Local agency, adaptation and the shadow system: The institutional architecture of social learning in rural areas of the UK and India.

Paper for the XI World Congress on Rural Sociology
Chris High[1], Mark Pelling[2] and S. Rengasamy[3]*

Abstract

Rural communities across the world face at times a range of environmental, social and economic pressures that threaten their viability in their current form. The ability of local actors to exercise agency in response to potential and emerging threats is of key interest in understanding their capacity to adapt. This paper argues that top-down narratives which focus on canonical organisations and formal institutions are at best a partial account of rural adaptation. More attention needs to be paid to the shadow system, the web of informal and often hidden relationships that permeate public and private life.

In the organisational and institutional literature, shadow systems have been discounted as either too complex to be tractable or an inevitable source of corruption and nepotism. Two case studies are presented to establish that neither claim is inexorably true: (i) the adaptation of dairy farmers to market and climate change in Carmarthenshire, South Wales and (ii) NGO mediation of community/state interaction in Tamilnadu, South India. In conclusion, some theoretical and methodological themes are highlighted for further research. These hold the potential to enable a better understanding of the shadow system, and its potential and pitfalls as a site of local agency in rural adaptation.

Acknowledgements

1. Introduction: Rural adaptation, local agency and the shadow system

Rural communities across the world face multiple challenges to their vitality and viability. Over the last 20 years a range of economic, social and environmental trends

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[1] Research Associate, Department of Geography, Kings College London, Strand, London, WC2R 2LS.
[*] Author for correspondence. E-mail: c.high@watercrowfoot.co.uk.
[2] Senior Lecturer, Department of Geography, Kings College London, Strand, London, WC2R 2LS.
[3] Professor, Madurai Institute of Social Sciences, Alagacoil Road, Madurai 652002, Tamilnadu, India.

have tested the capacity of local rural actors to adapt to changing conditions. These include declining terms of trade for agricultural produce, altered patterns of rural migration, new policy assumptions and long-term environmental changes. While the particular combination and effect of these trends vary in many places local actors need to cope with and respond to complex and difficult conditions. Successful adaptation can mean the difference between a declining, impoverished population with few livelihood options and a vibrant, prosperous society with a diverse and resilient local economy.

The adaptive capacity of local actors is in many respects shaped by their relationships with the wider rural sector – the economic and policy context in which they operate. Nevertheless, local agency is a key aspect of adaptation. From the perspective of external managers and policymakers, local agency is both a key resource and a confounding factor for successful adaptive action. From the perspective of many local actors, adaptation that is both effective and equitable cannot depend on the skill and goodwill of external decision-makers, whose interests and perceptions can vary greatly from those most directly affected by choices of adaptive strategy.

A recognition of the importance of local agency is evident in the literature on governance (eg Minogue, 2002) and participation (eg Chambers, 1997). Nevertheless, there is a growing critique that approaches founded in governance and participation too often in practice lead to perverse outcomes (Cooke and Kothari, 2002). This may be because, as this paper argues, there is an habitually partial account of the institutional setting of local agency. The claim is that much of the interplay between local agency and the institutions that shape and direct it happens out of view – within the shadow system (after Shaw, 1996) of informal and personal relationships that permeate public and private life, rather than the canonical (after Brown and Duguid, 1991) organisational forms that are most easily visible.

Adaptation, as a social process, is embedded in the formal and informal social context that local actors occupy. Therefore it makes sense to seek to understand it across both formal and informal dimensions of experience. Yet in much of the literature on institutions, organisations and governance and in many policy and management settings, shadow systems are either perceived negatively or dismissed as irrelevant: the domain of the informal is either considered too complex to take into account or as nothing more than a source of corruption and inefficiency, requiring management and control, and this is reflected in many policy contexts.

Two case studies of local rural development are presented to redress this view, seeking to demonstrate that shadow networks are (i) an important space for learning and hence adaptation, and (ii) a legitimate locus of ethical action. The case studies are respectively: (i) an examination of the adaptive capacity of Grasshoppers, a group of dairy farmers in Carmarthenshire, Wales, and (ii) the role of SPEECH (the Society for the People's Education and Economic Change) as a mediator between local communities and the state in Thiruchuli Panchayat Union, Tamilnadu.

In conclusion, it is argued that more work is needed to understand informal institutions and the potential constraints and resources for adaptation provided by the interweaving of shadow systems with canonically institutionalised social structures. The challenge is to develop research and action praxiologies more attuned to the shadow system. The paper concludes by pointing to a growing body of theory and practice that could critically inform such an approach, highlighting some of the key issues to be tackled.

2. Rural adaptation, institutions and the shadow system

A local actor can be defined as an individual or organisation with a capacity for intentional behaviour (agency), and with an identity founded in a particular locality. This is a slightly wider definition that the famous 'local people' of the participation and community development literature, and includes compound actors such as organisations. It is justified within a constructivist epistemology because such actors are commonly granted agency within normal discourse. For example, "the government has settled on its rural policy", or "the village collectively expressed its wish through a PRA exercise". A constructivist stance is preferred to a realist one, because granting agency in this way depends on viewpoint. Constructivism allows an understanding of different points of view from within a situation, without an imperative to choose between them. The advantages of such 'epistemic cognition' (Salner, 1986) underlie a number of effective approaches to rural learning and change, where multiple viewpoints and contested realities are a significant issue (Checkland, 2000; Ison and Russell, 2000a; Leeuwis and Pyburn, 2002).

One reason local actors are of interest is because of their role in adaptation to rural change. While local actors will clearly be constrained in their adaptive choices by structural factors beyond their control, it is not necessary to see either structure or agency as necessarily prior to the other. Giddens (1984), for example argues that structure and agency co-produce one another. While this has attracted a range of critique (Hay, 1995; Jessop, 1996), it still seems reasonable to maintain an interest in the ongoing interaction between local agency and the institutions (*sensu* North, 1990) that influence it, when seeking to understand what the potential for adaptation is in a given context and how rural adaptation is experienced.

This section reviews some of the adaptive pressures on rural actors in the UK and India, and considers in general terms the institutional architecture of social learning, within which agency directs local adaptation. It concludes by exploring the idea that a key site of local agency and adaptation lies within the nexus between the formal institutions of the rural sphere, and the informal institutions of the associated shadow system, and points to some emerging theoretical developments the management literature that help to unpack this.

Rural adaptation

As in other sphere of experience, rural actors are periodically challenged to adapt their mode of being as a result of changes in the physical and social environment in which they exist. It may be unreasonable to argue that rural areas are especially vulnerable to change. But there is compelling evidence that rural areas around the world, currently face challenges that threaten unsought and unwanted changes of high degree, (Hubert et al, 2000; O'Hagan, 2001; Vorley, 2002). While many of these pressures are unexpected and acute enough to qualify as crises, it is the cumulative effect which is most debilitating. In consequence, the historical discontinuity in western agriculture mooted by Hubert et al (2000) has its counterpart in the wider rural economy of Europe as well as other parts of the world.

In the UK, headlines such as: '*Farming in crisis as thousands quit*' (Hetherington, 2003), and '*Crisis warning over rural reform*' (BBC, 2002) have become increasingly common. The headlines reflect an increasing concern with a combination of stressors (Drummond et al, 2000; Lowe and Ward, 1998: 469) that have manifested over the last two decades, including foot and mouth disease, bovine spongiform encephalopathy, EU Common Agricultural Policy reform, changing rural population

structures, economic depression in the agriculture sector. The policy response has been a radical overhaul of rural governance, with more likely to follow (cf Haskins, 2003), and corresponding institutional pressures on rural actors. The result is a chronic sense of crisis (Drummond et al, 2000; Greer, 2003), reflected in a search by policymakers, NGOs (Non-Governmental Organisations), industry leaders and local rural actors for sustainable modes of development that conserve key variables, whether they be livelihood opportunities, reduced postbags, nature conservation status or whatever, according to their particular combination of interests.

In India, rural areas are often perceived as disadvantaged: left behind by the market liberalisation (Keay, 2000: 531), and with higher poverty rates than urban areas on most measures (Bernstein et al, 1992: 6-7). While the green revolution raised productivity in irrigated areas, rain-fed areas have been largely passed by (ibid: 51-64). Present and future issues include displacement of rural people, loss of rural culture and identity, input/commodity price squeeze, policy-led agricultural modernisation, globalisation of markets, worsening climate and poor relationships between state and civil actors (Pimbert and Wakeford, 2002; Rengasamy et al, 2001). With a growing population and increasingly stretched natural resource base, rural India is the Achilles heel of the country's development.

That is not to say that the news is not all bad. Pretty (1995), for example, argues that there are multiple cases around the world of 'islands of success', where low-impact, sustainable systems of rural livelihoods are working; a range are identified in Vorley (2002), for example. The challenge is to widen this foundation of success, in the face of future shocks and trends. Theory and methodology that aid in the analysis of adaptive capacity and the facilitation of adaptation while paying heed to the needs and experience of local people, is therefore as timely now as ever. Research into adaptation and vulnerability grows apace, especially in the climate change, the management and the disasters literature (Adger et al, 2002; Coles et al, 2001; Pelling, 2003; Pelling and High, 2004; Weick, 1998; Weick and Sutcliffe, 2001; Wisner et al, 2003). But there is a danger that the role of local agency is lost in approaches which fail to appreciate the embedded nature of local adaptation, and concentrate too little attention on the lived experience of learning and communication amongst local actors. This is highlighted by an examination of the literature on the institutions that underpin adaptation, where theory and practice tends to focus on formal instruments and strategies.

The institutional architecture of social learning and adaptation

Institutions have been a perennial source of contention within social thought and study over many decades with a resurgent 'new institutionalism' evident in several fields over the last twenty years (Hall and Taylor, 1996; Lowndes, 1996; Vandenberg, 2002). As a consequence, there is a multiplicity of contested definitions, often grounded in different traditions of understanding and fields of application. To further muddy the waters, the everyday usage of institution, institutional and so on is quite loose.

The key division is perhaps between those who construct institutions as a type of organisation (eg Uphoff, 1986), and those who view them as the rules, norms and strategies which shape individual and organisational behaviour (eg North, 1990; Ostrom, 1999). The latter argue that distinguishing between institutions and organisations provides conceptual clarity (North, 1990: 3-10). Following North, this paper defines institutions as the rules, norms and incentives that structure agency, and organisations as the embodiment of agency within social structures shaped by

institutions. Institutions, constructed in these terms, should not be read in a solely negative sense as constraints. As Nelson and Nelson (2002) point out, they enable as well as constrain – institutions are the points of reference which allow human co-operation.

The importance of institutions for adaptation is demonstrated within the literature on social and organisational learning, where the capacity of social groups to respond to complex and sometimes unexpected stressors is a perennial concern (Argyris and Schön, 1996; di Stefano, 2000; Finger and Verlaan, 1995; High, 2002; Leeuwis and Pyburn, 2002). In this literature, institutions, adaptation and social and organisational learning tie together in two ways.

The first concerns the socialisation of learning – the extent to which learning is determined by culture and socialisation (Jarvis et al, 1998: 44). Thus, social characteristics such as age, social class and caste can open or close particular pathways for adaptation (Pelling, 1998), and there are accounts of the capacity of societies and individuals to cope with risk from natural disaster that are constructed in these terms (Burton et al, 1993; Wisner et al, 2003). Also relevant are analyses of how social processes enable or constrain learning (Elwyn et al, 2001, §11; Joiner, 1989).

The second view of looks at changes at the level of collective behaviour, treating group behaviour and learning as an emergent property (see Capra, 1996: 28; Checkland, 1999: 74-82, for discussions of emergence). In other words, this view amounts to a claim that there exist important learning processes at the social level, which do no reduce to the sum of individual learning processes. Developments in this vein include work on organisational learning (Argyris and Schön, 1996), policy learning (Sabatier and Jenkins-Smith, 1999), social unconsciousness (Goleman, 1998), and group-think (Janis, 1972). Note there is no assumption that collective learning is inherently positive or negative, merely a demonstration that processes operating at the collective level can alter the sum effect of changes to individual knowledge.

These two senses of social learning operate at different logical levels, and while neither determines the other they are clearly related in terms of adaptation. One one hand, the social environment in which local agents operate configures the space of possible individual adaptive actions. On the other, collective adaptive action emerges from interactions between individual actors. In both cases, institutions play a central role: the socialisation of learning can be read in the institutions that determine individual adaptation, and institutions shape the emergence of social behaviour from individual agency. This interweaving of institutions around social learning is not an isolated example, as in general institutions operate in isolation. They have different relevancy to given decisions by given actors, and can act to modify one another in particular situations (cf Mershon, 1994). The metaphor of institutional architectures (after Adger and Kelly, 1999) reflects this interdependence and complexity, recognising that different types and levels of institutions may be active in any given situation, and hold different shape and meaning from different perspectives.

When considering the institutional architecture of adaptation, a further layer of complexity is provided by different kinds of adaptation, of which there are many extant typologies (eg Smit et al, 2000; Yohe, 2000). In particular, adaptive capacity – the characteristics of a system which enable it to adapt – can be considered in terms of responses to particular risks as well as in terms of more generic capacity. Emerging research findings on adaptive capacity to rapid climate change in the UK rural sector indicate that these tend to be institutionalised differently. While adaptation to specific

hazards is sometimes formally institutionalised and supported by a range of conceptual tools and methodologies such as risk assessment, cost benefit analysis and so on, less attention is paid to methodologies for building a more generic adaptive capacity. The possible exception, outside of a loose sense of management responsibility for coping with events, is the Horizon Scanning function (cf DEFRA, 2004); now institutionalised in the UK within organisations such as the Department for Environment, Food and Rural Affairs (DEFRA) and the Environment Agency. This, as the name suggests, seeks to bring to the notice of policymakers risks that are not currently within their boundary of attention.

In any case, developing formal structures and preparing contingency plans for every eventuality is impractical, and even where they are in place, they may prove to be based on inadequate assumptions. This is illustrated by the inadequate initial policy response to the 2001 outbreak of foot and mouth disease in the UK (Anderson, 2002). It is therefore of interest to ask what other scope there is for working with adaptation? If the formal institutions of adaptation are not the whole story, then what else is there? Do we have to wait until events which have not been anticipated or taken seriously to arise before we can organise in response to them, or is there any way of assessing and perhaps helping to improve the ability of social actors such as organisations, businesses, families and communities to respond to unknown and uncertain hazards?

Local agency, adaptation and unmanaged spaces

This paper proposes that a fuller appreciation of the institutional architecture of adaptation can be obtained by considering a broader range of institutions, than often seems to be the case in practice. When one examines adaptation from the perspective of local agency, alongside the formal institutions that derive from policy, statute and legally institutionalised contracting, a host of informal traditions, practices and norms become visible. Rose (2000), for example, sees the informal institutions of Russian society as a key factor in the ability of local actors to cope with the failings of the post-communist state.

While not formally constituted, such institutions have a social reality and legitimacy beyond simple 'habits or preferences' (Lowndes, 1996: 193). However, while their existence is well established within the institutional literature (Lowndes, 1996: 183; North, 1990, chapter 5; Ostrom, 1999), there is considerable uncertainty about how they come into existence, how they change and on the nature of the relationship between formal and informal institutions (North, 2001; Rizzello and Turvani, 2002; Williamson, 2000). While the more sociological new institutionalisms theorise informal institutions in terms such as embeddedness (Granovetter, 1992), it is not too unfair to say that in much of the institutional literature, informal institutions are problematic. North (1990, chapter 5) for example, states that the majority of institutions are informal and is clearly interested in the long term effects of informal institutions on social and economic trajectories. However, he has no adequate explanation of how they arise and change (Lowndes, 1996: 187-8; Williamson, 2000). Instead North treats culture as an exogenous variable, albeit one he recognises a need to know more about (North, 1990, pg 188; North, 2001).

In the absence of a satisfactory understanding of informal institutions, North (2001), Ostrom (1999) and others have focussed on formal institutions as a locus of opportunity for change and reform. Some go further, presenting informal institutions as purely a source of inertia and corruption (Lowndes, 1996, pp 188-9). The difficulty of analysing informal institutions and the tendency to treat their existence as a source of resistance, rather than a resource for change, is echoed within the majority of the

management literature (Shaw, 1997: 235). For example, in the work of Argyris and Schön (1996), informal institutions are recognised, but are still treated as a problem to be solved and tractable to top-down management effort. A better understanding the interplay between the formal and informal institutions is required in order to open a space for a fuller appreciation of the institutional architecture of adaptation.

Research with rural policy makers in the UK and India reinforces the view that it is difficult to reconcile the informal institutions of local agency with the formal rules and procedures of civil servants, agency managers and other representatives of the state. That is not to say that there are not theoretical and methodological traditions that are concerned with informal institutions. An awareness of informal, embedded realities is present in the literature on participation (Chambers, 1997) and policy coalitions (Sabatier and Jenkins-Smith, 1993), for example. However, the question is whether an approach founded in the realities of local agency can ever be compatible with policy and organisational contexts that have an inherent top-down bias. What is required are traditions of understanding that make sense from the perspective of managers and policy-makers and yet are suitably subversive to the view that the role of decision-makers is to make and enforce decisions.

A possible candidate tradition is social capital (cf Baron et al, 2000), which directs attention to both formal and informal relationships. It has attracted policy attention from many of the organisations funding community development programmes including the likes of the World Bank (Harriss, 1997) and DfID (Carney, 2002), as well as NGOs such as CARE (ibid) and IIED (Bebbington, 1999), and has a rich range of metaphorical interpretations. There is a strong focus on local agency within this literature, but the practice that it supports tends to focus on creating formal institutions based on informal structures. Theoretical expositions of social capital and the practices they purport to support have been strongly critiqued (Fine, 2001). Yet there remains considerable potential for a more critical engagement with informal institutions through the language and ideas of social capital (Pelling, 1998).

Another academic domain with emerging potential for theoretical and methodological development around informal institutions is the management literature. The potential arises within two relatively recent schools of thought: research on (i) communities of practice (Brown and Duguid, 1991; Fox, 2000; Lave and Wenger, 1991; Lesser et al, 2000; Wenger, 1999), and complexity science perspectives on management (Shaw, 1997, 2002; Stacey, 1996; Stacey et al, 2000). What these approaches have in common is that they challenge top-down thinking, moving away from what Stacey et al (2000: 26) refer to as a rationalist teleology – "movement towards a future that is a goal chosen by reasoning autonomous human beings". This is not to suggest that the possibility of management action with respect to informal institutions is not possible. Instead it is argued that the appropriate stance is management *in relation* to the shadow system, rather than management *of* the shadow system.

Wenger (2000a), for example asserts that informal organisational structures such as communities of practice cannot be shaped by management effort, constructing them in terms of their response to organisational change rather than submission to it. Shaw (2002), too challenges the assumption that organisational dynamics are the product of intentional dynamics and that the 'gap' between formal and informal organisations is something to be bridged and controlled. Instead, she embraces the informal as a locus of opportunity for change, where new opportunities arise through engagement and conversation. The challenge is not so much one of how to drive change, but how to participate in the way that things change over time (ibid: 172). This requires

"conceptual ability brought to bear on the large-scale combined with individual skills of communication exercised at the small scale." (Stacey, 2001: 234).

Thus this paper proposes that the institutional architecture of adaptation encompasses exactly those informal spaces in which local agency thrives, and inverts the usual view that the problem is to bring unmanaged spaces within management control. Instead, it needs to be recognised that unmanaged spaces are pervasive and enable the ongoing operation of individuals and organisations even within highly formalistic institutional contexts. Thus the skills that local agents use to navigate unmanaged spaces overlap those that organisational actors require to make canonical institutions work.

That is not to say that formal structures are or should be unnecessary. Instead it is proposed that a deeper understanding of the interactions between formal and informal institutions, between the canonical and the shadow systems, will enable a more effective understanding of both local agency and rural adaptation. As an initial step, the critique that shadow systems are so complex that they are intractable to analysis and/or irrelevant, and an inevitable source of corruption and inefficiency needs to be addressed.

3. Exploring the shadow system

Two case studies that illuminate the relevance of the shadow system to analysis and action with respect to adaptation are presented in this section. Only material relevant to this paper is presented here and the cases are treated in more depth elsewhere (High et al, 2004; High and Rengasamy, 2002; Rengasamy et al, 2001). Also, the case studies have arisen within separate research projects, and are not given here for the purposes of comparison. Instead each acts as a counter-example for the two objections to informal institutions that were discussed in the previous section. That is, the case studies support a claim that it is not always the case that shadow systems are intangible and irrelevant or inevitably corrupt.

Both case studies are firmly rooted in spatially local contexts, and focus on local actors. The first case deals with the anticipated adaptive capacity of a farmers' discussion group to cope with rapid climate change and other stressors. Exploration of their adaptive capacity reveals it is founded as much in the informal, tacit institutions as it is in rules and procedures, and reveals a space for highly effective local agency, where social and individual learning reinforce one another. The second case looks at the role of a small local voluntary organisation as a policy broker, short-circuiting the long chains of responsibility within the Indian civil service through skilful relationship building. While this necessitates navigating exactly the informal interstices where corruption thrives, the NGO is able to maintain its ethical standards through the strength of its internal values and external relationships.

Case study 1: Grasshoppers and the New Zealand system

This case study looks at the adaptive capacity to climate change of Grasshoppers, a Welsh dairy farmer's discussion group that started in order to explore a set of dairying practices originating in New Zealand. The group facilitates the comparison of its members' husbandry and business practices against one another through a regular programme of group meetings. These usually consist of a farm visit, followed by joint analysis and a communal meal. They characterise the meetings as sharply critical, but value the opportunity to get advice and ideas from each other.

The group has converged on a standard set of practices, which they refer to as the New Zealand system. The system centres on careful manipulation of herd numbers in

relation to the ability of a holding to support grazing. Input costs are held down by conserving hay for the winter, turning cattle out early in the year and omitting an autumn calving. This means little or no spending on winter feed and reduced labour costs to care for intensively housed cattle. Thus although less milk is produced than under more intensive regimes, the profits are greater, and the farmers have time to pursue other interests. Over time, a group culture has emerged that encourages innovation and careful management of resources. Together with the high calibre of the individual members, the result is a group of farmers who are in profit and proactively diversifying, while most UK dairy producers struggle to sell milk over the cost of its production.

Because of their proven ability to adapt to changing market conditions, Grasshoppers were chosen as one of several case studies for a research project investigating the adaptive capacity of the UK rural sector to rapid climate change. Rapid in terms of climate change exceeds most small business management horizons by an order of magnitude or more. Even so, an extreme climate cooling scenario, such as a fast shutdown of the North Atlantic ocean circulation (see High et al, 2004, Appendix 1) considered in the project would present a considerable challenge to the New Zealand system as it stands, over the space of a decade. Exploring how this successful group of farmers might meet such a challenge, and the social and individual resources they could draw on to do so, throws light on how local actors might potentially respond to strong stressors such as rapid climate change.

Social learning, adaptation and the shadow system

A workshop and series of semi-structured interviews with members of Grasshoppers produced evidence that the generic adaptive capacity of the group was indeed strong. Group members anticipated that the direct and indirect effects of climate change might well disrupt their current dairying system:

> *"Climate cooling would raise the cost of production. It would negate our current gains."*

> *"The most important impact of cooling would be the changes it caused to the global food system. Somewhere else could be better for milk or be able to produce food inputs so there would be shifts"*

Nevertheless, group members expressed a strong consensus that they would be able to adapt, based on their previous experience of change:

> *"Change is not a problem, it is exciting".*

> *"There is confidence from past changes working. Having done it once, we could change again if we had to."*

Further analysis of the Grasshoppers' adaptive capacity revealed two key factors in their projected ability to adapt to climate change. The first was a strong sense of community – a shared identity as members of the group – that highlighted their common interest and responsibilities to one another. The group identity, which is constructed in terms of learning and adaptive capacity is founded in the formal purpose of the group, but is not itself formally instituted. Instead it is internalised. Membership of Grasshoppers with all that that entails is experienced as part of each member's individual identity, though that is not to say that it is not something that members occasionally question:

> *"I'd have to admit that at some points I've had to ask 'Is this worth the extra hassle? Do I need to be a member of this thing?' But if you look at it in the longer term, I suppose everybody goes through points when they're extremely keen, and then not so keen."*

Secondly, the group had strong links with groups in other countries, creating an extended learning network. These links are not formal, but instead depend on the ability and interest of individuals to create and maintain relationships:

> *"Mobiles/e-mail etc means you can have friends in New Zealand or Ireland. It spreads information transfer… so no-one is alone."*

Through this network, group members are able to trade experiences of what works with others in different context, it was suggested that this was a potential resource in the face of rapid climate change:

> *"In terms of adapting to a different climate, you could go and look at places in the world where people already live with it. Now we have learnt from New Zealand, but if the climate cooled we would learn from other parts of the world."*

Collectively, the group's adaptive capacity is stronger than that of most individual members, and it is apparent that the group provides its members with an environment in which learning is incentivised:

> *"It's like twenty heads learning at once, and sharing that information back. It would have taken me a lot longer to get were we are today."*

Yet, although the group has some recognisably formal institutions, such as a regular schedule of meetings and formal roles such as chairman, many of the key institutions are informal:

> *"We're less top down than other groups".*

> *"The group has an intimacy that is quite unique."*

As an example, trust is critical to the group's success and this is underwritten by the exclusion of group members who do not seem able to maintain confidentiality. This is not part of a formal constitution, but has a taken for granted quality:

> *"The group is closed. If you do not cope with the group culture of critical assessments then you would leave."*

> *"Confidentiality is key, if that is broached that is it."*

This research demonstrates that in the case of Grasshoppers at least, informal institutions are a key part of adaptive capacity. They are not the whole story, as the group is formally instituted as well, but it is a healthy, vibrant shadow system that gives the formal institutions life. Time may yet tell whether Grasshoppers are indeed well placed to cope with rapid climate change and other shocks and trends. But as local actors, it was only by assessing the embedding of their adaptive capacity in informal relationships that much meaningful evidence could be discerned.

Case Study 2: SPEECH and rural governance in Tamilnadu

SPEECH (The Society for the People's Education and Economic Change) is a medium sized NGO, operating in the Virudhunagar District of Tamilnadu, South India. This case study examines their work in Thiruchuli Panchayat Union, an administrative division of the district, where they have worked since 1987. The area was selected because of its poverty in terms of a number of social and economic indicators. The organisation, with an ethic founded in Freire's (1972) ideology, has a commitment to work witin local communities in the interest of the poorest and most vulnerable local actors (Rengasamy et al, 2001: 3-5).

In 1987, the lowest tier of government was suspended throughout the state, and there was no formal system of local representation. This left many people in Virudunagar with no way to influence policy decisions or implementation, even though these have

striking effects on local lives and livelihoods. Even when representative government was revived in the 1990s, a gap remained between many local people's aspirations and the ability of the policy system to deliver on its obligations under state and national law. Local governance is fragmented, complex and responsible for a huge number of programmes, sometimes in contradiction with one another and/or with stated policy objectives (ibid: 12-16).

As a result, the way that policies are implemented is as important as the decision-making and explicit statements of intention that drive them. The bureaucracy responsible for policy delivery suffers from insular incentives and a risk-averse culture that cuts public officials off from the concerns of those they nominally serve. Multiple layers of bureaucracy separate those likely to be in face-to-face contact with local agents from those with the power and confidence to actually make decisions. Actors inside and outside the system who attempt to correct perverse policy outcomes face enormous difficulties, because the formal channels of the state bureaucracy are slow and tend to discourage initiative and there is difficulty deciding which of the many demands on official's attention are worth following up. So from the perspective of local actors, policy formation and delivery can be very opaque, unresponsive and arbitrary in its execution. Consequently, relationships between officials and local communities are often marked by tension and recrimination.

SPEECH's ethos centres on a concern to nurture local agency, through building capacity for self-organisation. But the NGO also recognises that unless the factors that inhibit development are tackled, both at the local and institutional level, sustainable rural development will not be achieved. 'Bottom up' development without accommodation to change from those at the 'top' will struggle to succeed. The challenge for SPEECH and similar organisations is to work alongside the system and help ground it in local realities, without becoming subject to its limitations (High and Rengasamy, 2002).

Ethics and the shadow system

While SPEECH is not politically partisan, it has fifteen years experience as a local policy broker, working to bring local actors and representatives of the policy system together where this might prove beneficial to both. Research in Thiruchuli on links between policy and sustainable agriculture and rural livelihoods (Rengasamy et al, 2001) produced evidence about local adaptive capacity, and of a space for local agency to affect policy implementation, based within the shadow system.

What the research demonstrates is that it is possible to short-circuit the official channels within the canonical organisations that support rural development, creating links between senior decision-makers and local agents. This can happen spontaneously (ibid: 53-64) but a systematic review of the organisation's policy work revealed that intentional action is also possible (ibid: 65-72). The analysis showed the importance of working through the alternative networks of personal relationships and informal communication that sits alongside the official organisation of the policy delivery bureaucracy. Important networks included kinship and ties of place, as well as alternative power structures such as the civil service union. SPEECH's role as a PRA training provider to the civil service was a further key source of professional and personal links in to the canonical hierarchy.

Critically though, getting an official's attention was not enough to achieve action on local policy priorities. SPEECH had also to be able to demonstrate their trustworthiness in terms appropriate to formal channels. As committed local actors with a demonstrable track-record as an effective development organisation, the support of local officials and a reputation for honesty, this too is possible. As in the

previous case study, trust is again an important variable in a successful articulation of the canonical and shadow systems. For SPEECH, this means gaining the trust of local people as well as those within the policy system, something that requires a long-term commitment to the area and a strategic view of building and maintaining relationships.

What the case study demonstrates is that working through the shadow system can support policy advocacy and hence adaptation, and that a firm ethical foundation is a practical asset when doing so. For SPEECH, when working through the shadow system it is important not to become tainted by it. Corruption by its very nature needs to remain hidden, and because of their tacit nature, shadow systems are a good place for all sorts of hidden, underhand dealings. Yet at the same time, because the organisation was well-placed to satisfy the formal institutions regulating policy interactions, they were arguably more effective operators within the shadow system than disreputable actors that can only operate there. The shadow system may hide corruption, but it also provides an opportunity to subvert the institutionalised corruption of a system that perversely fails to enact its purpose of existence.

4. Conclusion: Research and the shadow system

This paper has demonstrated that the shadow system can be an important site of local agency, and a significant resource in rural adaptation. In the face of the challenges facing rural areas, the potential of informal institutions to enable may be just as important as their function as constraints. The research challenge is to establish a greater degree of credibility and trustworthiness for the claim that informal institutions and the shadow system are both relevant and tractable to analysis, and to develop methodologies for engagement with them in different circumstances.

The management literature emphasises the challenge for current organisational practice in such an engagement. It requires a leap of faith and a shift in assumptions to trust the ability of individuals and groups within interpenetrating formal and informal organisational structures to make sense of the changing situations within in which they find themselves, and to create and develop new organisational behaviours (Stacey, 1996). This constitutes a very different model of management compared to the command-and-control ideas that underpin much management practice.

The question is whether a similar reconceptualisation is required of the activities that constitute social research? Given the importance of personal values, trust and reciprocity in the shadow system, it is arguable that access to the shadow system will only open up for those willing and able to participate in it. As noted elsewhere in the literature on participation and social theory, this leaves the image of the researcher as a value-free observer, separated from their subject, untenable as a guiding metaphor for research practice. Instead an acceptance of social scientists as embedded in their research context, reflexively negotiating and maintaining a range of formal and formal relationships and institutions with other research stakeholders seems more realistic. This does not imply a lack of rigour, but rather an alignment between intuition and reason, which recognises the limitations of propositional knowledge (Flyvbjerg, 2001; Midgley, 1991). It does not imply a lack of critical thinking, but instead requires it for effectiveness.

Finally, we suggest that a number of emerging research approaches show promise for effective exploration of local agency. Many of these already draw on the strengths of more than one academic tradition for theoretical rigour and methodological effectiveness. Further exploration and cross-fertilisation between these approaches

offers the prospect of improved knowledge of shadow systems and local agency in the sense defined by Maturana and Varela (1992) – *"effective behaviour within a domain".* These approaches include:

- Second-order participatory approaches based in the politics of invitation, active listening and soft systems stakeholder analysis (High, 2002; Ison and Russell, 2000a, b).

- An approach to informal social structures that draws on the understandings developed in the literature on communities of practice (Fox, 2000; High, 2002; Wenger, 2000a, b) and the critical edge of social capital theory (Baron et al, 2000; Lesser, 2000; Pelling and High, 2004)

- Progressive, empirical theories of social and organisational learning, especially where founded in action research on complex issues (Griffin et al, 1999; High, 2002; Leeuwis and Pyburn, 2002; Shaw, 1997, 2002; Stacey et al, 2000)

- Sociological new institutionalism, especially that focussed on networks (Granovetter, 1992; Murdoch, 2000; Powell and DiMaggio, 1991).

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