratieff cycles of system decline and renewal, and even world systems theory with its emphasis on hegemonic cycles) and analysed the factors that motivate or impede gradual and revolutionary change. The parallels may be strongest with Regulation theory, which attempts to examine how material ‘regimes of accumulation’ are complemented by social ‘modes of regulation’ that co-evolve with them in ‘structured coherences’ that give the general contours of capitalism very specific, distinct manifestations in certain times and places, with the contours of each permutation emerging directly out of necessary responses to the problems that ended the previous one. Such parallels are testament to the resilience of capitalism in modern history (and the difficulty of generating real change!), despite numerous attempts to replace it. Scholars of resilience would do well to study capitalism’s many moments and places of reform to learn more about how change can serve in regressive ways as protection against wholesale transformation.

Third, it is unclear *how to bound the systems* being studied. In other words, if resilience is a measure of some capacities or properties of a system, where are the boundaries of that system? This relates directly to the point regarding measurement above: since the social-ecological resilience literature emphasizes resilience of a general sort—resilience to all kinds of shocks and uncertainty (see Folke et al. 2010), rather than very specific capacities or properties—there is little agreement regarding how to bound the ‘systems’ at the heart of these questions, claims, and interventions. Yet, while it is never clear how to bound the system, most resilience thinking seems to assume an implicit ‘local-global’ geographical imagination, and to focus on the ‘local’ scale within that framework, assuming that adaptive capacity is to be found or built there, rather than in changes in, say, international trade policy, or national political structures (Mackinnon and Derickson 2012: 2). Again, it is significant that this was one of the fatal flaws of traditional cultural ecology: a field that attempted to discover and analyse how societies adapted—in fact, ‘learned’—to live sustainably within specific physical environments, it focused very much on

small-scale examples that could be imagined to exist in relative isolation, such that energy flows, caloric budgets, and so forth within them could be studied quantitatively. The growing recognition that such systems were neither closed nor in equilibrium, but rather connected to the rest of the world in complex, dynamic, and multiscalar ways, challenged cultural ecology. Most of all, the recognition that in a great many of the cases studied, the major sources of disequilibria in the ‘local’ system were connections to international markets, pressures for capital accumulation, and interventions by colonial and postcolonial central states using these ‘local’ people and places for their own ends, was a key point in the shift from cultural ecology to political ecology. And then, of course, it became necessary to not just acknowledge the importance of capital accumulation and state power to ‘local’ equilibria/disequilibria, but to actually have plausible theories of capitalism and the state – something sorely lacking from most current resilience thinking.

Given all this, one response to the SES resilience literature emerging out of geography is an insistence on greater clarity around the time-space resolution of analysis (Pendall et al. 2010; Christopherson et al. 2010). As we seek to identify and measure resilience, we must carefully specify the physical and temporal boundaries within which we are operating. The challenge of defining the time horizon of analysis is important given that resilience may oscillate within adaptive cycles and in response to different types of specific challenges. Disturbances may be acute (often exogenous) shocks or chronic, endogenous slow burns or slow-moving challenges of a system undergoing transformation, all of which have different temporal-spatial implications (see Pendall et al. 2010). These different types of disturbances have varying implications for the capacity of constituents to respond: e.g., slow-burns tend to be corrosive of regional unity and may undermine capacity to adapt or cope, whereas acute disasters are often thought to galvanize cohesion and instigate socially desired innovations (Pendall et al. 2007; Pike et al. 2010).

Fourth, *a too-heavy reliance on systems theory can be problematic* if it fails to pay attention to the agency people have in building resilience capacities at various levels. As Mackinnon and Derickson put it, “...the question of whether the spatial unit in question can be usefully or accurately understood as a self-organizing entity modelled after ecosystems remains unaddressed” (2012: 9). By treating various sorts of ‘capital’ (surplus in ecosystems, social capital, financial capital, and so on) as equivalent, and by placing social cycles and dynamics such as the financial bubble and crisis within a framework derived and extrapolated from the study of ecosystems, resilience thinking arguably naturalizes the social. In so doing, it commits a fundamental error of mistaken analogical reasoning; treats social dynamics (such as accumulation and crisis) as operating far more deterministically than they actually do (e.g., according to predictable, cyclical models), thereby foreclosing the potential of human agency; and depoliticizes those same social dynamics by treating them as inevitable (there will be financial crises; we must build capacity to weather them), rather than as objects of struggle (see, e.g., Watts 2011).

As the resilience model has emerged primarily from ecology, social science thinking and approaches have been poorly integrated despite the general acknowledgement of the importance of the social within ecological systems. However, there is a developing social science literature that addresses the role of human agency in social-ecological systems. These authors point out that human systems are distinguished by the capacity of humans to produce, perceive and

anticipate change, whether refusing to adapt, or postponing crisis or imagining creative responses to disturbance, and organizing collective action to enhance ability to increase wellbeing (Davidson 2010; Pendall et al.2010). The social science literature is increasingly paying attention to the ways in which human systems affect adaptive cycles, and how they might more effectively forecast potential stresses and disturbances, recognize and minimize risk, and build effective strategies for responding to perturbations. Many social scientists are increasingly using resilience more as a broad, suggestive framework for analysis than as an accurate depiction of an inevitable, omnipresent cyclical dynamic (see Zimmerer 2011, for example). Similarly, others abandon the systems nature of ecological resilience and specifically incorporate human agency as a key factor contributing to resilience capacity.

At the same time, however, *approaches that frame resilience as a personal attribute of individuals or groups are problematic* as well, since they fail to recognize the ways in which the environment influences the adaptive capacities of individuals. Such an approach paves the way for perceptions that some people simply do not have what it takes to overcome adversity, or towards blaming those who do not possess the characteristics needed (Luthar et al 2000; Luthar and Cicchetti 2000). This tendency was particularly evident in early approach to resilience in psychology (see Ungar 2012; Murray and Zautra 2012), but is also apparent in approaches in international development that use resilience thinking to extend neoliberal ideas into poverty reduction and humanitarian assistance (see below; Watts 2011). The danger, for development policy and practice, of errantly interpreting the concept of resilience as a characteristic of individuals or groups is that it could be construed as a justification to blame those who are most vulnerable and least able to marshal the resources necessary for developing resilient trajectories. Such an approach fails to adequately recognize the ways in which the adaptive capacity of individuals and groups is constrained by a variety of structures and organizations as well as the entrenched dynamics of power (see Reid 2010; Cooper 2008). The response in the psychology literature, as in other disciplines that study resilience, has been the emphasis on framing resilience as a process or phenomenon, rather than a personal characteristic of individuals to refer to resilient trajectories or profiles of adaptation instead of resilient people (Luthar and Cicchetti 2000).

Attempts to find the appropriate balance between these two concerns have led, for example, to the idea of community resilience that has emerged in sociology. Community resilience is the capacity to “anticipate risk, limit impact, and bounce back rapidly through survival, adaptability, evolution, and growth in the face of turbulent change” (Plodinec 2009); it emphasizes the primary role and agency of community-members in developing resilience capacity at the community level. The effort, here, is to both avoid the systems approach that lays too heavy an emphasis on structural factors as well as the individualistic approaches to resilience that emerged from psychology. Mackinnon and Derickson (2011) have both critiqued and attempted to further the engagement between the community development tradition and resilience thinking, advocating a framework of “resourcefulness” instead because of concerns about the political valence and genealogy of ‘resilience.’

The community resilience approach follows from both the SES literature on resilience, which suggests that multiple sources of knowledge, including of the lay public, contribute to adaptive capacity (see Scoones 1999), as well as the public health and risk management literatures, which

identify the critical role of communities (social groups, networks, regional affiliations) in marshalling the resources to both minimize risk and maximize resilience factors (Davis et al. 2005; Magis 2010). Resilient communities actively develop social resources, as opposed to simply individual ones, working intentionally to enhance personal and collective ability to respond to and influence change (Magis 2010). From this perspective, a primary way that humans are able to enhance resilience is to minimize the risk to which they are subject.

Within the field of geography, scholars have argued that while reflexivity and agency matter (contrary to deterministic systems theory), change itself is not so easy as people coming together in focus groups to decide what sorts of changes they want. Rather, change is shaped and constrained by existing and historically inherited institutions. Evolutionary economic geographers (coming out of an evolutionary institutional tradition linked to, among others, Joseph Schumpeter) see the economic landscape as a “complex adaptive system” (Martin and Sunley 2006) in a way that overlaps nicely with SES resilience theories emerging from ecology. Like social-ecological resilience, this approach emphasizes the non-linearity of change in human systems; change “does not proceed along a single grand avenue toward perfection but along multiple paths which do not all lead to optimal change” (Grabher and Stark 1997; quoted in Pike et al. 2010). The adaptive cycle from SES resilience theory seems to work well at the regional level, perhaps because regions operate at multiple scales, and are open, highly interconnected systems that experience continual flows of resources and information (Pendall et al. 2010; Martin and Sunley 2007).

A distinct fifth critique *questions the assumption that disturbances to systems are generally unexpected and unknown*, which is central to the ecological resilience framework, particularly as articulated by Holling (1973, 1986; Gundersen and Holling 2002). An important question, of course, is what sorts of changes are accepted as meeting this very particular combination of criteria, of being both inevitable (neither preventable nor alterable) and yet unforeseeable. Social phenomena that are both explicable and potentially alterable via political action, for instance, would seem not to meet this definition. In fact, a great many of the sources of structural vulnerability, their operations and outcomes over time, and their persistence and consequences in the future are well known and quite predictable. While we cannot always have certain foreknowledge of specific threats or hazards, we can and do know that these events will always filter through existing structural conditions in a way that systematically and repetitively disadvantage certain groups over others. Thus, the “science of surprise” perspective can be—and often is—used to abdicate responsibility for the systematic vulnerability of the poor. The concern, then, is that this assumption will be used as an excuse for not addressing the underlying structures that systematically disadvantage certain groups.

Finally, an overarching critique of the resilience framework that comes particularly out of the field of political ecology is the question of power: resilience thinking often *fails to adequately incorporate relations of power*. Michael Watts argues that this is a problematic outcome with most attempts to apply complex adaptive systems thinking to social and economic systems, as is done within the resiliency school. “What is striking in such an integrated field of theory” Watts writes “is that there is no point of intersection between system resiliency and virtually any contemporary account of social power or for that matter the contradictory dynamics of capitalist accumulation” (Watts 2011: 87-8). This failure emerges on two distinct levels. First, a focus on

resilience not only ignores but potentially diverts attention away from the underlying causes of vulnerability to shocks and hazards. Second, resilience thinking often does not question the normative valence of resilience (see Pike, et al. 2010; Pendall et al. 2007).

Resilience thinking has been attractive in security, financial, and development circles at least in part because it resonates with a free market ideology, and thus there is the concern that the resilience concept will be used as a mechanism for the further entrenchment of neoliberal ideologies. Walker and Cooper (2011), among others, argue that resilience thinking about complex systems echoes the Hayekian philosophy that markets are too complex for any centralized authority to predict, much less control. In this perspective it is the free market that is equipped to respond to and manage (if invisibly) both complexity and volatility. The overarching assumption here is that social and ecological systems will evolve most productively once liberated from the interventionist state; this assumption suggests that individuals are responsible for their actions and outcomes rather than being constrained by a variety of structures and organizations as well as the entrenched dynamics of power (see Reid 2010; Cooper 2008). Resilience discourses echo this market-centered logic by very often placing systems within an ecosystems services framework that calculates the benefits of ecosystems for human and larger systems functioning, a calculation that often results in the vilification of the urban and rural poor who are characterized as being least able to protect these ecosystems and simultaneously most in need of them.

Watts (2011) builds on Walker and Cooper (2011) to explore how the rising interest in resilience thinking not only reflects the depth of neoliberal thinking within the world of development but is in fact generative of such thinking. He argues that the application of resilience to development extends neoliberal ideas into poverty reduction and humanitarian assistance in new ways. He highlights the jointly-authored report *Roots of Resilience* put out by UNDP, UNEP, the World Bank, and WRI as a primary example. This report suggests that markets in ecosystem services are a key mechanism to “create self-interest that leads to an improved natural resource base,” generating “income from sustainably managed ecosystems... as a stepping stone in the economic empowerment of the poor” (WRI 2008). If the focus on ecosystems services leads to the creation of markets and private property rights in ecosystem ‘commodities’ (as UNEP suggests it should, to avoid the tragedy of the commons) the poor will be at a significant disadvantage. Watts argues that resilience in this sense becomes a mechanism of governance within which life becomes nothing more than permanent readiness and flexible adaptation. Here, spontaneous market order has become a form of sustainable development within which any poor person becomes “‘an entrepreneur of himself,’ a hedge-fund manager for his own impoverished life” (90). Under this paradigm, Watts argues, markets in ecosystem services constitute the basis for survival in a world defined by turbulence, risk, and unpredictability. The concern, of course, is that the poor will be further dispossessed of the very resources they need to build their lives and livelihoods, both now and in the future.

In order to address the lack of attention to relations of power, in this report we look first to the literature on vulnerability (Section III, below). Vulnerability approaches make an important contribution to resilience thinking because it is here that the structural production of insecurity, inequality and poverty has been well studied and theorized. Secondly, we acknowledge that resilience is itself contentious; we must always ask “*resilience of what to what and for whom*”

(see Carpenter et al. 2001; Leach et al. 2010). If resistance to or revolutionary calls for change are seen as inherently counter-productive, then resilience condemns people to struggle permanently to accommodate themselves as best they can via adaptation within the “already existing” world (Reid 2010). Resilience is not an inherently desirable outcome; rather we recognize it as a contested process. This perspective allows for the possibility of resistance (resisting change that is expected to hurt the wellbeing of some members of society) or transformation (a radical shift from one paradigm or regime to another) as components of resilience. The discussion of social movements in Section IV highlights some of the lessons from such contestations on the ground.

We find, that despite these critiques—which are nonetheless significant—resilience thinking has the potential to be very fruitful for rethinking development work. But, we suggest that the resilience concept must be deployed in a careful way, paying attention to the potential pitfalls of uncritical deployment. We propose a specification of resilience that brings power, rights, and agency directly into the formulation of resilience.

III. Bringing in Research on Vulnerability

We argue that vulnerability studies can make an important contribution to resilience thinking because of their focus on the structural production of insecurity, inequality and poverty. There are many different approaches to vulnerability, all of which arguably emerge from the hazards tradition (and some of which remain more tightly connected to the field of hazards research). There are several specific insights from the literature on vulnerability that are helpful for bringing a focus on power relations into resilience thinking.

Vulnerability scholars have sought to develop a theoretical framework through which to understand the nature of socio-ecological relationships and dynamics at different scales. One of the key insights from this work is the now-familiar point that exposure to hazards, differential sensitivity to those hazards, and the ability to respond successfully to hazards are all phenomena inseparable from highly differentiated and unequal social structures. To take the classic example, while droughts are natural hazards, famines are products, also, of decisions farmers and policy makers make about agricultural production, food exports, the introduction of debt and wage labor and the concomitant fraying of relationships of reciprocity, and the undermining of traditional mechanisms of storing and redistributing surplus. In short, the drought may be natural, but the famine is social, or at least socio-ecological. Moreover, many hazards that are ‘natural’ on the surface can be seen as also social in nature: structural adjustment programs mandated in the 1980s, for instance, influenced how well rural communities were able to respond to and cope with prolonged drought. As such, an adequate understanding of social impacts of natural hazards and underlying causes of vulnerability requires rigorous theorizing of the social structures and dynamics of a modern, globalized, and increasingly capitalist society.

There is a general agreement in the vulnerability literature of the types of social differentiation and marginalization that produce or exacerbate vulnerability. As Wisner et al. (2004: 11) summarize, the “key variables explaining variations of impact include class (which includes

differences in wealth), occupation, caste, ethnicity, gender, disability and health status, age and immigration status, and the nature and extent of social networks” (see also Harris 1990; Harris et al. 1990; Whitehead 1990). In an example of this type of research, Carney examines the lack of food security in the Gambian wetlands. She finds that changing land-use strategies have restructured female labor patterns and weakened women’s customary rights to rural resources, meaning that male heads of households can capture female labor for individualized accumulation (Carney 1996: 184). In this way, gendered dynamics leave women more vulnerable than men. (See also Bianchi and Spain 1996; Cutter 2009; Morrow 2008). Together with gender, race and class-based inequalities combined to produce some of the most extreme vulnerabilities. This dynamic is captured perhaps most vividly in the research demonstrating the differential impact of and response to Hurricane Katrina (Cutter et al. 2006; Elliott and Pais 2006; Logan 2006; Pastor et al. 2006; Elder et al. 2007; Brunsma et al. 2007; Potter 2007).

Political ecology, one of the principal schools of thought to emerge from the hazards tradition in the 1970s and 80s, hinges on the perspective that understanding vulnerability requires an understanding of the social and material conditions of production. These conditions include property relations; forces or conditions of production including technologies, production practices, etc.; and the social relations of production, including the relationship between producers or laborers and employers or owners of the means of production (see, e.g., Wisner et al. 2004; Watts 1983; Hewitt 1997; Oliver-Smith and Hoffman 1999; Bolin with L. Stanford 1998). In other words, class—the distribution of assets and property rights, and the appropriation and distribution of surplus from direct producers—is a key variable and relation in producing vulnerability (Watts 1983, 1991; Susman et al. 1984). The political ecology approach differs from other analyses of vulnerability in that it regards social differentiation and its production as an internal feature of society rather than as exogenous variables that impact vulnerability.

We suggest that this political ecology perspective is most helpful for bringing power into the resilience concept. Whereas other perspectives frame vulnerability as simply, inadequate social security and exchange arrangements, from the perspective of empowerment, vulnerability is defined as a political space and as a lack of rights broadly understood (Watts and Bohle 1993: 4, 8-9). Watts and Bohle (1993: 50) underscore how differential access to power shapes dynamics at multiple levels: “intra-household rule-governed inequities over access to resources and property rights, village level stratification, processes of political inclusion and exclusion with respect to land or access to local credit, national level power, and global powerlessness.” This differential access to power, including the institutional relations that concentrate power in few hands, is the principal structural contributor to vulnerability (Mustafa 1998: 304). Access to land, the larger political economy that structures the relations between farmers and the national and global economy, war, conflict, civil strife, and disease all play a role in distributing—or concentrating—power, and hence, in shaping vulnerability (Mustafa 1998; Hewitt 1997; Collier 2007).³

³ Policies associated with “discourses of degradation” are key to analyse as they illustrate the way in which power infuses the right and capacity to frame arguments. Based on their research in the prefecture of Kissidougou, Guinea, James Fairhead and Melissa Leach (1996) underscore how discursive constructions of degradation that portray local inhabitants as incapable resource stewards can undermine beneficial socio-ecological practices at the local level:

While the political ecology school of vulnerability research focuses on these social factors, a related field of studies on vulnerability pays close attention to biophysical conditions, changes, and hazards and emphasizes place- and scale-specific analyses. This work, largely elaborated around climate change, focuses on mitigation of and adaptation to hazards. In an excellent example, Cutter (1996) offers a framework of place-based interaction between biophysical vulnerability (exposure) and social vulnerability (hazards-of-place approach). The hazards-of-place model sees hazard potential emerging from a combination of risk (defined as likelihood of a hazard event) and mitigation measures that reduce risk and/or its impact. Here, “hazard potential is filtered through the geographic context (site and situation, proximity) and the social fabric of society (socioeconomic indicators, risk perception, ability to respond) and either moderated or enhanced by them. Biophysical vulnerability and social vulnerability together form the overall place vulnerability” (Kumpulainen 2006: 66-67). This approach has been applied toward hazard assessments in the United States, particularly of coastal areas (Cutter et al. 2000; Boruff and Cutter 2007; Boruff et al 2005). This work suggests that the vulnerability is influenced by a range of social, economic, and physical characteristics, which have differentiated impacts in each place. Boruff and Cutter (2007:25) write: “in some locations the physical environment (a floodplain or a coastal site, for example) contributed more to the overall place vulnerability; in others the residents’ social characteristics (minority poor, for instance) were more important in determining overall vulnerability” (see also Boruff et al. 2005). This work has identified ten factors that account for 82% of the variance among US coastal counties: poverty, age, development density, presence of immigrants, rural/urban dichotomy, race and gender, population decline, ethnicity (Indian) and farming, infrastructure employment reliance, and income (Boruff et al. 2005; see also O’Brien et al. 2004).

This latter strand of thinking about vulnerability has been very influential in discussions around climate change and the way resilience thinking has emerged in development circles. For instance, the major institutions responding to climate change, such as the IPCC and European Environmental Agency, have adapted a model of vulnerability from this research. In this model, vulnerability is broken into three components: *exposure* is the “nature and degree to which a system is exposed to significant climatic variations” (exposure to climate factors); *sensitivity* is the “degree to which a system is affected, either adversely or beneficially, by climate-related stimuli” (sensitivity to change) and *adaptive capacity* is the “ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences” (CESR 2010: 6). This definition is clearly very similar to definitions of resilience, and has in fact contributed to their development.

As a result of the overlapping emergence of resilience thinking, disaster resilience, and climate adaptation in development circles, vulnerability and resilience are often taken as closely linked or mirror images of the same phenomenon (Adger 2006). For example, the UN World Food Program defines vulnerability as “a forward-looking concept aimed at assessing community and household exposure and sensitivity to future shocks” (WFP 2009: 27). According to them, “the vulnerability of a household or community is determined by their ability to cope with their

“such intervention has had the instrumental effect of robbing valuable resources from local control, and placing their stewardship in the hands of a technical and managerial elite” (292).

exposure to the risk posed by shocks such as droughts, floods, crop blight or infestation, economic fluctuations, and conflict. This ability is determined largely by household and community characteristics, most notably a household or community's asset base and the livelihood and food security strategies it pursues" (ibid: 27-28). Common usage in development agencies often have these two concepts running together, sometimes used in opposition to one another, or as simply two terms for the same complex of variables. However, we see important and productive differences between these two concepts, and argue that there is merit in keeping them analytically separate.

The concepts of resilience and vulnerability emerged out of distinct scholarly trajectories and theoretical points of view (Miller et al. 2010). While the concept of social-ecological systems resilience is grounded in the natural sciences, and ecology in particular, the concept of 'vulnerability' emerged from interdisciplinary debates within geography, human ecology, political economy, natural hazards research and political ecology. This lineage has imbued vulnerability studies with an attention to social dynamics of inequality and marginalization that is not directly evident in resilience thinking. We believe that these different origins mean that the literature on vulnerability may provide some guidance for addressing the weaknesses in resilience framework (Manyene 2006). Specifically, integrating vulnerability into resilience—both the political ecology perspective on the structural production of vulnerability and the natural hazards perspective of socioecological vulnerabilities—may provide a theoretical language and practical road map for incorporating considerations of agency, power and structure into the resilience framework (Beymer-Farris et al. 2012: 284). In particular, it is in theorizing the *production* of vulnerability that this tradition can really strengthen the resilience framework. Accordingly, we use vulnerability studies to highlight the ways in which the possibilities and opportunities for resilience building are differentiated across society, and that we need to look at the structural conditions that contribute to or detract from resilience processes. We must ask how structural forces—including factors such as race, class, and gender—contribute to or constrain equitable opportunities to build resilience. And we must ask how social-ecological resilience building is a social—and contested—process as much as an ecological one, linked to often highly differentiated and unequal social structures.

IV. Bringing in Lessons from Social Movements

If vulnerability and resilience are brought together, they produce a nuanced approach to wellbeing but the oft-cited need for "local capacity" is still not well-grounded. We argue that social movements in rural areas around the world have organized to fight for the right to build and deploy local capacity and from them we incorporate their insistence that rights—rights to resources, social protection, autonomy and basic human dignity—need to be protected if sources of resilience are to be strengthened. In this report we highlight the experiences of social movement actors around the world who have fought for the right to basic resources and won.

Over the past ten years, agrarian social movements have become increasingly visible actors pressuring national governments and international organizations to recognize the rights of farming communities to determine their own food systems. These movements are working within a rubric of equity, trying to tie more of the benefits of high agricultural production and

productivity to the rural and urban poor. In doing so, social movement actors struggle against the structural conditions of poverty and insecurity. These social movements also demonstrate the contestations being made around local capacity building, emphasizing the need to always ask questions about capacity building for whom? How? And, on what terms?

IVa. Cases

Case 1: La Via Campesina and the global campaign for Food Sovereignty

Food sovereignty is a term introduced by activists from La Via Campesina in 1996 at the World Food Summit but the concept has since grown into a global movement seeking to infuse discussions of food security with attention to power, inequality, and control. La Via Campesina is an organization “which brings together millions of peasants, small and medium-sized farmers, landless people, women farmers, indigenous people, migrants and agricultural workers from around the world [to] defend small-scale sustainable agriculture as a way to promote social justice and dignity.”⁴ The main goal of the organization is to build a network between local-level rural social movements and to realize food sovereignty.

Food sovereignty is a rights-based framework for rethinking global and local food systems. As described in the International Assessment of Agricultural Knowledge, Science, and Technology for Development (IAASTD), “the concept [of food sovereignty] includes prioritizing local agricultural production to feed the population and access for peasants and the landless to land, water, seed and credit...[and] places emphasis on local autonomy, local markets and community action” (IAASTD 2009: 17, 20). It is defined in slightly different ways across the myriad organizations working within Via Campesina, but definitions of food sovereignty always emphasize the *rights* of people to define their own food and agriculture. As Via Campesina’s own statement (2007) says, food sovereignty is “the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It defends the interests and inclusion of the next generation.”

While food sovereignty does prioritize local and national economies and markets, it does not negate trade. Movement participants argue that trade should benefit everyone through the formulation of transparent trade policies and practices that contribute to safe, healthy, ecologically sustainable, and culturally appropriate food production and consumption (People’s Food Sovereignty Network 2001; NGO/CSO Forum for Food Sovereignty 2002).

Key components of La Via Campesina and related social movements’ conception of food sovereignty include (see Windfuhr and Jonsen 2005):

- Priority of local agricultural production to feed people locally;
- Access of smallholder farmers, pastoralists, fisherfolk and landless people to land, water, seeds and livestock breeds and credit.

⁴ <http://viacampesina.org/en/>

- Land reform (or progressive distribution and tenure security)
- The right of consumers to decide what they consume, how and for whom;
- The right of countries to protect themselves from underpriced agricultural and food imports;
- The need for agricultural prices to be linked to production costs and to stop all forms of dumping;
- The populations' participation in agricultural policy decision-making;
- The recognition of the rights of women farmers who play a major role in agricultural production in general and in food production in particular;
- Agroecology as a way not only to produce food but also to achieve sustainable livelihoods, living landscapes and environmental integrity.

The areas of overlap between resilience thinking and food sovereignty are substantial, though they inhabit very different policy worlds: both approaches emphasize the importance of local knowledges and efficacy, the need for access to resources to produce and reproduce locally, and the push for diversity in agricultural production and political representation.

Case 2: Right to Food Campaign (India):

In response to a severe drought in India that left many people displaced or lacking food or clean water, and in light of government policies that led to the stockpiling of nearly 65 million metric tons of food grains despite the lack of food security among the Indian people, the People's Union for Civil Liberties (PUCL), a civil society organization in Rajasthan, brought a petition to the Supreme Court demanding that the government use its food stocks immediately to feed the many people who were on the brink of starvation (Jayasekera 2000; Ahreya et al. 2008). These efforts brought together civil society organizations from around the country motivated to "build a larger public campaign for the right to food" coalescing in the Right to Food Campaign (RFC)⁵. The RFC is a "loosely knit network of mostly civil society organizations" organized around the idea that the right to be free from hunger and undernutrition is deeply contingent upon other entitlements related to livelihood security, including "the right to work, land reform and social security" (Athreya et al. 2008: 131; Dreze 2002). As such, the RFC advocates on a wide array of issues, including a national Employment Guarantee Act, mid-day meals programs in all primary schools, universal implementation of the Integrated Child Development Services program, nutritional programs, the right to work, social security programs, and equitable rights to land and forests.

Employing a rights-based approach to social change, the RFC focuses explicitly on the responsibility of the state in ensuring its citizens' basic entitlements necessary to food and livelihood security (Athreya et al. 2008; Banjaree et al. 2005). In this way, they have targeted state institutions as a critical site through which to facilitate and institutionalize social change, particularly at the judicial level (Banjaree et al. 2005). Drawing on conventions and agreements codified in international law, the RFC argues that India is obligated to ensure that all Indians are free from hunger and malnutrition. Furthermore, they argue that a human right to food entails not only the alleviation of food insecurity, "but that it must also identify the nature of the rights

⁵ <http://www.righttofoodindia.org/campaign/campaign.html>

holders and their rights, the nature of the duty-bearers and their obligations, and the procedures through which they ensure that the duty bearers meet their obligations to the rights holders” (Athreya et al. 2008: 8).

While the focus of the RFC has been directed explicitly at the state, the movement has taken a multifaceted approach to social change. In addition their attempts to directly influence policy, the RFC works to raise widespread awareness for hunger issues through strategic use of the media, as well as working at the grassroots level to improve participation in existing programs and assess the needs and challenges of the poor—bringing together a wide range of stakeholders that have contributed to its success (Banjaree et al. 2005; Srinivasan and Narayanan 2007). Moreover, sustained connection between the various nodes of the network sustains the sense of collective identity among movement participants and offers a democratic environment in which strategies, information sharing, and movement goals and achievements can be shared and negotiated (Srinivasan and Narayan 2007). One of the greatest strengths of the movement has been its focus on and ability to pool resources (financial, knowledge, skills, and human labor), and what started as an “informal mode of networking” (Srinivasan and Narayanan 2007: 3) has grown into an influential movement.

The RFC in India frames food security as a right, but argues that addressing hunger involves securing access to other resources and entitlements, such as the rights to work, social protection, and access to land. This case demonstrates the necessity of state intervention, as both the guarantor of rights and the provider of legal protection, particularly for the most vulnerable.

Case 3: Indigenous Peoples’ Movements in Andean South America (Ecuador, Bolivia, Peru)

Throughout the Andean region and especially in Ecuador and Bolivia, indigenous social movements have emerged that have had significant impact on government leadership and policies, and which have raised the profile of struggles for indigenous rights both within the region and in international forums. Indeed, in Bolivia and Ecuador indigenous social movements have coalesced into successful political parties, *Movimiento a Socialismo* (MAS) in Bolivia and *Pachakutik* in Ecuador, have led to the election of Bolivia’s first indigenous president, Evo Morales, and have resulted in the major re-writing on the national constitutions in both countries. While in Bolivia the energies of the indigenous movement have been well-integrated into the MAS, in Ecuador the Confederation of Indigenous Nationalities of Ecuador (CONAIE) remains less so, using other means to pressure the Ecuadorian government. In both contexts, social movements have succeeded in inserting indigenous voices and visions both into the policy arena as well as into current political debates (Casas 2011).

The indigenous social movements have implemented a series of concepts from indigenous cosmovisions, such as *Pachamama* (mother earth) and *sumaq kawsay* (living well), that differ significantly from Western notions but which they have use to organize and make claims (Casas 2011; Zimmerer 2012). For instance, the Quechua term *sumaq kawsay* (*buen vivir* in Spanish) has not only entered the political spaces in the Andes (including the right to *sumaq kawsay* being enshrined in the respective constitutions of Ecuador and Bolivia), but has taken on a much larger importance across social movements (including those focused on agroecology, food sovereignty, and sustainability more generally) and post-colonial theories. *Sumaq kawsay* can be translated in

many ways—*kawsay* is a very versatile word that carries a spectrum of meaning. In indigenous social movements, *sumaq kawsay* has been used strategically to indicate “living well,” carrying the connotation of a healthy and fit life and livelihood centralizing both ecological and social sustainability. Central to these indigenous concepts is a very different way of thinking about the relationship between nature and society. Indigenous notions integrate and fuse the natural realm and the human-social world; indigenous Andean concepts conjure an idea of nature as humanized landscape of food-producing environments and technologies (Zimmerer 2012). This implies that each side has a set of responsibilities towards the other but also rights. Thus, human stewardship of nature is not simply about groups taking care of the earth, but also an idea that the *Pachamama* takes care of people in a reciprocal manner.

This has significant influence over how indigenous social movements deploy the framework of rights. These movements do utilize the language of rights to make claims within new arenas, but they also significantly transform these frameworks with a new articulation of rights that challenges liberal ideas regarding to whom rights accrue (Andolina 2003; Becker 2011). For instance, indigenous movements demand the recognition of communal and cooperative forms of ownership (Zamosc 2007), suggesting that rights can be claimed by communities or ethnic groups, and, more provocatively, to other entities that might be considered inanimate in Western contexts, like to nature or “Mother Earth” (Casas 2011). They also lay claim to communal rights to ecological resources, like land, water, and air. This expanded notion of rights has been incorporated into the constitutions in Bolivia and Ecuador, as well as in declarations and proposals emerging out of the World Peoples Conference on Climate Change and the Rights of Mother Earth in Cochabamba, Bolivia in April 2011 and the Bolivian proposal to the Rio+20 conference, which brings together ideas emerging from various indigenous and environmental social movements to propose the rights of nature as a key component of a deeper commitment to sustainable developments.⁶

Case 4: “We do it ourselves”—Nijera Kori (Bangladesh)

Nijera Kori, an organization of vulnerable groups in rural Bangladesh that seeks to address the structural conditions of poverty⁷. Nijera Kori—which translates to “We do it ourselves”—was formed in response to dissatisfaction with the NGO sector, which was seen to lose sight of the root causes of poverty and marginalization; they sought to directly challenge the “service-based approach” of mainstream NGOs.

Nijera Kori employs a rights-based approach in their activism that entails a reconceptualization of the liberal notion of rights premised on the individual, to an understanding of rights that is collective in nature (Kabeer 2003). In order to achieve collective rights, however, requires action at multiple levels. First, Nijera Kori argues that the institution of patriarchy is in fundamental contradiction to the realization of collective rights and the elimination of poverty. Second, the organization states that an “accountable, democratic environment is absolutely essential to development.”⁸ Finally, Nijera Kori argues that social and ecological sustainability are

⁶ <http://pwecc.wordpress.com>

⁷ www.nijerakori.org

⁸ www.nijerakori.org

interdependent processes, and thus must be simultaneously addressed.. The organization is committed to participatory methods of democratic engagement in all aspects of their work.

One of the characteristics of Nijera Kori that distinguishes it from other NGOs working on poverty and inequality in South Asia is its explicit rejection of micro-credit schemes. In contrast to the rhetoric of empowerment reproduced by champions of micro-credit and micro-finance schemes, Nijera Kori argues that micro-credit discourages community autonomy by creating debt dependencies and associated vulnerabilities. Rather than integration into the very social and economic structures that oppress poor and marginalized peoples, Nijera Kori conceives of community empowerment as “the processes of change through which those who have been denied the ability to articulate their needs, exercise their rights and influence the decision-making processes which shape their lives are enabled to do so” (Kabeer 2002: 6).

One of the lessons of Nijera Kori for resilience thinking is that control over the process of building local capacity must rest in local communities—not in the market or in outside organizations. Resilience work should not just be “participatory,” it should be indigenous, endogenous and grassroots.

Case 5: *Movimento dos Trabalhadores Rurais Sem Terra (MST) (Brazil)*

The Movement of Rural Landless Workers (known as The Landless Movement, or the MST) came together in 1984 in the southern region of Brazil. Initially a fairly loose coalition of squatters, rural activists, lay clergy and radical politicians, the movement has grown into one of the most significant grassroots political forces in contemporary Brazil. The key organizing principle for movement activists and members has been the idea that land is not simply a commodity but rather is a social good and as such has an obligation to be distributed fairly and to be productive of livelihood resources such as food, income and labour. This principle is enshrined in the Brazilian Constitution and, in part because of the MST’s efforts, has also taken a more prominent role in statutory law, or the Civil Code (revised in 2003).

The MST gained membership during the early 1990s and won important cases as land reform settlements were created from idle properties throughout the country. As a result of the MST’s skilled organizational ability and substantial capacity for bringing people together, the issue of access to land has remained in a surprisingly visible position on the political agenda at national and sub-national levels (at a time when the percentage of people living in rural areas has decreased significantly). As the MST has grown (its direct membership is now over 1 million people, and its sphere of influence much greater), the movement has broadened its focus from simply fighting for access to land to ensuring that rural people have access to a broader set of rights as well as a set of economic and political opportunities for promoting wellbeing. The movement advances a theory of rural industrialization and even urbanization that counters the excessive influence of an “island” or poles approach to modern development that has prevailed in Latin America since the early 1900s. The movement also emphasizes the importance of education as a necessary (if not sufficient) tool for accessing both rights and resources: activists have organized itinerant schools with a pedagogical tradition derived from Paolo Freire as well as fighting for resources from public institutions to support rural students.

The important lessons to learn from the MST are that rights are only effective if supported by popular or grassroots mobilization and participation—in other words, there is a difference between de jure and de facto rights—and the right to a resource like land needs to be embedded in a broader reorganization of political, economic and social arrangements that provide the means of using and benefitting from the land. The movement advocates for agricultural and industrial “development” but one geared towards appropriate technologies and the needs of local communities and the poorest.

IVb. Discussion: the relevance of social movement campaigns for resilient livelihoods

As with the resilience framework, social and ecological interdependence is a key concern of these movements, all of which suggest that achieving social justice means paying attention to ecological-social linkages. Whether in food sovereignty movements or in those that frame nature as a humanized landscape, these movements promote using local knowledges and agroecological practices as mechanisms to protect biological diversity and sustainably manage ecological resources. A key issue, however, is the emphasis on technologies and strategies that can be managed at the local scale in ways appropriate to the specific context such that they contribute to the goal of equity.

The approach championed by these social movements represents no less a radical epistemic shift than that represented by the resilience framework (Wittman 2011; Ishii-Eiteman 2009; Scoones 1999). At the root of these social movement struggles is the desire to protect the capacity of local people to determine the content and trajectory of their own lives and livelihoods. These movements seek to re-orient discussions of national development towards local, regional, and national autonomy and management of resources and to guarantee that solutions are context appropriate.

But at the same time as these approaches focus on local capacity and rights, this does not devolve into an individualizing logic wherein both the responsibility and blame for poverty are placed on poor people’s shoulders without attention to the systems within which poverty comes about and is patterned. Thus, at the same time, these social movements mobilize rights-based frameworks that emphasize the importance of state capacity to protect these rights as well as the responsibility of the state to ensure basic entitlements. Social movement mobilize this language, and in so doing transform and expand our understandings of rights. One key challenge levelled by these movements is a re-interpretation of to whom rights accrue. Utilizing the language of rights available through the United Nations framework has allowed these groups to make disparate claims and concerns more legible to a broader audience and to gain access to dominant political and social institutions (Casas 2011). But these movements also transform the idea of rights that have emerged from the liberal democratic tradition: among other claims, they ascribe rights to nature, to collective or cultural entities, and to food.

Underlying this discussion of rights is the basic proposition that people should have stable access to the resources that allow them to forge healthy, stable, meaningful, and resilient livelihoods. Different movements focus on different sets of resources. Education, political participation, land, water, seeds; these are some of the key resources these groups are mobilizing around. However, resources that contribute to local people’s capacity for resilience will depend on the social and

ecological context, and guaranteeing rights to sources of resilience should be an important component of a responsible and justice-oriented conception of resilience.

These social movements are all oriented to creating suitable livelihoods for people; not just creating a basic standard below which people cannot subsist. This is the key idea underlying the notion of “living well”. Efforts to support rural wellbeing should incorporate not just the means to cope at a basic level, but to actually thrive in response to challenges and the shifting ecologies and social institutions that rural people are increasingly faced with. This implies that our concept of resilience should include the ideas of not just responding to threats or hazards by coping along a basic level of subsistence, but actually thriving, building healthy, happy, and meaningful lives and livelihoods.

And finally, we can learn from these social movements that special attention must be paid to the most marginalized, vulnerable, or disadvantaged. These movements pay particular attention to the structural forms of marginalization embodied in gender, caste and ethnic relations and they all incorporate a substantial focus on equity.

V. Moving forward: Resilience for Social Justice and the Implications for Measurement

Drawing from the literature on resilience, vulnerability and social movements, *we define resilience as the processes of learning, organization, and adaptation taking place across scales that enable people to respond to and cope with internal and external stresses in ways that allow them to build and defend healthy, happy, and meaningful lives and livelihoods.* We seek to build a conception of resilience that serves social justice; to do this we bring power and agency in as key components. We come to several key conclusions about a helpful and responsible conceptualization of resilience for development work:

- *Resilience is a contested process, both in terms of how it is defined and how it is generated in particular locations.* There are multiple actors in any given community with different ideas about the form of resilience that is most desirable, and in different positions to pursue resilience.
- *Equity is central to a responsible, social-justice approach to resilience.* Lack of equity is not just an outcome of failed resilience; inequality itself diminishes the possibilities for resilience building.
- *A social justice approach to resilience supports the empowerment of local actors and recognizes that access to rights and resources are necessary to generate resilience.* Here we draw on insights from social movements around the world to argue that people have the right to the key resources for building resilience (including government support) and to local control over the resilience process.
- *Building resilience is not only about moving forward to build adaptive capacity, but also about understanding the structures that facilitate or inhibit resilience.* A rights-based approach requires careful engagement with relations of power and the legacies of history. Supporting resilience involves efforts to uncover and work against the root causes of vulnerability and poverty. Further, efforts at structural change, rather than just individual or group adaptation, are also important to developing overall capacities for resilience.

A rights-based approach to resilience recognizes that the adaptive capacity of humans is contingent upon the set of resources they have access to, the quality and quantity of these resources, and the nature of this access. We suggest that there are five key sets of resources that contribute to building resilience capacity: governance and political resources, civic capacity, natural resources, economic resources, and resources that support learning.

Effective governance and political resources

Effective governance is necessary for building adaptive capacity on many levels. First, the resilience framework clearly indicates that governance that is flexible and adaptive must be closely connected to the realities on the ground. Thus, an indicator for rural wellbeing must reflect the opportunity for and level of democratic engagement and participation. Decentralized and local adaptive governance is a strong theme running through the resilience literature. Framing these resources as rights suggests that governing structures and civic institutions must protect effective access to and exercise of the resources people need to build adaptive capacity. Within a rights-based framework, people have the ability to make claims against states and other institutions, to demand that they provide or protect access to the resources needed to develop local capabilities and knowledge bases. To support rural wellbeing, governments must be inclusive, and provide necessary services and social protection measures. Thus an indicator of rural wellbeing will include not only availability, access to, and quality of government services such as health care, education and social protection, but also mechanisms of participation and measures of government accountability.

Civic capacity

Civic institutions have an important role to play in building resilience capacity. Such institutions play an important role in the exchange and translation of knowledge between stakeholders and policy makers. They also provide spaces for civic engagement and the formation of social networks, which help to forge and reproduce shared social values and ethics. This not only builds trust and solidarity within and between groups—which, as noted, improves the capacity to reach agreement and distribute resources equitably—but civic institutions also provide the mechanisms through which resources can be distributed during crisis. Finally, civic institutions not only provide spaces where people can build local capacity to respond to stresses, but they also provide opportunities for civic and political engagement that contribute to building responsive, accountable, and adaptive structures of governance.

Natural resources

One of the principle lessons of resilience thinking is that ecological and social systems are inextricably linked. Human activity both draws upon ecological resources and impacts these resources, influencing the capacity of ecological systems to function and to provide those resources in the future. A resilience framework, thus, involves holistic thinking and an approach that places particular actors or sets of actors and actions within larger assemblages of interaction. Ecological systems studies is critiqued for failing to adequately capture the human component of these overlapped or linked systems, and political ecology is critiqued for not focusing enough on

the environment. The framework we develop here seeks to overcome these failures by identifying natural resources as a key source of rural wellbeing.

The land and environment where rural lives and livelihoods are situated is perhaps the most fundamental building block of rural wellbeing. The social movements we discussed above indicate that rights to natural resources, such as land and water, are necessary to develop rural livelihood security. Thus, central to our rights-based approach is the effective right to land and water; we add to this the right to environmental quality—that is, the right to clean water and air, and to productive land that is not degraded.

Economic Resources

As noted above, the people who are most vulnerable to hazards are those with poor access to economic resources, including reliable and effective markets. The rural poor, in particular, have historically been unable to access quality markets. Thus, our framework indicates that markets are a key resource through which to build more resilient rural wellbeing. However, markets must work for rural people, not to exploit or disadvantage them in favour of urban or corporate elites. From a critical perspective, markets are often seen as part of the problem rather than as a solution for ensuring rural wellbeing. We suggest that in order to improve rural wellbeing, markets must be competitive and transparent, and that transactions costs must be reduced to enable access to them in rural areas.

The resilience framework laid out above suggests that a diversity of livelihood mechanisms will contribute to rural wellbeing and resilient capacity. Thus, we suggest that the market should be seen as one arena of economic action among many, and that economic infrastructure should not overly privilege markets over other means of livelihood making (McCarthy and Wolford 2011). We also suggest that diverse forms of markets—regional markets alongside global commodity flows, for instance—can contribute to rural wellbeing.

Resources that support learning and knowledge sharing

Opportunities for social learning are an important contributor to resilience because they provide mechanisms through which knowledge can be harnessed and shared, and because learning improves creative capacities. Education also improves the ability to predict and prepare for shocks. Learning can take place in a variety of settings, including formal and informal education, through producer networks or extension services, or through apprenticeships and intergenerational learning networks. Like other sets of resources, from a resilience perspective, learning can, and should, involve multiple forms and mechanisms of knowledge acquisition and generation. While formal education opportunities may be the most obvious, there are many informal forms of learning and knowledge sharing that can also contribute to generating creative solutions.

These five clusters of resources are clearly overlapping; in fact, a strength of the resilience approach is its recognition of linkages across arenas and spatial and temporal scales—a strength that we seek to build upon here. We suggest that these clusters represent key resources that people have rights to, and which contribute to building resilient rural livelihoods and means of

wellbeing. This conceptual approach to resilience provides a framework through which we can develop the tools to measure rural wellbeing. These clusters of resource are potentially measurable categories that can be utilized to develop helpful measurement tools that address resilience in a novel and helpful way.

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