# Community resilience, social capital and territorial governance



## Lynda Cheshire*, Javier Esparcia** and Mark Shucksmith***

*University of Queensland, Brisbane (Australia), **University of Valencia (Spain) and ***Newcastle University (United Kingdom)

## Community resilience, social capital and territorial governance

*Abstract:* The community resilience constitutes a conceptual framework for understanding the risks and changes that rural regions face. Nevertheless different paradigms and disciplines have influenced its development in particular directions. Along the way, what was initially formulated in the natural sciences has come to be embraced enthusiastically by the social sciences and harnessed to already contested concepts, such as community and social capital, as a way of explicating what should be resilient, the conditions and resources thought to foster resilience, and the ways in which resilience can be measured. But this has not occurred unproblematically and there are reasons to be cautious about the uncritical application of resilience thinking to social systems and contexts. Further, while the interest of this collection lies in the concept of rural community resilience, it is important to be mindful that there is nothing uniquely rural about the term since it has also been adopted in the urban context, arguably with even more fervour. It is worth asking, then, what, if anything, is distinct about the theory, policy and practice of rural community resilience and in what ways do rural studies scholars make a contribution to resilience debates that go beyond the immediate setting of rural spaces.

*Keywords*: rural areas, processes of change, disruptive events, networks of trust and reciprocity, adaptive strategies.

## Resiliencia comunitaria, capital social y gobernanza territorial

*Resumen:* La resiliencia comunitaria constituye un marco conceptual para entender mejor los riesgos y cambios que han de afrontar las zonas rurales. Sin embargo diferentes paradigmas y disciplinas han influido sobre el desarrollo de este marco conceptual en direcciones igualmente diferentes. Lo que fue planteado inicialmente en las ciencias naturales, posteriormente ha sido acogido con entusiasmo en las ciencias sociales, ligado a conceptos tales como el de comunidad y el de capital social, como una forma de explicar lo que debe ser resiliente, las condiciones y los recursos para fomentar la capacidad de resiliencia, y las formas en las que ésta puede medirse. Sin embargo esto no se ha producido sin problemas, y hay razones para ser cautelosos ante la aplicación indiscriminada o falta de crítica de la resiliencia a los sistemas y procesos sociales. Además, aunque este número especial está dedicado a la resiliencia de las comunidades rurales, hay que tener en cuenta que el término resiliencia no implica nada específicamente rural, como lo pone de relieve el que este ha sido adoptado también en contextos urbanos, posiblemente incluso con más fervor. Por lo tanto cabe preguntarse lo que en su caso es diferente en la teoría, la política y la práctica de la resiliencia de las comunidades rurales, y de qué forma los estudios rurales contribuyen a los debates que sobre la resiliencia van más allá del entorno inmediato de los espacios rurales.

*Palabras clave*: áreas rurales, procesos de cambio, eventos traumáticos, redes de confianza y reciprocidad, estrategias de resiliencia.

Lynda Cheshire. University of Queensland, Brisbane (Australia).

Javier Esparcia. University of Valencia (Spain). Correspondence: javier.esparcia@uv.es.

Mark Shucksmith. Newcastle University (United Kingdom).

## *Introduction*

Defined as the ability of local communities to adapt to, and recover from, disruptive events, community resilience has gained currency in academic and policy parlance in recent years. In the wake of both natural and anthropogenic disasters around the world, there is growing recognition that local resources and relationships are essential for aiding communities in absorbing the impacts of, and coping with, exogenous shocks. Yet community resilience extends beyond issues of disaster management and is recognised as a key ingredient in assisting local places deal with more subtle forms of social disruption. In rural areas, such disruptions may arise from the demise of an industrial base, or the closure of a key employment hub, but they also take the form of protracted decline generated by service closure and depopulation. In determining how and whether local areas cope with such shocks, community resilience places particular emphasis on the collective nature of the response and the ability of local people to draw on communal resources to work together for the common good. Social capital, in the form of generalised networks of trust and reciprocity, is seen as an essential ingredient of community resilience.

In drawing on popular myths about the nature of rural life, community resilience is often viewed as an inherent property of rural places, albeit one that has been undermined by their growing vulnerability in the face of decades of change and restructuring. Yet it is important to move beyond populist ideas about rural community

Lynda Cheshire, Javier Esparcia and Mark Shucksmith

resilience and to engage in critical theoretically – and empirically – informed debates about what constitutes community resilience; what assumptions underpin it; and whether it provides an adequate framework for understanding how rural places might respond to the risks that threaten them. Equally important are questions of governance for achieving community resilience, including the appropriate scale of action; the various roles and responsibilities of state, community and corporate actors –those located within the locality and those that are more exogenous – and the mechanisms in place for achieving coordination of activity. With community resilience still a relatively new concept in rural studies, these questions remain unanswered although our intellectual toolkit is not empty. Indeed, many of the debates revolving around rural community resilience echo those that have long been a preoccupation of rural studies scholars. It is thus importantin the excitement that often surrounds a new concept such as this that the caution and learnings generated through earlier research on related issues, such as rural development,are not forgotten.

This special issue on *Rural community resilience, social capital and territorial governance* brings together several papers thathighlight the utility of community resilience as a conceptual framework for understanding the risks and changes that rural regions face, while also exposing the concept to empirical scrutiny and testing. In this opening paper to the special issue, the guest editors set the groundwork for the articles that follow by charting the lineage and trajectory of community resilience and highlighting the different paradigms and disciplines that have influenced its development in particular directions. Along the way, what was initially formulated in the natural sciences has come to be embraced enthusiastically by the social sciences and harnessed to already contested concepts,such as community and social capital, as a way of explicating what should be resilient, the conditions and resources thought to foster resilience, and the ways in which resilience can be measured. But this has not occurred unproblematically and there are reasons to be cautious about the uncritical application of resilience thinking to social systems and contexts (MacKinnon and Derickson, 2012; Brown, 2014). Further, while the interest of this collection lies in the concept of *rural* community resilience, it is important to be mindful that there is nothing uniquely rural about the term since it has also been adopted in the urban context, arguably with even more fervour. It is worth asking, then, what, if anything, is distinct about the theory, policy and practice of rural community resilience and in what ways do rural studies scholars make a contribution to resilience debates that go beyond the immediate setting of rural spaces. Finally, the last section of this introductory article provides a brief outline of the papers featured in this special issue, highlighting core themes and conclusions that emerge from this collective debate.

# *Defining community resilience*

'Resilience' is clearly in fashion, and across the world in the face of the economic crisis and other global challenges individuals, communities and businesses are exhorted to be resilient. But what does it mean? Like other terms that have come in and out of fashion – such as sustainability and social capital – there is ambiguity, a search for meaning, a power-infused contestation of alternative constructions of the term, and implicitly the exercise of discursive power.Part of this contestability derives from the fact that the term has migrated from the natural and physical sciences to the social sciences, bringing with it a series of assumptions that social systems operate in similar ways to those in the natural or physical world. Martin (2012), Davoudi (2012), Scott (2013) and others have traced this migratory process of the concept, distinguishing between engineering, ecological and evolutionary approaches to conceptualising resilience.

From an *engineering* perspective, Holling (1973, 1996) defined resilience as the ability of a system to return to its preceding equilibrium state after a disturbance, whether a natural disaster, such as a flood or earthquake, or a social upheaval such as war or an economic crisis. The faster the system 'bounces back', the more resilient it is thought to be. The *ecological* concept of resilience differs in a number of respects, most notably in its rejection of the idea that systems can and should return to their pre-crisis state rather than seeking to adapt and evolve in the aftermath of that crisis. In this context, scholars such as Holling (1996) and Martin (2012) conceive of resilience in terms of the magnitude of a shock that a system can withstand before it changes its structure and reconfigures itself onto a new path or configuration. Apart from emphasizing magnitude of the shock as much as speed of recovery, the ecological approach recognises that resilience may mean establishing a new equilibrium or alternative stability domain, rather than necessarily returning to the prior steady state. In this sense, resilient systems are more likely to 'bounce forward' to a 'new normal' rather than to bounce back.

The concept of *evolutionary* resilience, in contrast, takes the position that systems are more likely to be characterised by change, discontinuity and complexity than by stability, such that the notion of equilibrium makes little sense (Berkes and Folke, 1998: 12). Further, as Davoudi (2012) notes, the drivers of change are not only external, but can also be internally produced and involve gradual processes of change rather than sudden and unexpected shocks. Resilience in this sense is not conceived of

Lynda Cheshire, Javier Esparcia and Mark Shucksmith

as a return to normality, but rather as 'the ability of complex socio-ecological systems to change, adapt, and crucially transform in response to stresses and strains' (Davoudi, 2012: 302). Scott (2013) has explored some affinities between the evolutionary approach to resilience and concepts of neo-endogenous (or networked) rural development and adaptive networked governance. These affinities are explored further in later sections.

In the social sciences, the distinction between these approaches is less clear cutand researchers generally converge around two, rather than three, key strands of literature (Berkes and Ross, 2012). The first, which Berkes and Ross identify as still being in its infancy, incorporates elements of an ecological and evolutionary perspective, locating social and cultural systems alongside ecosystems to consider how they evolve and adapt to ongoing changes such as those brought on by resource depletion or climate change. Such work is particularly suited to the study of local ways of life that are inextricably connected with, and reliant upon, natural resources and systems, as exemplified by Berkes and Jolly's work on adaptation to climate change in Canada's western Arctic (2002). Their study exemplifies the utility of adopting an integrated social-ecological system approach for understanding how indigenous communities continuously adapt and evolve in the face of highly variable climatic conditionsand how this, in turn, has enabled them to develop the 'culturally ingrained mechanisms' (p.1) that they need to cope with the increased variability and unpredictability of global climate change.

The second approach to community resilience in the social science adopts a more psycho-social framework to consider how individuals and communities recover from a trauma and sustain well-being in the face of continuing adversity. Such work has been particularly pronounced in the field of disaster studies (see for example, Paton and Johnston, 2001; Norris *et al.*, 2008; Chamlee, Wright and Storr, 2011; Cox and Perry, 2011; van Zandt *et al.*, 2012) where researchers have drawn upon ecological and evolutionary notions of resilience to consider the ways in which local communities can better prepare for disasters and the resources that are required to assist in quickeradjustment tothe post-disaster state and a return to a positive trajectory. As a result, considerable attention has been directed to the factors that promote community resilience, largely with a view to finding ways to enhance them, while seeking to reduce those that are thought to increase vulnerability. For some scholars, such as Paton and Johnston (2001), resilience is primarily a function of communities themselves, such that 'resilient' communities are those which display the requisite set of competencies and capacitiesfor disaster readiness. These competencies include the presence of strong social networks in the form of social capital, local institutions, self-efficacy and sense of

community which imbue community members with a ready-established capacity to share and mobilise resources and to come to one another's aid at times of crisis. Similarly, Norris *et al.* (2008) define resilience as contingent on a set of 'networked resources' or 'adaptive capacities' that can be readily deployed during an emergency. Unlike Paton and Johnston, who focus on factors that are endogenous to the community, however, Norris *et al.* include in their model of community resilience the presence of adequate levels of economic resources, such as financial wealth, adequate housing and economic growth, along with reliable and equitable access to information and communication by way of recognising that there are structural processes at work which lead to the uneven distribution of resilience across different communities.

# Community resilience, social capital and governance

As evidenced above, there has been growing recognition of the utility of the concept of social capital to community resilience theory and practice where it now takes centre stage as one of the key properties of a resilient community (Breton, 2001; Norris *et al.*, 2008; Adger, 2010). Yet, like resilience, social capital has been a fashionable and chaotic concept which has been used so loosely that one writer has asked whether it is now an 'analytical tool or a clingfilm wrap' (Schuller, 1999: 8). The most influential use of the concept of social capitalhas been by Putnam (1993: 167), for whom social capital 'refers to features of social organisation, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions'. From this definition it is fairly obvious how researchers might see trust, norms and networks as resources to facilitate collective action in making a community more resilient to change and crisis. However, in contrast to the more structural understanding of social capital as posited by Bourdieu (1977; 1991) who embeds social capital within a broader analysis of the struggles among individuals for access to other resources (such as education, esteem and financial reward), Putnam and his followers see social capital as an inherent property of a group or community which, if present, works for the common good. Not only is this a normative understanding of social capital – the more we can generate, the better we will be – but it also involves the extension of what was once considered an individual asset to become a feature of communities and even nations (Portes, 1999). Putnam is not alone here. Even Giddens (1998: 110) has referred to social capital in the

context of 'community-focused approaches' to fighting poverty: 'community building emphasises support networks, self-help and the cultivation of social capital as a means to generate economic renewal in low-income neighbourhoods'.

In community resilience research, the tendency to focus on the endogenous features of communities that facilitate resilience (including the presence of networks of trust and reciprocity among members), coupled with awareness that vulnerability, especially to disasters, is spatially contingent, has had a number of consequences for policy and practice. The first, as Coaffee (2013: 246) observes is a 'rescaling' of the politics of community resilience whereby 'resilience is coming home and is nesting in the local area... to create a new, more community-driven, social contract between citizens and the state'. Where earlier attempts to foster resilience previously operated at the level of the nation state and drew on national indicators to measure the resilience of entire economies or countries (Cutter *et al.*, 2008), more recent strategies have focused on local territories, communities or localities as the most appropriate scale for resilience building. While this may seem paradoxical when the sorts of processes and pressures to which modern societies are increasingly vulnerable are global, rather than local, in form, the localisation of preparedness and response policies is justified on the basis that attempts to build resilience will be more sustainable when they are embedded in local everyday activities and structures outside of emergency situations (Coaffee *et al.*, 2008; Bach *et al.*, 2010; Coaffee, 2013).

The second consequence relates to this. Not only are local communities now defined as the appropriate site or scale of resilience building, but they are also posited as the principal actors with whom responsibility for fostering resilience is thought to lie. Just as governance theorists have described the shift from a socialised, welfarist mode of governing to an advanced liberal form of rule in which the activity of governing is devolved to, or at least 'shared with', actors and agencies 'beyond the state', so we have also witnessed rising expectations on individuals and communities to take greater responsibility for their own risk management. The prioritising of local social capital, community capacity and self-efficacy as resources for resilience have facilitated this reconfiguration of risk governance by providing the state with the discursive tools to absolve itself of its responsibilities. This has occurred, first, by the state overlooking the way it has contributed to the structural vulnerability of many communities through its support for the uneven distribution of wealth and power. Second, through attempts to ameliorate the resulting vulnerability of those who are most disadvantaged by celebrating the 'empowerment' of local communities to find their own solutions to the problems they face even while the power to shape agendas remains centralised (MacKinnon and Derickson, 2014; Welsh, 2014). Finally, it also occurs by locating the

source of failure in the inadequacies and pathologies of the communities themselves (Herbert-Cheshire and Higgins, 2004; Cheshire, 2006). If resilience is thought to lie in the adaptive capacities and resources of local communities and their ability to collectively mobilise these resources as needed, then the reverse is surely true and the failure of communities to demonstrate their resilience lies wholly in the absence of social capital, trust and sense of unity. In the context of neoliberalism and fiscal retrenchment, resilience thus runs the risk of being seen as self-help without state support and effectively setting up communities to take 'knock after knock'.

Such moves have led to considerable theoretical and political critique of how the concept of resilience has been applied to places and communities, importing naturalistic concepts and metaphors without attention to social relations and structures. Among those most critical are Mackinnon and Derickson (2012) who express the following concerns. First, the ecological concept of resilience is conservative when applied to social relations. Second, resilience is externally defined by state agencies and expert knowledge. Third, a concern with the resilience of places is misplaced in terms of spatial scale, since the processes which shape resilience operate primarily at the scale of capitalist social relations (Mackinnon and Derickson, 2012: 253).

For these authors, rural, urban and regional resilience must be understood in relation to the tendency to uneven spatial development, disruption and crisis inherent within capitalism and the way in which certain social groups and regions bear the costs of periodic waves of adaptation and restructuring. They propose an alternative concept of resourcefulness 'to animate politics and activism that seek to transform social relations in more progressive, anti-capitalist and socially just ways' (Mackinnon and Derickson, 2012: 255).

## *Community resilience and rural studies*

The issues discussed thus far in this introductory paper apply to community resilience as a concept that has no inherently rural characteristics or qualities. Indeed, there is a large and expanding body of research on urban resilience which views cities, rather than rural areas, as especially vulnerable to the threats of climate change, terrorism, disease pandemics and natural disasters because of their large and dense populations and because they are home to society's core economic, cultural and political

institutions (Coaffee *et al.*, 2008). Nevertheless, rural studies scholars have found considerable utility in the concept of community resilience in their endeavor to understand how rural economies and societies adapt to ongoing change and disruption in the form of increased climate variability, depopulation, service withdrawal and industry closure and/orhow they recover from disasters and crises such as bushfires, floods, droughts and disease. Morrissey *et al.* (2007: 120) go so far as to suggest that dramatic events and extreme weather risks are particularly characteristic of rural areas, such that rural dwellers live with the threat of natural disasters 'on a more or less continuous basis'. While urban scholars and residents may contest this assertion, what *is* apparent is that while the concentration of population, infrastructure and services might render cities more vulnerable to such threats, the very presence of these institutions means that they also have the 'advantages of very substantial disaster mitigation infrastructure... and the services of multiple agencies and professionals at times of need'.Too often, rural areas do not.

A comprehensive overview of the application of community resilience within the field of rural studies has been provided elsewhere by Scott (2013). He identifies two key themes that have become prominent in rural community resilience studies; the first focusses on farming and its role in social-ecological resilience and the second examines various components of community resilience in rural localities, particularly as they experience some form of sudden or protracted shock. As Scott (2013: 602) explains, the application of social-ecological frameworks of resilience are particularly pertinent to rural studies 'given that the agricultural system and ecological system are not just linked, but truly interconnected and co-evolving in terms of producing food while maintaining ecosystem functions and services'. This point is clearly exemplified in the work of Darnhofer (2010), for example, who adopts resiliency as a framework for thinking about the sustainability of farming as a system so that it can respond to change and new opportunities, not only in terms of its on-farm production activities, but also its broader involvement in, and contribution to, off-farm activities that sustain the social fabric of the rural community. Darnhofer herself notes that the concept of the farm as a social-ecological system is a much narrower adoption of the ecological and evolutionary approaches to resilience outlined earlier, which have generally been applied to larger-scale ecosystems (Berkes and Jolly, 2002). Nevertheless, other authors have also found utility in applying social-ecological notions of resiliency to the localised scale of the farm, but also emphasising its connection to the surrounding rural economy and community (see for example Wilson, 2010, and McManus *et al.*, 2012).

Community resilience, social capital and territorial governance

In the second instance, resilience has also been used as a way of understanding the capacity of rural areas to respond to crisis, with particular emphasis on the effects of those crises upon individual and community well-being and on the kinds of resources that either enhance or diminish their capacity to respond, recover and adapt in a sustainable manner. Following broader trends in the application of resilience to the field of disaster studies, a range of studies have examined these issues in the context of disasters and extreme weather events in rural areas such as bushfires, cyclones, floods and disease (see for example Allen, 2006; Morrissey and Reser, 2007; and Griffiths and Evans, this issue). In addition, though, there has also been recognition that the kinds of threats that rural communities often face are not necessarily single, episodic events, but a protracted kind of threat, such as drought and other forms of climate change, depopulation, service withdrawal and general community decline which not only create an uncertain future for rural areas, but undermine their capacity to respond effectively through the erosion of the financial, human, institutional and community resources upon which resilience is said to depend (Stehlik and Chenoweth, 2001; Wells, 2009; Perz *et al.*, 2010). More recently, Skerratt (2013) has taken issue with the preoccupation of scholars to focus on externally induced shocks (protracted though they may be) rather than treating change as a constant in all human systems. Using community land trust boards in Scotland as an example, Skerratt (2013: 36) emphasises the importance of resilience building through proactive human agency that builds the skills and capacity base of rural communities 'in the context of ongoing change rather than in anticipation of singular events'.

The rural dimension of resilience research goes beyond the mere take-up of a concept by researchers working in rural areas, however. Instead, there are two additional, and perhaps more important, ways in which community resilience and rurality come together. The first relates to the contribution that rural studies scholars have made in advancing community resilience debates, largely through critical engagement with prior, but related, concepts of exogenous and endogenous rural development. The classic formulation of rural development until the 1970s was an *exogenous* model, under which rural places were regarded as distant technically, economically and culturally from the main (urban) centres of activity, and perceived as 'backward' and marginal. But by the late 1970s there was growing evidence that this model had not worked (and indeed had been to the detriment of many rural areas). Exogenous development was criticised as dependent, distorted, destructive and dictated (Lowe *et al.*, 1995). Instead an *endogenous* approach to rural development was proposed based on the mobilisation of local resources and assets by those living in the place itself and valorising difference rather than enforcing a universal model. In the context of neoliberalism and discourses

of austerity, however, it became recognised that the endogenous approach exacerbates inequalities both within and between places because the initially uneven playing field disadvantages weaker and poorer places' ability to mobilize resources and form effective external relationships (Arnason *et al.*, 2009). People in rural areas are increasingly exhorted to exhibit community resilience and practice 'self-help', as they are left to go it alone (Cheshire, 2006). The result of this individualisation of risk and of responsibility is recognised in rural studies to be uneven development and a perpetuation of spatial inequality between rural and urban as well as within the rural itself.

This, in turn, elicited a revision of the concept of endogenous developmentby researchers at Newcastle University in the UK who instead proposed the notion of *neo-endogenous* development (Lowe *et al.*, 1995; Ray, 2006), or what we might call *networked development* (Shucksmith, 2012). They argued that social and economic development processes in any locality inevitably include a mix of endogenous (bottom-up) and exogenous (top-down) forces. The local level necessarily interacts with the extra-local. The critical issue is the balance of internal and external control of development processes and how to enhance the capacity of local actors to steer these larger processes to their benefit. Critical to the socio-economic development process are those institutions, actors and networks that have the capacity to link businesses, communities and institutions involved in governance at a variety of scales. Networked (i.e. neo-endogenous) development thus advocates an emphasis on local capacity-building, but recognises in addition the essential role of the state and other external actors. Networked development therefore involves not only deliberative governance and territorial place shaping, but also institutional capacity building and sharing of other responsibilities with an enabling state (Shucksmith, 2012). The implications of these insights for community resilience theory and practice is evident and remind us that the resources for resilience cannot be expected to reside exclusively within the local area, and that local areas need to be integrated within wider networks and structures so that external resources can be readily deployed when they are absent or damaged in the local setting.

The second connection between rurality and resilience to the policy domain of rural community resilience and the question of how, and in what ways, resilience policy is conceived and enacted differently in rural areas than in urban. Since there is not the scope here to undertake a detailed comparison of rural and urban resilience policy – notwithstanding the challenge of ever completing such a task given the diversity of national policies relating to rural and urban issues across different countries and jurisdictions – this question can only elicit a very brief and partial answer at best, using Australia as an example. For almost two decades now, rural studies scholars have observed how governmental strategies to address rural

vulnerability have drawn heavily on narrative of endogenous community self-help to devolve responsibility for the management of local risks and challenges onto rural people themselves. As Cheshire (2006; see also Herbert-Cheshire, 2000; and Herbert-Cheshire and Higgins, 2004) and others (Higgins and Lockie, 2002) have extensively documented in Australia, such practices began to dominate rural policy in the 1980s when the so-called rural crisis began, largely as part of a neoliberal turn in rural policy that induced governments to withdraw services from rural areas while promoting local forms of community self-help as a potential solution. Alongside proclamations that rural people should become more self-reliant and less dependent upon government, a new community-based agenda emerged that located the resources for development within the existence of a strong and cohesive local 'community' which exhibited a collective 'can-do' attitude.

Beyond this, however, self-help had long been viewed as an effective strategy for supporting the poor and the deprived on the argument that only by learning to help themselves would they find a way out of their deleterious situation. The only difference in its application to rural areas was the justification that self-help was a natural state for rural communities because of the culture of strong and cohesive communities and self-sufficiency already thought to exist there (Woods, 2007; Cheshire, 2006; Shucksmith and Talbot, 2015). As Murdoch (1997: 114) put it, not only should rural people be disposed towards helping themselves but they expect this: 'they know almost instinctively that they are best placed to solve their own problems'.

In recent years, a spate of major disasters in urban areas has prompted an extension of such discourses into the nation's capital cities amid concerns that earlier forms of governmental intervention into disaster preparedness and mitigation has created unrealistic expectations and unsustainable dependencies. Drawing on the now familiar language of self-reliance and local community action, for example, the Council of Australian Governments' *National Strategy for Disaster Resilience* (2011) posited that:

> Fundamental to the concept of disaster resilience is that individuals and communities should be more self-reliant and prepared to take responsibility for the risks they live with ... a resilient community will understand and have the ability to use local networks and resources to support actions required during an emergency and to support recovery efforts (COAG, 2011: 10).

In contrast to earlier rural policies, contemporary understandings of resilience in Australia appear to have moved away from a focus on the kinds of community resources

and attitudes that foster resilience towards greater recognition of the need for a more networked approach based on shared responsibilities, and greater coordination, between the government, business and community sectors. In a language that reflects neo-endogenous conceptions of resilience, this is based on recognition that it is unrealistic to expect a community to respond effectively to large-scale disasters since effective disaster management requires a collaborative approach with clarity of roles across all levels of government:

> There is a need for a new focus on shared responsibility; one where political leaders, governments, business and community leaders, and the not-for-profit sector all adopt increased or improved emergency management and advisory roles, and contribute to achieving integrated and coordinated disaster resilience. In turn, communities, individuals and households need to take greater responsibility for their own safety and act on information, advice and other cues provided before, during and after a disaster (COAG National Strategy for Disaster Resilience, 2011).

In the above policy statement, there is a much clearer articulation of the role of the state and fairly limited expectations of what urban residents should do – in this case 'take greater responsibility for their own safety and act on information, advice and other cues'. Gone are the aspirations to foster a stronger community spirit or a healthy community attitude that were so prevalent among earlier self-help discourses in rural policy. Yet when applied to rural areas, these contemporary disaster resilience discourses begin to lose their *neo*-endogenous appearance, not only by exhorting back to traditional mythologies of rural people as naturally resilient, self-reliant and interdependent, but by reducing community resilience once more to a set of community attitudes and dispositions. Take, for example, the Australian Bureau of Rural Sciences' view of the determining factors of rural community resilience:

> A community's vulnerability, resilience and adaptive capacity will be determined in part by residents' attitudes towards the process of change (Australian Bureau of Rural Sciences, 2008).

This return to endogenous processes is illustrated more extensively in a report by the Queensland Reconstruction Authoritywhich highlights some of the disaster resilience strategies enacted in Queensland as a result of the severe and widespread flooding the state experienced in 2011. Among the case studies featured in the report is an account of the small town of Theodore in Central Queensland, which experienced severe flooding on several occasions in 2010-2011 to the point where the entire town

was evacuated. In the opinion of the Chair of the Reconstruction Authority, 'Self-starting Theodore' is a classic case of a town kick-starting its own recovery rather than waiting to be shown:

> Theodore is a community that won't stay down for long. The trick in the face of varying obstacles over the years has been to keep the response local... "We like to fix things ourselves and not wait for the government to come in and save us. We don't let anything stand in the way of our community's progress" said [one resident] ... This is testament to Theodore's resilience (Queensland Reconstruction Authority, undated, p.7).

Similarly Table 1 identifies 23 characteristics of a resilient community as formulated by the Centre for Community Enterprise in Canada. Again, what is most evident in this list is that community resilience becomes reduced to a particular (rural) mindset or attitudinal state as opposed to a complex set of networked resources that are often structurally and differentially distributed. What this suggests is that in Australia, at least, *rural* resilience policy and practice has failed to keep up with theoretical and conceptual advancements in resilience thinking even while broader national disaster policy has advanced. The effect is a bifurcated set of policies that places a much weightier set of expectations upon rural areas than upon urban despite the unequal distribution of resources required for community resilience that leave rural areas disadvantaged from the start.

*Table 1.*
*Characteristics of a resilient community*
*(according to the Centre for Community Enterprise in Canada)*

| | |
|---|---|
| Characteristic 1: | Leadership is diversified and representative |
| Characteristic 2: | Community leadership is visionary |
| Characteristic 3: | Community members are involved |
| Characteristic 4: | Community feels a sense of pride |
| Characteristic 5: | People feel optimistic about the future |
| Characteristic 6: | Spirit of mutual assistance and cooperation |
| Characteristic 7: | People feel a sense of attachment |
| Characteristic 8: | Community is self-reliant |
| Characteristic 9: | Belief in and support for education |
| Characteristic 10: | Key community economic development functions are served |
| Characteristic 11: | Organizations have developed partnerships |
| Characteristic 12: | Employment is diversified |
| Characteristic 13: | Major employers are locally owned |
| Characteristic 14: | A strategy for increasing local ownership |
| Characteristic 15: | Openness to alternative economic activity |
| Characteristic 16: | Community looks outside itself for resources |
| Characteristic 17: | Community is aware of its competitive position |
| Characteristic 18: | Community has a community economic development plan |
| Characteristic 19: | Citizens are involved in community vision and goals |
| Characteristic 20: | On-going action towards community economic development goals |
| Characteristic 21: | Regular evaluation of progress |
| Characteristic 22: | Organisations use the community economic development plan to guide their actions |
| Characteristic 23: | A development approach encompasses all population segments |

Source: Kenyon (undated).

# Outline of papers

A set of six papers are included in this special issue, covering case studies in Spain, United Kingdom, Mexico and Brazil and including analysis of resilience strategies

focused in different actors, such as LEADER local action groups, farmers, women, entrepreneurs and institutional actors.

The paper by F. Martínez, H. Sacristán and J.L. Yagüe ("Are local action groups, under LEADER approach, a good way to support resilience in rural areas?") is related to an already traditional theme in studies on rural development in the European Union, the LEADER approach. The taken approach is especially relevant given the economic crisis facing the country, and the negative effects this has especially in rural areas, with economic structures often weaker and civil societies in need of better articulation. The work is based on a survey of a sample of 25% of LAGs in Spain during the period 2007-2013. Respondents associate the crisis with two major types of factors, those of economic nature (rising of unemployment, lack of competitiveness, funding difficulties, business closures, etc.) and those of social nature (as the lack or reduction of basic education and health services, migration, aging and population losses).

When assessing whether the LAGs have improved resilience of rural communities and, where appropriate, how they are coping with, the results point to a clear positive and active attitude of most of the LAGs. These tend to focus their responses especially highlighting the importance of training for both employment (addressed to unemployed) as entrepreneurship (addressed to potential or already entrepreneurs), with focus on both technical innovations and processes (for example through business incubators). To a certain distance they have also developed consulting work for potential entrepreneurs, traditional functions which had been partially neglected as a result of the high bureaucracy in the years before the crisis. A final result which is worth noting is the perception from more than half of the LAGs to have contributed positively to a change in mentality among the rural population, being this type of changes a crucial base for any adaptive strategy. As a consequence rural areas would be, according to the authors, in a better position to face and overcome the consequences of the economic crisis. However, more than half of respondents are not too optimistic since they think that these areas will have very serious difficulties recovering from pre-crisis situation. This would be an implicit recognition of the failure of both the local society as the LAGs themselves to maintain sufficient levels of resilience to adequately overcome the economic crisis, namely of the failure of these territories facing the rural crisis.

The paper opens a door to further studies to deepen analyse both the crisis and the response of rural communities, completing the information gathered from the survey with a qualitative case study approach which may include in-depth interviews with key actors in different rural areas. Thus we may contrast if the perceptions and actions taken by LAGs correspond to those perceived and implemented by different groups of local stakeholders in the same rural areas.

The paper by M. Pallarés ("Women's eco-entrepreneurship: a possible pathway in social resilience?") also takes the economic crisis as a starting point. From the case study of High Catalan Pyrenees counties (Spain), she highlights how women are an element of social resilience in rural areas. Three analytical and conceptual frameworks are combined in the paper, social resilience, local development in rural areas and geography and gender studies. Based on a set of in-depth interviews (self-employees, recent and senior entrepreneurs, and elected representatives involved in environmental and heritage management), the role of social resilience in local rural development is analysed through its three main components (institutional memory, innovative learning and social networks).

Findings show that a bit more than one third of new initiatives are promoted by women, usually micro-sized enterprises mostly related with local food and natural resources, which differs of the women initiatives during the 90s which were widely related to tourism sector. Nevertheless in traditional sectors (i.e. local products) it has been detected a frequent reduced visibility of women since they are working and even managing enterprises but are their male partners who held public and formal representation. In contrast, initiatives in nature-base sector tend to be held since the first stages by women. Three other characteristics are important: first, most of the new entrepreneurs (in which the presence of women tends to be higher) are newcomers or returnees; second, they keep tight links with urban networks, and finally women have crucial role in those most innovative entrepreneurship initiatives. Related to institutional environment, adaptive learning and connectedness for social resilience, two are the main results. First one is that in front of the predominance of top-down decision making style bot at intra-institutional and intergovernmental level, plural procedures arise when women occupy senior positions (i.e. mayor and deputy mayor chairs). Nevertheless, despite contribute to strengthening –bonding - social capital, the presence of women has not been sufficient to significantly influence the generation of new projects. The second finding is related to leadership. While newcomers have a critical view since they found a lack of inclusive leadership (being for them a central problem as it could have negative implications), local population easily identifies some leaders, being in most cases part of their own social networks. The question which arises is if we are also in front of a lack of integration of newcomers in the local social networks.

As a conclusion, women are gaining significant resilience in recent years in the traditional men-dominated field of entrepreneurship, undertaking new innovative initiatives especially in sectors such as arts and crafts, local food and environment. In addition to that, they are increasingly participating and/or leading empowerment processes at community level (in spite of their comparatively low representation in local

politics in relation to the rest of the region and the country). The sustainability of this local development model increasingly should depend on gender equality policies and a more efficient facilitation and promotion of women entrepreneurship initiatives, being also crucial to keep the tendency to expanding participation and leading capacity to other sectors and beyond county boundaries. Furthermore, it will be also necessary that public decision-makers better integrate in local development models and policies the demonstrated community resilience leaded by women as well as their high potential promoting economic initiatives at local scale.

The Santiago Comaltepec community in Mexico, analysed by M.D. Delgado, R. Escalante and S. Basurto ("Is the Community-Based Management of Natural Resources (CBNRM) inherently linked to Resilience?"), for centuries practiced an environmental sustainable community-based management of their forests. Through a set of participatory workshops and in-depth interviews authors conduct a comprehensive analysis of, first, sustainability of socio-ecological system of the case study, which is divided in different subsystems such as social, economic and political settings, resource system, governance system (traditional rules and regulations), users, interactions and outcomes, among others. And second, they analyse the adaptive strategies used by the community, classified in categories as mobility, forecasting, storage, rationing, selection, communal pooling, market exchanges and diversification.

Results show three main disturbances and drivers of change affecting the community, migration of younger and better qualified, new models of consumption and incomes derived from globalization, and climate variability and its effects in the also ecologically diverse community. To cope with them the community is adopting a set of strategies and adaptive practices, as for example the development of physical infrastructures for wood storage (storage strategy), limitation of wood cutting to allow forest regeneration (rationing strategy), to buy some wood to surrounding communities to increase their marketed volume (market exchanges' strategy), diversification of income sources and skills to spread disturbance-related risks, at least at household level, in addition to payments for ecosystem services, ecotourism and diversification of cultivated and harvested products (diversification strategy). These resilient strategies may also have negative effects, such as disagreements and/or potential conflicts between members within the community (for example young vs elderly people deciding on a more or less exploitation of natural resources, having the elderly higher risk aversion), loss of social capital since most of the migrants are young and member of high potential, or an increase of family and community dependence on global (external) economy, which may imply higher social vulnerability in the medium term. Thus, using the words of Delgado *et al.*, "while ... rationing of forest resources might be good for

ecological resilience, social resilience is being affected". And certainly one of the most interesting adaptive strategies, common pooling, is being increasingly questioned since benefits did not sufficiently reach the whole community. Thereby a better use of communal resources and an acceptable balance between communal and individual/familiar benefits are necessary, avoiding potential –generational, but not only- conflicts within the community.

The papers conclude that certainly the forest and land in the Santiago Comaltepec community are now sustainably managed, contributing through different adaptive strategies to environmental-ecological resilience. However, this management provides limited development for the community, arising some strategies to cope with that, in some cases, may provoke negative effects such as a loss of social capital through migration or conflicts between generations. This interesting case study shows the complexity inherent to the needed balance between the different components of the sustainability within the communities, and the important difficulties that they have in their adaptive strategies to cope with the internal and mainly external challenges and threats that local communities should face in the current times.

How communities react and restructure themselves when facing vulnerability due to social and/or economic crisis is also de starting point for R. Exterckoter, C.A. da Silva and A.F. Tulla ("Family farmers as agents of resilience in the Western region of Santa Catarina, Brazil"). The study area became during the 80s in an important centre of agro-industries focused on a high tech industrialization of pigs and poultry, enabling the region to become the largest meat complex in Brazil. The region diversified their production during the 90s and in parallel there has been an increasing process of integration between farmers with the agro-industries. The high control of agro-industries over the production system, apart from some initial benefits, resulted in the exclusion of many of the integrated farmers, who were subsequently pushed into crisis. Following a methodology based on the analysis of secondary data and studies on the area, authors analyse in detail four main resilience factors, production for own consumption, pluriactivity, productive diversification and transforming agricultural products through processing food using traditional methods in their own properties.

Production for own consumption traditionally was the strategy for poor families (since they were outside the main agricultural supply chains in the region) to minimize negative impacts. Recent studies highlight it is an increasing phenomenon and that it has "contributed to the resilience, minimizing exposure and vulnerability of families in periods of lower prices paid by the agro-industries. It also represents their social capital, knowhow, and the use of specific land resources, contributing to farmers' adaptation in crisis". Pluriactivity is another adaptive strategy by family farming, affecting to almost

one fifth of family farmers, which has contributed to the increase of incomes and subsequently to the permanence of family farmers in their communities. Combined or not with pluriactivity family farmers also implement productive diversification, mainly focused on milk production (this strategy comes from the 80s, being in the recent years milk producers about two thirds of the family farmers, who produce nearly 90 % of the milk in the region) and recently, but with still not significant figures, agro-ecological and organic production is increasing as part of that diversification adaptive strategy. A final adaptive strategy is related to traditional processing methods, originally based on traditional production for household consumption but which later on derived on informal exchanges and networks of artisan processing units. This production is being increasingly converted into transforming cottage industries being the base of small rural business in the region.

Authors highlight through the paper the adaptive capacity and strategies of family farming to cope with crisis and difficulties, such as those derived from integration with agro-industry. This pattern coincide with many other experiences which show the high capacity of family farming to adapt to the changes, frequently higher than specialized business being part of a very integrated agro-industrial system. The stock of social capital partly explains this capacity and strategies of family farming, but it would be very useful in future research to also deal with the links between both aspects, social capital and resilience, using primary sources, for more complete approach to this interesting topic.

A Pedreño, C. de Castro, E. Gadea and N. Moraes ("Sustainability, resilience and agency in intensive agricultural enclaves") analyse the case study of the enclave of Murcia (Spain), a territory subject to an intensive farming dynamic, with a high concentration of classical elements of production (land, work and capital). As a result this agricultural activity is highly integrated in industrialized large-scale supply chains. Authors conduct a detailed and consistent analysis on sustainability and resilience in its application to the processes of restructuring from the social and territorial logic. Local dynamics, with different local actors developing their own strategies from their own power positions, are fundamental for the configuration of each enclave and its integration or articulation in the global commodity chains. These individual (actors) and collective strategies (groups of actors and enclave) could be seen as embedded into dynamic processes of constant re-positioning which allow them not just resist to the changes (persistent resilience) but also adaptive and transforming resilience strategies. Three main types of actors are analysed, companies, households and workers, and institutions, having each of them different adaptive capacity.

The companies develop their resilience through four main strategies, internationalisation, concentration of production (achieving economies of scale), constant technological innovations (applied mainly to the management of resources and production processes), and the use of workforce.

Households and workers develop –survival- adaptive strategies mainly through a flexible labor market, which means temporality and job insecurity, formal and/or informal employment, sectorial and territorial mobility, incomes partly undeclared, ethnic and gender segmentation, etc. All these strategies, although could be understood as efficient in economic terms for the system performing, also implies social inequalities and conflicts. In relation to the institutional environment, of special importance are a set of regional-local institutions which through different strategies and actions are constantly looking for a greater economic performance and efficiency and the improvement of global resilience of the system (enclave). Regional government is one of these key actors, dealing with legislative reforms, programmes to support economic activity, demands and management of water transfers from other areas, adaptation of State Land Act of 1998 (which although intended to favour land development for residential purposes, also promoted the expansion of arable land). Municipalities closely support these strategies bringing new land for agricultural development (through rezoning of land). The increase of land consumption in the region could be described as voracity with almost no limits, since for example some environmentally protected areas have been also converted for agricultural (and residential) purposes. It is a model based on the overexploitation of natural resources, highly supported by most of the actors within the system, including other actors such as research and technological centres (helping to the restructuration towards more competitive varieties for example of grapes and peaches), associations of exporting producers', associations of large and small business, cooperatives and trade unions.

Therefore, the enclave of intensive agriculture seems like a very complex machine with many different and "perfectly" geared pieces, which has an output, the economic performance of the system, through constant adaptations in order to keep its competitiveness. But this system has important costs, its decreasing environmental and social sustainability. Thus, this is a clear demonstration of what authors said that this type of enclaves could be highly resilient (in terms of its competitiveness and economic performance) but not –social and environmentally- sustainable.

As we have seen in most of previous papers farmers are in the centre of resilience strategies. R. Griffiths and N. Evans ("The Welsh Marches: resilient farmers? Exploring farmers' resilience to extreme weather events in the recent past") complement these perspectives addressing another interesting topic. The analysis focus on those extreme

events of the last decade (heatwaves, flash floods, extended periods of rainfall, heavy spring snowfall and prolonged flooding) using three main sources of information, newspapers, meteorological records and semi-structured interviews. Authors conceptualise resilience as a product of the combination of four key elements, vulnerability, social capital, and coping and adaptive capacities (depending both of them on the demographic, social and economic characteristics of the community, location, etc.).

Results are comprehensively organised following these four key elements. In respect to the vulnerability, there are many the evidences related to those events. Isolation and remoteness are the factors most frequently reported (and as a consequence ability of emergency services to provide the needed assistance was limited during and right after this events). Farmers are exposed and respond to the vulnerability derived from known hazards, but unknown or hidden hazards are also present, increasing farmers' exposition. Nevertheless, response also depends on the perception of the potential benefit, which sometimes could be lower than the feeling of risk. In these –frequent- situations farmers do little to improve their response capacity. Another key element is related with ties and sense of belonging, which farmers' communities show to have developed. This social capital (with differences in stock, type and characteristics) seems to be critical at the time to farmers be confident that they are not alone facing shocks. Social capital, social networks and shared local knowledge have been found and are perceived by farmers as instruments to build and conduct their collective responses to extreme events.

Farmers in the study area seem to have a high coping capacity, namely, short-term and even emergency responses, built on their shared knowledge, their social networks and the social capital within the community. Authors report many examples showing that these farmers tend to be highly self-sufficient, coping successfully with many shocks and mitigating their negative first effects. Furthermore, this is a cumulative learning process along time which allows farmers' community to build their own adaptive capacity. Unlike coping capacity the adaptive one – responses and adaptation in the medium-long term – is more complex and difficult to identify since implies not only technological innovations but social and cultural capital (which in turn depends on physical, natural and economic conditions). Nevertheless evidences show that it is present and mostly based on that shared knowledge from past experiences (namely, on previous coping capacity). From this learning process, each farmer community builds their own culture of resilience, which involves some direct strategies and adjustments (ie. alternative sources of income, as we may seem in others case study in this special issue). Sometimes adaptations do not respond to a shock or crisis but take advantages of changes in markets or introduce improvements that have proved to be successful in

other areas. Certainly it seems that a comprehensive understanding of adaptive capacity would benefit from deep and long research at community level, attending to the wide set of factors involved influencing it and the wide set of responses and strategies, direct and indirect, that the community may be implementing both in relation to extreme evens as other possible situations.

## Conclusion: contributions of the special issue in light of the theory

Of the three major conceptual approaches to resilience presented in previous sections, engineering, ecological and evolutionary, only one of the papers makes a reference –and very partial- to a combination of engineering and ecological approaches. This is the case of the analysis focused on Local Action Groups in Spain, part of whose managers arises that rural areas may not recover and return to the situation prior to the financial crisis that began in 2008 in the country (while others managers focus that rural areas should go ahead adapting to new circumstances). But apart from this, the papers present case studies mainly as socio-ecological systems with strong social and cultural components, which partly explain aspects such as the embeddedness in the local community, or the degree of strength of social capital. The presence of this embeddedness explains that some strategies are pure survival, accepting farmers and rural workers a worsening of their living conditions. Sometimes to be rooted at the community does not compensate the worsening living conditions and the farmer or other members of her family may choose other strategies, such as temporary or permanente migration.

Case studies are linked with the evolutionary ecological approach, in the sense that the authors focus on the processes of change in the different systems. One of the case study faithfully reflects this view: "These individual (actors) and collective strategies (groups of actors and enclave) could be seen as embedded into dynamic processes of constant re-positioning which not just resist to the changes (persistent resilience) but also adaptive and transforming resilience strategies". This could be the most dynamic system among those analysed in this special issue, with the exception to the farmers in Welsh Marches (UK) who, in the field of coping strategies, should respond very quickly to the extreme unforeseen events. The remainder cases perform changes in the

aforementioned direction, but they are a bit more enlarged over time. This is because the enclave in Murcia (Spain) is a system subjected to intense market forces and high competition from other producers both internal and external.

The case study about resilient farmers in Welsh Marches has some connections with the psycho-social framework, complementary to the ecological evolutionary. It is interesting how through different events and sources of information specific factors aimed to the reduction of vulnerability are detected, and in parallel those enhancing factors of resilience (development of adaptive capacities), such as strong social networks, local institutions, sense of community. At different level some of these factors are present among women in High Catalan Pyrenees counties (Spain) and the inhabitants (or some groups, such as elderly) of local community of Santiago Comaltepec (Mexico).

In regard to the drivers of change, from case studies trends already reported in the literature in recent years are confirmed. So it can be differentiated two major drivers of change. The external drivers of change are related to the integration into the international economic system (intensive agriculture enclaves in Murcia, Spain), national (family farmers in Santa Catarina, Brazil) or regional (women entrepreneurs in High Catalan Pyrenees in Spain). All these systems can be roughly determined by the processes of worldwide globalization. In addition such integration may stimulate internal processes of change and adaptation. Often this processes lead to major crisis. Thus, the inclusion of farmers of Santa Catarina in the regional agroindustry system pushed many of them into a deep crisis, to which they had to gradually cope through different adaptive strategies (self-consumption, diversification, etc.). This type of adaptation reminds incrementalist mechanisms in planning, which consists in small but continuous changes thus avoiding deep and dramatic changes in the system. Women entrepreneurs in the Catalan Pyrenees (Spain) are equally suited under these guidelines, pressed externally by the economic crises affecting deeply to rural areas (being women a particularly vulnerable group). They are internally stimulated by some factors (social networks, empowerment, leadership, sense of belonging), introducing adaptive strategies which push them to be more competitive taking advantage of external changes, such as increasingly demand for quality local products of leisure models based on use and enjoyment of natural resources such as landscape, etc.).

From the presented papers there is not a fixed pattern regarding governance structures necessary to achieve community resilience. Nevertheless it seems clear a direct and positive association between the presence of developed local governance structures and greater community adaptive strategies. A significant example comes from the indigenous community of Santiago Comaltepec (Mexico), but other examples

show that the bottom-up processes seem appropriate to promote a sense of belonging, social capital and strengthening social networks (Martínez *et al.*, this issue; Esparcia *et al.*, 2015), and that this social capital can contribute to better coping responses (eg against the extreme weather events) as well as adaptive responses (e.g. facing negative consequences of vertical integration of farmers with agroindustry sector in Santa Catarina in Brazil). Sometimes bottom-up processes also contribute to adaptive strategies dealing with economic sustainability (networks of farmers transforming their agricultural products in Santa Catarina), but it also seems clear that not always it results in the implementation of such strategies, or that its influence may be slower (e.g. women entrepreneurs in High Catalan Pyrenees counties, in Spain). In general rural areas with governance structures somewhat firmly (e.g. Local Action Groups or equivalent, i.e. public-private cooperation structures at local level) seems drawn that these can contribute significantly to the development of community resilience. However, large differences may arise depending on local factors such as the sense of belonging or the presence of well-established local leadership.

Different papers shown that the availability of a large stock of social capital not determines the existence of adaptive strategies; nevertheless it seems to be a factor closely associated with the most successful strategies. This applies, for example, to the indigenous community of Santiago Comaltepec (Mexico), which due to the survival of a customary common pooling system, they have been able to maintain the sustainable management of forests (not without difficulties). Sharing knowledge by farmers in the Welsh Marches (UK) about past experiences facing extreme events, and being associated with the feeling of belonging to the community, shows this important stock of social capital underpinning their adaptive responses.

On the opposite side, these adaptive strategies can be slowed or be ineffective when social networks are weak and the stock of capital is reduced in the whole system, and it is relegated to certain sectors or individuals. Thus for example the case study of the enclave of intensive agriculture in Murcia (Spain) highlights the objectives of increasing economic efficiency to remain competitive, resulting in the marginalization and impoverishment of part of agricultural workers, who are forced to increasingly accept precarious conditions. Unions cannot stop this process of deterioration being the final result the reduction of the overall stock of social capital and the weakening of social networks among different groups (although in parallel its reinforcement could occurs within each group, as a strategy for group survival).

Each group of actors plays different roles with regard to community resilience, and they can vary depending on the nature or type of strategies (for example those of a predominant economic, social or environmental nature). The immediate and short

term responses may be important in highly vulnerable systems to unforeseen shocks. But such responses are difficult to articulate and perhaps not achieving a very high efficiency. If they are mainly economic based responses the state seems to be who may provide a more adequate response, while the local community tends to be somewhat slower because the shortage of economic resources, which may go beyond the immediate availability by the population. However, if the answers are mainly socially based, is the local community which comes up as the actor with more capacity to respond and which may give the more effective responses.

The situation changes with the adaptive strategies, dealing mainly with non-short term processes. As community resilience is a cumulative process of learning over time, it can results in the creation of a culture of resilience in the local community. Similarly, the remainder actors are more responsive, though their interests may diverge, responding very differently depending on whether it predominate economic, social or environmental issues. For example the corporate actors have a very high response capacity from the economic point of view, as showed by most of the papers. Their survival is largely determined by its ability to continuously adapt, and hence, from the point of view of adaptive strategies corporate actors may have higher capacity than the state. However, if adaptive strategies are predominantly social or environmental, their role may be much less significant and, indeed, may be characterized by the lack of response and even by negative responses (for example worsening working conditions, as in the enclave of intensive agriculture in Murcia, Spain).

It would be simplistic to say that because of the context of neoliberalism the state is in a process of withdrawal. Certainly from some of the papers State is increasingly less present in the social aspects of development, and hence several authors coincide in highlighting the serious impact that economic efficiency (which is kept only inthe short andmedium term) has on the social sustainability (which is present and it is critical at any time). Deregulation of labor markets and the elimination or limitation of welfare systems (drastically reducing or even eliminating unemployment benefits, health assistance and contribution to pension system) come into this direction. In this sense the neoliberalism state is contributing in the first instance to the dismantling of mechanisms of social sustainability, and therefore not contributing to building or strengthening the social adaptive capacities but its weakness.

With regard to environmental sustainability, states have developed a very powerful rhetoric, accompanied with measures at national level. However, in local scale actions often do not match that rhetoric. For example, the state enables increased logging in Mexico, if that local community gets more incomes and as a consequence there are less conflicts within the communities and for the outside (less claims to the

state). In this case, the local community is who impede, through their customary management mechanisms, this process enabled by the state and fostered by the national and international markets (and globalisation). In other cases (farmers in Santa Catarina, Brazil), last decades the state has allowed and encouraged specialization although this has involved a significant increase in pollution of soils. In other cases (Murcia, Spain) the state has promoted, in close alliance with the economic powers, overexploitation of water and soil resources. They are therefore some examples in this special issue showing that the neoliberal rhetoric about the environment could has little to do with the real measures on the local level.

By contrast, the state highly supports the economic sustainability of national systems, although not always it reaches the local economic systems and local communities. In the following papers there are several cases where such support to local economic systems is very small or indirect, and helping to accelerate the integration of these local systems in national and international systems. Measures such as the deregulation of the labor market, support and stimulus of vertical integration of farmers with agribusiness, land conversion (including protected areas) into arable land, the timid protection of local products and promotion of organic production, among other measures, contribute to the efficiency of local economic systems. It should be noted that the state does not take these decisions independently, but, as for example in the case of the enclave of intensive agriculture in Murcia (Spain), in close connection with the most powerful economic actors such as large companies and associations of exporting producers'. Obviously the social costs can be very high, but this is an area in which the state's rhetoric self-justifies his "withdrawal". In this neoliberal rhetoric, his task is to promote conditions that facilitate economic growth and to remove obstacles that may hinder it.

Local communities are complex systems. As such it is possible to find capacity building processes of community resilience in many different environments and of different types, and frequently communities are highly isolated doing it. These processes from the local level are varied, of social nature (as the strengthening of social networks among farmers, or sharing knowledge about past experiences to better respond to the risks of extreme events); related to environmental issues (such as customary and sustainable management of timber harvesting); and economic, compatible and even integrated with the social and environmental issues (farmer associations to improve the added value of transforming local productions or associations of women entrepreneurs). Thereby neoliberal model leaves almost abandoned local communities in its embedding processes in the global system. Nevertheless through a set of case studies included in this special issue it comes up that local communities in rural areas can develop and

strengthen skills through different routes and using their stocks of social capital, implement and maintain a variety of adaptive strategies, namely building community resilience.

# Acknowledgments

# References

Adger, N. (2010): "Social capital, collective action, and adaptation to climate change", *Der klimawandel. VS Verlagfür Sozialwissenschaften*, pp. 327-345.

Allen, K.M. (2006): "Community-based disaster preparedness and climate adaptation: local capacity building in the Philippines", *Disasters*, 30(1), pp. 81-101.

Arnason, A., Shucksmith, M., and Vergunst, J. (2009): *Comparing rural development: continuity and change in the countryside of Western Europe*. Aldershot, Ashgate.

Bach, R., Doran, R., Gibb, L., Kaufman, D. and Settle, K. (2010): "Policy challenges in supporting community resilience", presented at the London Workshop of the Multinational Community Resilience Policy Group.

Berkes, F. and Folke, C. (1998): "Linking social and ecological systems for resilience and sustainability", in F. Berkes and C. Folke (eds.), *Linking social and ecological systems: management practices and social mechanisms for building resilience*, Cambridge, Cambridge University Press, pp. 13-20.

— and Jolly, D. (2002): "Adapting to climate change: social-ecological resilience in a Canadian western Arctic community", *Conservation Ecology*, 5(2), 18.

— and Ross, H.(2013): "Community resilience: towards an integrated approach", *Society and Natural Resources*, 26(1), pp. 5-20.

Bourdieu, P. (1977): *Outline of a theory of practice*. Cambridge, Cambridge University Press.

— (1991): *Language and symbolic power*. Cambridge, Harvard University Press.

Breton, M. (2001): "Neighbourhood resiliency", *Journal of Community Practice*, 9(1), pp. 21-36.

Brown, K. (2014): "Global environmental change: a social turn for resilience", *Progress in Human Geography*, 38(1), pp. 107-117.

Chamlee-Wright, E. and Stour, V. (2011): "Social capital as collective narratives and post-disaster community recovery", *The Sociological Review*, 59(2), pp. 266-282.

Cheshire, L. (2006): *Governing rural development: discourses and practices of self-help in Australian rural policy*. Aldershot, Ashgate.

Coafee, J. (2011): "Rescaling and responsibilising the politics of urban resilience: from national security to local place-making", *Politics*, 33(4), pp. 240-252.

—, Rogers, P. and Murakami-Wood, D. (2008):*The everyday resilience of the city: how cities respond to terrorism and disaster*. London, Palgrave MacMillan.

Cox, R. and Perry, K.M. (2011): "Like a fish out of water: reconsidering disaster recovery and the role of place and social capital in community disaster resilience", *American Journal of Community Psychology*, 38, pp. 395-411.

Council of Australian Governments (2011): *National strategy for disaster resilience: building our nation's resilience to disasters*. Canberra, Commonwealth of Australia.

Darnhofer, I. (2010): "Strategies of family farms to strengthen their resilience", *Environmental Policy and Governance*, 20, pp. 212-222.

Davoudi, S. (2012): "Resilience: a bridging concept or a dead end?", *Planning Theory and Practice*, 13(2), pp. 299-307.

Esparcia, J., Escribano, J., and Buciega, A. (2015): "A perspective of LEADER method in Spain based on the analysis of Local Action Groups", in L. Granberg, K. Andersson and I. Kovách (eds.), *Evaluating the European approach to rural development: grass-roots experiences of the LEADER programme*, Aldershot, Ashgate, pp. 33-52.

Giddens, A. (1998): *The Third Way*. Cambridge, Polity Press.

Herbert-Cheshire, L. (2000): "Contemporary strategies for rural community development in Australia: a govern mentality perspective", *Journal of Rural Studies*, 16(2), pp. 203-215.

— and Higgins, V. (2004): "From risky to responsible: expert knowledge and the governing of community-led rural development", *Journal of Rural Studies*, 20(3), pp. 289-302.

Higgins, V. and Lockie, S. (2002): "Re-discovering the social: neo-liberalism and hybrid practices of governing in rural natural resource management", *Journal of Rural Studies*, 18(4), pp. 419-428.

Holling, C.S. (1973): "Resilience and stability of ecological systems", *Annual Review of Ecology and Systematics*, 4, pp. 1-23.

— (1996): "Engineering resilience versus ecological resilience", in P. Schulze (ed.), *Engineering within Ecological Constraints*, Washington, National Academy Press, pp. 31-44.

Kenyon, P. (undated): *Rural revitalisation and the need to create sustainable, healthy and resilient communities*. Bank of Ideas.

Lowe, P., Murdoch, J. and Ward, N. (1995): "Networks in rural development: beyond exogenous and endogenous models", in J.D. van der Ploeg and C. van Dijk (eds.), *Beyond modernisation*, Assen, Van Gorcum, pp. 87-106.

Mackinnon, D. and Derickson, K.D. (2012): "From resilience to resourcefulness: a critique of resilience policy and activism", *Progress in Human Geography*, 37(2), pp. 253-270.

Martin, R. (2012): "Regional economic resilience, hysteresis and recessionary shocks", *Journal of Economic Geography*, 12, pp. 1-32.

McManus, P., Walmsley, J., Argent, N., Baum, S., Bourke, L., Martin, J., and Sorensen, T. (2012): "Rural community and rural resilience: what is important to farmers in keeping their country towns alive?", *Journal of Rural Studies*, 28(1), pp. 20-29.

Morrissey, S. and Reser, J. (2007): "Natural disasters, climate change and mental health considerations for rural Australia", *Australian Journal of Rural Health*, 15, pp. 120-125.

Murdoch, J. (1997): "The shifting territory of government: some insights from the Rural White Paper", *Area*, 29(2), pp. 109-118.

Norris, F., Stevens, S., Pfefferbaum, B., Wyche, K., and Pfefferbaum, R. (2008): "Community resilience as a metaphor, theory, set of capacities and strategy for disaster readiness", *American Journal of Community Psychology*, 41, pp. 127-150.

Paton, D. and Johnston, D. (2001): "Disasters and communities: vulnerability, resilience and preparedness", *Disaster Prevention and Management*, 10(4), pp. 270-277.

Perz, S., Cabrera, L, Carvalho, L, Castillo, J. and Barnes, G. (2010): "Global economic integration and local community resilience: road paving and rural demographic change in the southwestern Amazon", *Rural Sociology*, 75(2), pp. 300-325.

Portes, A. (1998): "Social capital: its origins and applications in modern sociology", *Annual Review of Sociology*, 24, pp. 1-24.

Putnam, R.D. (1993): "The prosperous community", *The American Prospect*, 4(13), pp. 35-42.

Queensland Reconstruction Authority (2011): *Rebuilding a stronger, more resilient Queensland.* Brisbane, Queensland Reconstruction Authority.

Ray, C. (2006): "Neo-endogenous rural development in the EU", in P. Cloke, T. Marsden and P. Mooney (eds.),*The handbook of rural studies*, London, Sage, pp. 278-291.

Schuller, T. (1999): "Social capital: analytical tool or clingfilm wrap?", *Concept*, 9(1), pp. 8-10

Scott, M. (2013): "Resilience: a conceptual lens for rural studies?", *Geography Compass,* 7(9), pp. 597-610.

Shucksmith, M. (2000): "Endogenous development, social capital and social inclusion: perspectives from LEADER in the UK", *Sociologia Ruralis*, 40(2), pp. 208-18.

— (2010): "Disintegrated rural development? Neo-endogenous rural development, planning and place-shaping in diffused power contexts", *Sociologia Ruralis*, 50, pp. 1-14.

— (2012): *Future Directions in Rural Development?* Dunfermline, Carnegie UK Trust.

— and Talbot, H. (2015): "Localism and rural development", in S. Davoudi and A. Madanipour (eds.), *Reconsidering localism*, London, Routledge, pp. 255-274.

Skerratt, S. (2013): "Enhancing the analysis of rural community resilience: evidence from community land ownership", *Journal of Rural Studies*, 31, pp. 36-46.

Stehlik, D. and Chenoweth, L. (2001): "Building resilient communities: social work practice and rural Queensland", *Australian Social Work*, 54(2), pp. 47-54.

Van Zandt, S., Peacock, W.G., Henry, D.W., Grover, H., Highfield, W.E. and Brody, S.D. (2012): "Mapping social vulnerability to enhance housing and neighborhood resilience", *Housing Policy Debate*, 22(1), pp. 29-55.

Wells, M. (2009): "Resilience in rural community dwelling older adults", *Journal of Rural Health*, 25(4), pp. 415-419.

— (2014): "Resilience and responsibility: governing uncertainty in a complex world", *Geographical Journal*, 180(1), pp. 15-26.

Wilson, G. (2010): "Multifunctional 'quality' and rural community resilience", *Transactions of the Institute of British Geographers*, 35(3), pp. 364-381.

Woods, M. (2007): *Rural geography*. London, Sage.