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Communities and social enterprises in the age of globalization

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Abstract

Purpose – The goal of this paper is to develop a conceptual framework to understand the processes by which rural communities are using commons-based social enterprises to engage global actors and forge local places.

Design/methodology/approach – The paper uses a four-step conceptualization of commons-based social enterprises within a complex world: deal with communities as complex systems embedded in larger complex systems, understand cross-scale linkages between communities and other levels of organization, identify drivers of change, and build adaptive capacity to increase the resilience of communities in the face of globalization. The paper draws upon an international set of cases undertaken by the Centre for Community-based Resource Management to illustrate each step.

Findings – Social enterprises are one means by which rural communities are negotiating with global actors through recent processes of globalization. The social enterprise provides a mechanism for rural people to secure tenure for common-pool resources and allows them to make direct decisions regarding their management.

Research limitations/implications – To further develop the understanding of commons-based social enterprises will require further integration of theory regarding commons and social enterprises.

Practical implications – States and development agencies lack enabling policies for commons-based social enterprises that support the multiple goal strategies of rural communities for natural resources.

Originality/value – Commons and social enterprise literature have tended to exist in separate domains and this paper makes a first step toward their integration.

Keywords Communities, Entrepreneurship, Globalization, Rural regions, Social change

Paper type Conceptual paper

Introduction

What roles do rural communities play in a world in which enterprises are increasingly driven by global forces? Rural communities often seem destined for roles in a play in which the script has been written by others. In some scripts they are given the role of heroic "primitive" people resisting multinationals and other global forces. In others they are the victims who are sacrificed to make way for progress (Blaser *et al.*, 2004). Rural communities are still important actors in the latest version of the globalization

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play, but they are beginning to co-author the scripts by learning how to play the globalization game.

There are many stages on which local actors engage with global actors; in this paper our interest is with the rural stage. We use the term, rural, to refer to places in which environmental goods and services such as natural resources, watershed protection, and biodiversity intersect with the occupation of these lands by people and their economic activities. For local actors, rural is home, a place in which they make their livelihoods from environmental goods and services. For global actors, the rural is a source of both natural resources and human resources that through the strategic investment of capital can lead to the growth of capital, as well as providing local benefits such as employment. Whereas, local actors tend to be place-based, global actors can be opportunistic and transient, "roving bandits" with no attachment to place (Berkes *et al.*, 2006). This shared interest in the same places results in a stage that has much interaction between local and global actors.

It is these people and places and the interaction between local and global actors that is the basis of rural, resource-based economies and enterprises. As increasingly noted through emerging concepts such as sustainability science (Kates *et al.*, 2001), and the Millennium Ecosystem Assessment (Capistrano *et al.*, 2005), ecological services and human well-being make up a tightly coupled system, and place-based considerations are crucially important.

The interaction between rural communities and global processes has often been considered a recent phenomenon, leading to a characterization of rural communities as places isolated from the global. But globalization is not a new phenomenon, nor is it a new experience for many local actors. However, what is different about this latest phase of globalization is the compression of temporal and spatial scales that characterize such interactions. The processes of contemporary globalization are dominated by flows of information, people, goods and services that are seemingly instantaneous and can occur over a large portion of the earth (Young *et al.*, 2006).

How do communities respond to global economic forces? One strategy of engagement is political resistance. It is a strategy that, at best, has allowed local actors to fashion a hybrid form of economic development more to their liking; not transcend global forces (Scott, 2005). Another strategy that has been garnering attention from scholars is enterprising engagement – the use of business enterprises as a vehicle for development, control of local resources and self-determination. Escobar (1995) has called it transformative engagement with modernity, whereby traditional practices are modified and enriched by outside technologies and knowledge, resulting in an adjustment of the local economy and social structure.

A key aspect of this strategy is for rural communities to gain control of local natural resources so that they can be utilized to build local economies. Examples are many and include the use of indigenous land rights in Canada as a foundation for development (Anderson *et al.*, 2006); the development of smallholder forestry in the Amazon floodplain (Sears *et al.*, 2007), enterprises based on the multiple goods from the rainforest (Godoy *et al.*, 2002), and indigenous entrepreneurships that tend to focus on social enterprise and local cultural values in integrated conservation-development projects (Berkes and Adhikari, 2006).

This paper explores the linkage between natural resources and social enterprises in the context of natural resource governance in a globalize world. It brings together what

has been two disparate bodies of literature, commons theory and community economic development. We start by exploring social enterprises and the kinds of resources on which many of these enterprises are based: common property (or common-pool resources). Then we suggest a four-step conceptualization of commons-based social enterprises within a complex world.

First, not only are communities part of a larger world, but also communities themselves are complex systems embedded in larger complex systems. Second, to deal with this complexity, we need to understand the nature of cross-scale linkages between communities and other levels of social and political organization. Third, communities respond to various influences, making it important to identify those drivers of change originating outside the local system. Fourth, we need to investigate the various ways in which we can help build adaptive capacity at the local level to increase resilience in the face of rapid change that characterizes globalization. Following brief discussions of social enterprises and commons theory, we deal with each of these four points.

Social enterprises

For many rural communities, social enterprises are seen as a way to mediate relationships with global actors. Many rural communities saw their economies collapse under the processes of globalization and became increasingly dependent upon transfer payments from state governments, corporations and non-governmental organizations (Anderson *et al.*, 2006). Such processes result in the loss of rural livelihoods and place-based economies, and place rural communities in relationships of dependence with global actors. In recent decades, however, many rural communities began a process of gaining control over local resources and establishing enterprises based upon the use of those resources.

Berkes and Adhikari (2006) investigated a set of 42 indigenous cases from the UNDP Equator Initiative database that were nominated for the Equator Prize as successful models of integrated conservation-development projects in tropical countries around the world. The cases showed a high diversity in the kinds of businesses developed and resources used, and tended to focus on social enterprise, local-cultural values, and the politics of resource access and control. While global enterprises focus on providing growth in capital to shareholders, these enterprises seem to be set up to provide social dividends to community members. Social enterprises have an important role in maintaining economically viable communities while trying to obtain control over their resources.

Such social enterprises are not based upon utilitarian-economic models but rather an economic model in which resources provide for much broader goals, economic, social, cultural and political. These enterprises provide multiple benefits such as self-determination, cultural revitalization, protection of watersheds and sacred sites, employment, and capacity building as well as cash income (Berkes and Adhikari, 2006). These broader goals are addressed by engaging global economic processes and not by resisting them. Examples include the Inkinip winery of Osoyoos First Nation (Anderson *et al.*, 2006) and the Whitefeather Forest Management Corporation of Pikanigikum First Nation from Canada (Chapeskie *et al.*, 2005); the Menominee Tribal Enterprises in the USA (Huff and Pecore, 1995); and San Juan forestry enterprise in Mexico that has a 25 year track record (Velazquez *et al.*, 2003).

There are many reasons why local communities engage global processes. Often, however, local communities are simply trying to find paths to self-determination and survival. They do not create the markets for resources but find ways of identifying existing global markets and engaging them. Often their interest in conserving resources is not as an abstract conservationist ideal but in recognition that their survival is linked to the survival of their local environment. For many local communities, enterprises are not pursued for capital growth alone, although profit is a necessary requirement for an enterprise to survive.

What is a useful framework to understand such natural resource-based social enterprises? Our interest is in enterprises that require collective action for their management and provide collective benefits to their members (Ostrom, 1990, 2005). They often require a land and resource base; operate in local, national and international markets; and require partnerships and networks to access knowledge, technology, capital and access to markets. Since, such social enterprises often depend upon common pool resources as sources of primary inputs, the natural starting point in building a framework for this discussion is that of commons or common property theory.

Communities and the commons

Commons theory has undergone a major transformation since the 1980s, from the "tragedy of the commons" with its prognosis of gloom and doom, to the idea that resource users are capable of self-organization and self-regulation. A great deal of research in the last three decades has focused on commons institutions and defining the conditions that lead to the solution of the tragedy of the commons.

The new commons theory was developed mainly through the study of communities and community-based resource management cases. Small-scale common property systems were often chosen because these relatively simple systems could be used as "laboratories" to build theory. For example, Ostrom (1990, p. 29) comments that her initial strategy was to study small-scale common property situations "because the process of self-organization and self-governance are easier to observe in this type of situation than in many others." We start with commons theory because it is these natural resources, and their management by community-based systems, that allow for the emergence of the type of community social enterprises we are discussing in this paper.

The work since the 1980s has led to increasingly more precise definitions of the issues and their solutions. Common-pool resources share two characteristics:

(1) exclusion or the control of access of potential users is difficult; and

(2) each user is capable of subtracting from the welfare of all other users (Feeny *et al.*, 1990).

These two universal characteristics of commons are referred to as the exclusion problem and the subtractability problem, respectively. Thus, Ostrom *et al.* (1999) define common-pool resources as "those in which (i) exclusion of beneficiaries through physical and institutional means is especially costly, and (ii) exploitation by one user reduces resource availability for others."

Exclusion refers to the ability to exclude people other than the members of a defined group. Some indigenous tenure systems are designed to deal with exclusion while

others use normative notions of respect for the traditional area of a social group. The important conclusion of the commons literature is that the legal recognition of communal resource rights is a key to success. This holds true for many cases of social enterprises of indigenous peoples. Without legal protection, conflicts among competing groups for resources such as forests, agricultural land, wildlife and environmental services such as biodiversity become inevitable. Problems of exclusion become especially important in an increasingly interconnected world in which local resource rights are under pressure.

Subtractability refers to the ability of social groups to design a variety of mechanisms to regulate resource use among members. In many community-based management systems, users have devised rules for self-governance, monitoring mechanisms, and sanctions. Such self-organized rule making by communities is very common in indigenous and other rural communities and have been documented in detail. Much of the common property literature addresses the subtractability issue, and the ability of groups to make rules-in-use (or institutions). For example, Ostrom (1990) lists eight design principles for effective community-based institutions. But the total number of enabling conditions that are important for the success of commons institutions may be considerably more, depending on how one may classify and count them.

Many common property systems of community-based resource management address exclusion and subtractability problems by devising institutions of collective action for common-pool resources. The key is the ability of a community using a common resource to limit the access of outsiders, and self-regulate its own harvest. Common property management works through incentives. If members of a group are assured that future harvests would be theirs by right, and not end up being harvested by another group, they have the incentive to self-regulate. Common property analysis focuses on institutions; many of these are informal local rules-in-use or behavioral norms. It looks at access and self-regulation, and asks questions about rules and who has rights and control over a resource. These rights and relationships are rarely static. Rather, they tend to change over time in response to various influences, both internal and external. Before turning to external drivers, we highlight an often-neglected issue – the internal complexity of communities.

Communities as complex systems embedded in larger systems

The notion of community is often used without an adequate critique of its geographic, political and normative dimensions; communities are often heterogeneous. The commons literature as well as other anthropological and human ecology literature has spent the last 25 years in moving our thinking from communities as homogeneous units, to systems that are heterogeneous and complex (Agrawal and Gibson, 1999). Communities are not simple entities but show some of the characteristics of complex systems: they may be multi-level and may include competing groups and different interests.

In a given community, there may be different interests by social group or ethnic group, as well as differentiation by gender and age. In our work in the Canadian North (Northwest Territories and Northern Manitoba, Ontario, and Quebec) we have not encountered one community that could be characterized as socially homogenous. In the James Bay Cree community of Chisasibi, for example, there were minority groups of Inuit and Metis. Among the Cree themselves, there were two groups, the coastal people

and inlanders, with distinctly different subsistence preferences. In the Canadian Western Arctic, the people of the Inuvialuit community of Sachs Harbour were descendants of the Inupiat of Alaska, and the people of Victoria Island and the Mackenzie Delta. The adoption of English as the common language in Sachs Harbour in the 1970s was in part a solution to the problem of dialect differences.

This pattern also appears to hold for many communities we have encountered in our international work. In the communities with whom we worked in Himachal Pradesh state in India, difference such as religion, caste, gender, and occupation made many geographically defined communities into a heterogeneous mosaic of different interests in the use of natural resources (Davidson-Hunt, 1997; Berkes *et al.*, 1998). In Mexico, a similar pattern emerges when looking at forest communities. Even communities that are defined as indigenous in the Sierra Tarahumara of Northwest Mexico included residents who immigrated to these communities in the late nineteenth and early twentieth centuries (Davidson-Hunt, 2003). Work undertaken in central Mexico has similarly shown how indigenous communities like San Juan in Michoacan State are a complex mixture of indigenous peoples, long-term settlers and more recent immigrants to the community (Bray *et al.*, 2003).

Research undertaken by commons scholars has demonstrated that most, if not all, rural communities bring together various social groups that historically belonged to different areas or social groups. Hence, community heterogeneity is the norm rather than the exception. One of the important implications of this heterogeneity is that there is often diversity in the interests of different community members in the use of community assets and often in the way social enterprise networks are structured. This results in a need to negotiate different interest within the community through a process that may often include both conflict and accommodation. Thus, community management of natural resources often includes multiple objectives, instead of allowing for a single-commodity focus. This is part of the reason that community-based resource management tends to look at multifunctional landscapes (Berkes and Davidson-Hunt, 2006).

The second aspect of complexity is that communities themselves are embedded in larger systems. These once remote communities are being integrated into increasingly privatized, individualized, commoditized-socioeconomic systems. These are not new or even necessarily recent trends, but the speed of change has accelerated.

The upshot is that capital markets and global enterprises are able to react swiftly to changes in market preferences. They can quickly identify sources of the natural resource required and begin negotiations with state and community governments to obtain access. This has changed the spatial reach of global enterprises and the speed by which they can reach into distant places. This is coupled with the emergence of rural communities not just as producers of global goods but also as consumers. Such changes have been influencing property rights dynamics at the local level, the role of traditional governance, and social values. Communities no longer need to produce to meet their own material needs and this has caused a shift in the balance between subsistence use of local resources toward the pursuit of economic opportunities integrated with monetary systems. The speed of such changes can cause rifts within communities and conflicts with the outside world as communities consider how to respond to these changes.

As many global enterprises extract natural resources without generating much local benefit, the interests of rural communities can collide with the interests of global enterprises. Rural communities would prefer that natural resource enterprises generate local benefits, whereas global enterprises focus on maximizing return on investment. State governments that allocate natural resources in most jurisdictions must thus consider both the local interest in resources, as well as the use of natural resources in the national interest.

As global enterprises continue to reach into even the remotest rural areas to access natural resources, commons governance becomes multi-scale and multi-jurisdictional. Rural communities have had little choice but to interact with regional and national governments that allocate resource rights and the global enterprises interested in developing them. To deal with this complexity, we need to understand the nature of cross-scale linkages between communities and these other levels of social, political and economic organization.

Dealing with the many levels of governance

Commons research has often sought the simplicity of community-based systems to develop theory. But in reality, resources tend to be used by competing communities and user-groups, and the scope of inquiry needs to be broadened by dealing with the linkages between communities and other levels of governance. It is difficult to find a resource management system that does not have some cross-level linkages and drivers at different scales, and this is particularly so in an interconnected world. Globalization has a major impact on local-level resource management through such mechanisms as the creation of international markets; for example, sea-urchin roe for the sushi market (Berkes *et al.*, 2006).

Consistent with Cash *et al.* (2006), scale is defined as the spatial, temporal or other dimension used to measure or study a phenomenon, and level as the unit of analysis located at different positions on a scale. Using the terminology of Young (2002), institutional interplay draws attention to the linkages among institutions, both at the same level of social and political organization and across levels. It includes the linkage of institutions horizontally (across geographical space) and vertically (across levels of organization).

This institutional interplay analysis has been used, for example, to examine cross-scale linkages in the management of narwhal in Nunavut (Armitage, 2005). The case is an experimental, community-based management process designed to devolve decision-making to community-level institutions, and to encourage the integration of western science and traditional knowledge. Established in four communities in the Nunavut region in 1998, the process involves vertical linkages from the local level (Hunters and Trappers Organizations), to the regional level (Regional Wildlife Organizations), and the national level (the Department of Fisheries and Oceans Canada) and Nunavut Tunngavik Inc. (a claims implementation organization). Connecting the levels is the main co-management body created under the Nunavut land claims agreement, the Nunavut Wildlife Management Board (Armitage, 2005).

In another example from Canada, the Whitefeather Forest Initiative of Pikangikum First Nation emerged as a community response to the interest on the part of a global forestry enterprise to begin logging in what Pikangikum considers to be their traditional territory. In the 1970s, the community chose to resist such an incursion and

was successful in delaying development for close to 25 years. But when the basis of their local economy, the fur market, crashed in the 1980s, the people of Pikangikum began to develop a new economic strategy based on commercial forestry and tourism. However, since natural resource management decisions in this area are made by the Province of Ontario, developing the new strategy required negotiating with the provincial government. The result of the negotiations was that the province developed a new policy to allow First Nations to lead planning for their traditional territories in partnership with the Ontario Government (Chapeskie *et al.*, 2005; WFMC, 2007). Once they secured access to the necessary natural resources, the First Nation than began negotiations with various partners to access capital, technology, information and markets. Thus, the process in the Whitefeather case includes vertical linkages involving four levels of government (federal, provincial, municipal, and local government of the First Nation), as well corporate partners that are at the local, regional and global levels.

Similar analyses can also be carried out with international cases. The forestry enterprise that was begun by San Juan in Michoacan emerged through an extended period of negotiations with both state and federal governments of Mexico (Orozco Quintero, 2007; Velazquez *et al.*, 2003). The importance of securing formal access to the natural resource for the success of the enterprise is shown by 25 years of experience. However, just as important to the success of San Juan were negotiations with financial markets to secure investment in the enterprise, as well as with other corporate partners who provided access to new markets. The San Juan case also demonstrates how community enterprises can be impacted by changes in international policy. The North American Free Trade Agreement opened up the Mexican market to imports of pre-fabricated housing components. The enterprise in San Juan was forced to compete with pre-fabricated imports from Canada that had lower production costs and economies of scale.

One response of the community was to partner with a non-governmental organization, the Forest Stewardship Council, to obtain certification for their forest management and obtain a price premium for their products in new markets. Communities often begin social enterprises for multiple reasons like securing tenure over what they perceive to be their traditional lands. However, in order to do so they often must interact with other regional, national and global levels of government and corporations.

As can be seen this from these examples in Canada and Mexico, cross-scale governance deals with management at multiple levels. The notion of cross-scale governance can retain the community emphasis and focus on the need to create political space at the community level, for example, through self-governance. The analysis highlights the need to consider linkages with other actors, both horizontal and vertical, that enable community-based management. It also shows the importance of drivers, external factors such as global markets, free trade, and the recognition of indigenous rights.

External drivers

Driver, as defined by the Millennium Ecosystem Assessment, is "any natural or human-induced factor that directly or indirectly causes a change" (MEA, 2003). As seen in the earlier examples, the creation of a global market for sea urchin roe is a powerful

driver for the serial depletion of local sea urchin stocks around the world over a 25-year period (Berkes *et al.*, 2006). Also important as a driver is government policy recognizing indigenous right to land, as seen in the case of Northern Canada (Anderson *et al.*, 2006) and the San Juan, Mexico, in which the securing of rights enabled the building of the forestry enterprise (Velazquez *et al.*, 2003)

Identifying external drivers that impact a community is not easy because of the confounding effects of multiple drivers of social and cultural change, such as "imported" values, the formal education system, TV and mass media, as well as environmental drivers, economic drivers such as market forces, and government policy itself.

We do not often think of government policies as external drivers. But consider, for example, the impacts of centralization in the Canadian North and imported resource management prescriptions. The (inadvertent) creation of dependency in the Canadian North dominated by indigenous peoples has posed enormous challenges. Legislation for self-determination and community-based management, the establishment of resource and environmental co-management mechanisms, and the recognition of traditional knowledge may be prerequisites for the emergence of social enterprises in rural communities given this legacy of dependency (Anderson *et al.*, 2006).

When we talk about natural resource-based community enterprises, supportive government policy is integral for their emergence. The primary issue is for government policy to allocate rights to the resource needed by the enterprise. Construed narrowly, as in the case of the Whitefeather Forest Initiative, this may be in the form of a license to the commercial forest resource or a partnership agreement to manage designated protected areas. In Mexico, San Juan was able to obtain a broader governance right under the provisions of the Mexican constitution which allow a community (*Ejido*) to collectively manage an area of land.

As noted in the MEA there is a relationship between the ability of communities to act and the frameworks within which action can occur, including the development of social enterprises to obtain human well-being from ecological goods and services (Capistrano *et al.*, 2005). External drivers may include environmental change, global markets that create a demand for natural resources found in a specific place and national policies regarding the allocation of natural resources. Rural communities may face the same external drivers, but how a community responds to an external driver is often place-specific. Some communities are pursuing more of an enterprise strategy while others are more concerned with issues of political governance (Anderson *et al.*, 2006; Scott, 2004).

What seems to be consistent is that there is a linkage between a community enterprise and external drivers, and such enterprises have a social mandate broader than profit maximization. As has been shown in the literature, a community enterprise must operate independently of local government and, if it is to survive, to do so profitably (Cornell and Kalt, 1992). However, survival is also dependent upon the ability of the enterprise to meet the social mandate of the rural community to whom it is accountable. External policies that allocate resources to a community-based resource management system is a necessary condition for the emergence of social enterprises that can mediate the need to adapt to external drivers while remaining sensitive to the diverse needs of local people and places.

These considerations imply that communities and community enterprises need to be highly adaptive to deal with change, responding both to changing local needs and expectations, and to a diverse variety of external drivers, including global markets and large-scale environmental change such as climate change. We need to investigate the various ways in which adaptive capacity can be built at the local level to deal with rapid change that characterizes globalization.

Building adaptive capacity to engage the global

Rapid changes that impact rural communities and their economies raise questions about adaptation: is it possible to help build adaptive capacity at the local level to increase resilience in the face of change? The concept of resilience is a promising tool for dealing with change because it provides a way of analyzing the dynamics of how systems persist or transform through change. Resilience is the capacity of a system to tolerate impacts of drivers without irreversible change in its outputs and structure, or to tolerate disturbance without collapsing into a qualitatively different state (Gunderson and Holling, 2002). A resilient system can withstand shocks and rebuild itself. Borrowed from ecology, the concept of resilience can also be applied to social and economic systems. It includes the capacity of humans to anticipate and plan for the future.

The notion of anticipating future change and building adaptive capacity to deal with change is relatively recent. In a document prepared for the Johannesburg Earth Summit, Folke *et al.* (2002) argued that such planning could be done in part through the creation of flexible multi-level governance systems that can learn from experience and generate knowledge to cope with change. As applied to rural economies and social enterprises, building adaptive capacity may mean strengthening local institutions, fostering partnerships, and building cross-scale linkages from the local level to the international.

To expand on the above, according to resilience principles (Gunderson and Holling, 2002; Folke *et al.*, 2002), there are three aspects of building resilience. First, improving the ability to deal with shocks and stresses depends on developing coping and adaptive strategies, retaining "memory" to be able to reorganize after a perturbation, and making use of opportunities created by change processes. Many rural communities are experts in adapting to change, since rural economies often seek diversity in creating livelihoods. This may be seen in the set of Equator Initiative cases (Berkes and Adhikari, 2006). Many kinds of social enterprises provide evidence of adaptive responses being developed by communities (Godoy *et al.*, 2002; Sears *et al.*, 2007).

Second, improving capability for self-organization requires capacity- and institution-building at various levels. It requires healthy community institutions for collective action (Ostrom, 2005). Here, the policy challenge is to strengthen community-based institutions, while at the same time building new institutions at other levels and their cross-scale linkages. In the case of Equator Initiative projects, many of these presumably successful enterprises have not only rich networks of support involving 10-15 partners, but that they also have links across four or five levels of organization. The large numbers of partners correspond to the many kinds of assistance (capital, knowledge, technology, marketing and so on) that community enterprises need to be able to deal with a globalized world (Berkes and Adhikari, 2006).

Other studies around the world are also finding that successful social enterprises need to have networks with multiple partners (Irvine, 2000; Mahanty, 2002).

Third, improving the capacity for learning and adapting requires securing access to resources for community-based management, and creating political space for social enterprises based on them. Secure land tenure for indigenous and other rural communities is a prerequisite to building a local economy. For land-based cultures such as Canadian indigenous people, control over traditional land has social and cultural importance, as well as political and economic. Creating a land base for the economy also provides opportunities for communities to learn from their own successes and failures in managing resources and enterprises.

Diversity in commons institutions (Ostrom, 2005) seems to be related to the diversity in forms or ownership, organization and operation of social enterprises. Rather than following the prescriptions of conventional top-down management, local managers need to be encouraged to generate a diversity of experiments. Nurturing social and institutional memory requires the creation of flexible multi-level governance systems that can learn from experience (adaptive management), and generate knowledge to cope with change by combining different kinds of knowledge (Folke *et al.*, 2002; Sears *et al.*, 2007). By emphasizing uncertainty and constant change, and by looking at change as opportunity, resilience thinking challenges the widely held notions about stability and resistance to change.

In conclusion, community-based focus and social enterprises are perhaps paradoxically, key to the survival of rural economies even in a world in which enterprises are increasingly driven by global forces. Rural communities are vulnerable to pressures and incentives that originate at higher levels of political and economic organization. This vulnerability can be reduced by keeping a community focus, with attention to complex systems phenomena such as scale, self-organization, linkages and drivers. In cross-scale commons management, dealing with the two fundamental problems of commons, exclusion (control of access of potential users) and subtractability (exploitation by each user reducing resource availability for others), also requires an understanding of complex systems.

Much evidence indicates that institutions that are close to the resource, flexible, diverse, and receptive to feedback from the environment, stand a better chance of success than top-down, centralized management systems (Folke *et al.*, 2002). A community-based focus helps build grounded theory and practice, and at the same time helps develop a more sophisticated understanding of how cross-scale linkages and external drivers shape interactions on the rural stage where the local engages the global.

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