Local Resilience and Climate Change: a study of the North East of England

Professor Keith Shaw
Louise Maythorne

Department of Social Sciences
Northumbria University

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EXECUTIVE SUMMARY

The Research Background
Climate change is one of the most important challenges facing governments in the 21st century, with a key role ascribed to changes at the local level. Indeed, the Local Government Association argues that tackling climate change should be placed at the centre of Local Authorities’ vision for their communities. Yet there are many varying interpretations as to how best to address the issue. This report investigates how the growing interest in ‘resilience’ can be utilised as a framework through which to identify policy solutions to the problems posed by climate change. In particular, the report considers how local managers in the North East have interpreted resilience, the extent to which it has been developed as a coherent policy agenda, its strategic significance, and how resilience can be viewed in the context of wider patterns of community involvement.

Methods
It draws upon findings from 30 semi-structured interviews undertaken in the region in late 2010 and early 2011. Interviews were undertaken with: climate change officers (or their equivalent, such as sustainable development officers) in all 12 local authorities in the North East region; local emergency planning/civil contingencies officers; climate change or emergency planning officers at the sub-regional and regional levels; and with a sample of relevant environmental stakeholders in the public, private, and voluntary sectors.

What Does Resilience Have to Offer?
The study captured a measure of uncertainty over the term’s exact meaning, a sceptical attitude to whether it was here to stay (or merely the latest buzzword), and concerns whether resilience was always a good thing - if it merely led to the defence of the status quo? There were also clear differences in the interpretation of resilience adopted by emergency planners as compared to climate change or sustainable development officers, and the lack of a coherent strategic framework within which the different local dimensions of resilience could be considered.

The research data also suggests that, although its full potential has not fully been realised, it is possible to identify six key advantages to using a resilience framework:

1. A suitable terminology for managing in ‘hard times’
The majority of those interviewed were positive about using the term in their work. It was viewed as: an appropriate term for the times we live in; accessible to the public and capable of affecting the behavioural changes required in relation to Co2 reductions; having the potential to be translated across different policy agendas; and offering a more ‘politically benign’ vocabulary when compared to ‘climate change’ and ‘low carbon’ approaches.
2. **It can help to make connections between emergency planning and environmental concerns**
   While recognising the necessary (and significant) distinctions between the two areas, framing an issue as ‘resilience’ could be helpful in enhancing linkage (where appropriate) between the emergency planning and environmental agendas: most especially with regard to community resilience, climate-related extreme weather events, and a more strategic approach to risk.

3. **It can help reconcile the adaptation and mitigation agendas**
   One of the recurring issues which emerged from the interviews was that the distinction between adaptation and mitigation was a difficult one to communicate to colleagues and the public, and not necessarily helpful in addressing climate change in a more holistic way.

4. **It can be used to bring together different policy agendas**
   Findings suggested that the economic dimensions of resilience were also being examined in a number of local authorities, and that making links between climate change adaptation and the changes needed to promote the low carbon economy would be beneficial. There are also opportunities to use the emerging resilience agenda to highlight the public health impacts of climate change.

5. **It is especially appropriate at the local level**
   It was recognised by all interviewees that involving communities in developing their own resilience was vital; resilience cannot simply be imposed upon a community. However, it was also recognised that there was still a key role for local government and other agencies to play in supporting and enabling involvement.

6. **Measuring Resilience**
   Given the recent reduction in the range of government targets, nationally defined indicators and the political emphasis on ‘localism’, it was acknowledged that the local development of a suite of resilience indicators could enhance collaborative working and further promote the adaptation agenda.

**Practical Suggestions for Local Authorities**

- Resilience could serve as an overarching strategic framework in terms of bringing together a range of relevant documents (such as Adaptation Plans, Risk Registers, Local Economic Assessments and Public Health Strategies) within one, local authority-wide cross-departmental Local Resilience document. Drafting such a document would be an important first step in defining resilience for all officers in the authority and for mainstreaming the idea across departments.
The focus on resilient communities could also help shape local authorities’ Community Involvement Strategies. Such a development would recognise that while resilience must be built from below, support from local government is also vital. In addition to outlining community needs and mechanisms of involvement, a focus on resilience would provide for a sharper focus on aspects of adaptation in which community involvement was vital.

It would be advantageous for the Local Resilience Forums to include a wider contribution from other policy officers such as climate change or sustainable development officers, in order that they might take a broader approach to risk and to share ideas for encouraging a resilient approach. A more holistic approach to training and professional development would also serve to break down barriers.

Given the dismantling of the regional level of governance and the resulting uncertainty over the future of regional climate change bodies, local authorities may wish to consider further developing specialist sub-regional networks that mirror the LEPs or even consider the development of more informal regional resilience and adaptation networks.

Being able to define, monitor and evaluate the extent of local resilience will be central to ensuring public awareness, achieving political buy-in from Councillors, maximising access to funding opportunities and enabling synergies between individual policy initiatives. There are a number of resilience frameworks, index’s and ‘toolkits’ currently used by a number of national and international organisations upon which local authorities can draw.

The research presented here represents a first step in developing an understanding of the relevance of a resilient approach in the current political and economic climate. It is also an attempt to ‘reframe’ resilience by extending the understanding of the term beyond the traditional disaster management and emergency-planning applications to encompass a more holistic and integrated approach to climate change adaptation.

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MAIN REPORT

Introduction

One of the first applications of resilience was in the study of ecology, where it was used to describe the capacity of an eco-system to return to equilibrium after a displacement or disturbance. The term also became an established part of the literature on disaster management, particularly in the context of developing measures to meet emergency situations, including environmental disasters, disruption to energy supplies or a terrorist attack. More recently, the emphasis on ‘bouncing back’ after external disturbances has been taken up within public policy debates, with the virtues of enhanced resilience increasingly seen as crucial if individuals, communities and organisations are to cope in the face of economic, environmental, and social shocks. Some of the desirable features of resilient management have been identified as: the ability to improvise; the use of imagination; the capacity to learn; adapting to changed circumstances; and being in a state of constant preparedness in order to respond to unforeseen events.

In relation to the role of local authorities, the original development of the resilience agenda focussed on civil contingencies and emergency planning, and was reflected in the development of Regional and Local Resilience Teams and Forums across England. More recently, the term has also been applied to the workings of local government in a number of areas, including: local approaches to economic development; relationships with the voluntary sector; and the well-being and happiness of local communities. In such applications, the focus on resilience potentially offers: a different interpretation of how to respond to problems; opportunities to integrate different policy approaches; a rethink of how we understand risk; a wider range of performance indicators; and fresh thinking on how to involve local communities.

One particular debate centres on the potential contribution that a resilience framework can make to the development of local climate change interventions. It is within this context that this report reports on recent research undertaken in the North East of England. It draws upon findings from 30 semi-structured interviews undertaken in the region in late 2010 and early 2011. Interviews were undertaken with: climate change officers (or their equivalent, such as sustainable development officers) in all 12 local authorities in the North East region; local emergency planning/civil contingencies officers; climate change or emergency planning officers at the sub-regional and regional levels; and with a sample of relevant environmental stakeholders in the public, private, and voluntary sectors. The addition of emergency planners reflects their role in dealing with severe weather events and the direct use of the term ‘resilience’ within the statutory role of Local Resilience Forums which co-ordinate multi-agency responses to major civil emergencies and produce Community Risk Registers.
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RESEARCH FINDINGS

1. The Resilience Narrative

Whilst a very small number of those interviewed were not familiar with the term, the vast majority were at least familiar with ‘resilience’ and acknowledged the growing interest in its application to climate change. Not surprisingly, those officers that worked in the field of emergency planning/civil contingencies, and who were members of the statutory local resilience forums, were very familiar with the term, as it was part of their everyday work. Another respondent felt that resilience had now assumed the status of ‘standard terminology’ within the area of climate change, while another acknowledged that the change in title of their local authorities’ emergency planning officer (to resilience manager) had served to ‘enhance the term’s visibility and embed the term within the council’s decision-making’.

On balance however, the general view expressed was that resilience had not, as yet, been fully absorbed within the local climate change agenda. Indeed, one local climate change officer was prepared to acknowledge that, ‘while I know it is important, I’m not really sure what it means’.

Another officer noted

‘I don’t encounter resilience very much in my everyday work, although it does depend who you speak to. When I’m talking to the Civil Contingencies Unit it crops up with relation to emergency planning and business continuity’.

When questioned further, a small number of those interviewed felt that term adds further complexity to an already confusing area: hence resilience becomes the latest in a long line of terms associated with the policy debates on the environmental challenges facing contemporary societies. These include, inter alia, Local Agenda 21, Sustainable Development, Environmental Sustainability, Climate Change, and the Low Carbon Economy. For one of the climate change officers, it was merely another ‘buzz word’, while for another, ‘resilience, like sustainability, is too difficult to define to have much currency’. Other critical judgments included that, ‘it’s just another nebulous term’ and that the ‘potential for misunderstanding is huge’. Several respondents also highlighted the negative connotations of the term, including the ‘danger that resilience is interpreted ‘defensively and inflexibly’, and that ‘resilience could be a problem if it involves resistance to all change’.
The majority of those interviewed however, were more positive about using the term in their work. For some, it was the appropriate term for our times as, ‘Society is in a vulnerable place at the moment and resilience conveys a sense of unity, strength, and a common bond’. Others saw resilience as a viable alternative term to sustainability, viewed it as easier to define than sustainable development and, in some respects, a ‘more relevant term for use in a harsh economic environment’. Another climate officer viewed it as ‘easier to understand than adaptation. If I was to talk to my colleagues about resilience they would understand what I meant’. The political dimension was also noted by a small number of respondents, one of whom commented that (compared to sustainable development) ‘resilience might have the advantage of being a more politically benign term – less challenging and contentious for local councillors’. While for another, ‘talking about resilience agenda could be more politically neutral than referring to a low carbon agenda’.

In the discussion of how a focus on resilience can enhance local approaches to climate change, respondents also touched upon how the term can be applied in the context of the traditional distinction been mitigation and adaptation. While one officer continued to feel that, the distinction between mitigation and adaptation is a helpful one because it ‘helps to make the specific actions that I am responsible for more easily understood to the public’, a number of others felt that the use of resilience could help reconcile mitigation and adaptation. According to one officer, ‘resilience could be a useful way of uniting the two approaches under the same umbrella – the two separate terms often cause confusion’. While for another, since ‘adaptation has lagged behind mitigation, resilience could be a way in which we advance it a bit faster.’

For one respondent from the wider group of environmental stakeholders,

‘The separation of mitigation and adaptation is frustrating as responding to climate change is best viewed as one multi-faceted initiative. Perhaps a focus on resilience can help to break down the often false contrast between the two, i.e. to be resilience you need to encompass all types of response. You cannot cherry-pick or say that you are concentrating on one rather than the other’.
The source of people’s information on resilience also varied, with a pronounced difference between the areas of emergency planning/civil contingencies and climate change/sustainable development. In the case of the former, where resilience was legally enshrined in the day-to-day remit of the emergency planning and civil contingencies officers, dissemination and learning has often taken place through policy documents produced at the Centre and via professional networks, such as the Emergency Planning Society. Conversely, amongst climate change officers and environmental stakeholders the interviews highlighted the particular importance of a small number of key individuals across the region.

The reference to individuals with a personal interest is important, in that some respondents noted that the wider dissemination of the resilience agenda in the North East was often reliant on a small number of key individuals who championed the concept in their day-to-day work. One such officer aimed ‘to get resilience considered in every piece of paper that passes the Council’s desk’. The familiarity - with resilience - of some of the climate change officers we spoke to, seemed to a large extent to be contingent on the extent to which they worked with these key individuals or were members of the same sub-regional/regional policy networks and partnerships, including Climate North East, the Local and Regional Adaptation Partnership and the Tees Valley Resilience Project. As one officer noted, the term ‘usually crops up when you’re working closely with someone who has a personal interest in it’. In this context, the Coalition Government’s plans to dismantle the regional tier of governance in England (including Regional Development Agencies and Government Offices) were seen by some respondents as problematic, particularly if this process also was to sweep away the North Eastern climate change networks that provided data, promoted policy leaning, and allowed for the sharing of best practice.

To provide a more detailed exploration of how resilience was understood by participants, those interviewed were provided with a list of 20 terms closely associated with, and emblematic of, the main interpretations of resilience in the literature. Respondents were asked to identify the 10 terms which they most closely associated with their understanding of resilience, and then to rank those ten in order of importance. The results (Figure 1) show the top ten-ranked responses for each of the terms. The association of resilience with adaptation is clear, as is its links with emergency planning, disaster management, managing risk, ‘flexibility’, and ‘durability’. These results echo many of the general responses of those interviewed, where adaptation and resilience were often used interchangeably by climate change offers. Indeed, some officers said that not only did they consider them to be synonymous, but that they also preferred the term resilience because it is more easily understood both by their colleagues and the general public.
The research also distinguished between two different dimensions of resilience that mirror the contrasts commonly made within the wider literature on the term, including those between resilience as ‘bouncing back’ or, in contrast, as ‘bouncing forward’.

The first of these can be viewed as resilience as ‘recovery’, and is essentially a conservative, safety first approach which places the emphasis on identifying short to medium-term risk, addressing the problems which arise, and rebuilding as quickly as possible within the original model: in effect, to ensure the status quo experiences as minimal disruption as possible. This particular interpretation captures the predominant viewpoint developed within emergency planning and the local resilience forums, where resilience is seen in terms of withstanding or recovering from adversity, defined in terms of threats and hazards, and involving, what the Cabinet Office has recently referred to as ‘Communities and individuals...
Harnessing local resources and expertise to help themselves in an emergency, in a way that complements the response of the emergency services.

The second dimension can be defined as resilience as ‘transformation’. Here the emphasis is on identifying short, medium and long-term risks and then thinking creatively about how to rebuild in order to improve upon the original status quo. Thus, a focus on resilience has the potential to create opportunity for doing new things, for innovation and for development. In short, resilience involves ‘bouncing forward’ rather than merely ‘bouncing back’. This dimension of resilience can also be viewed as capturing the particular - long-term - challenges of climate change adaptation.

Figure 2 captures how the preferred definitions can be grouped together within the two categories of recovery and transformation, and offers a more nuanced view of how resilience is being interpreted in practice. These findings illustrate that there is a preference for interpretations of resilience ‘as recovery’: evidence perhaps, that despite some understanding of a more transformational approach to resilience, the scale of the contemporary problems facing local authorities has (not surprisingly) produced a more cautious emphasis. In addition, the statutory basis of emergency planning, its well-established professional status, and the prior existence of local resilience forums, could also be seen to contribute to the influence of this view of resilience across the local authority as a whole.
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The continuing importance of an emergency planning view of resilience is further illustrated by the responses when interviewees were asked to indicate the policy or service areas in which they saw the term resilience most used? The seven broad categories highlighted, (Figure 3) included both Emergency Planning (the main area identified) and Business Continuity, which is also central to the role of Local Resilience Forums. However, there are also clear signs that the term is becoming an established part of the narrative on local climate change, both in terms of the role of local authority interventions and the importance of community resilience.

Figure 3: Applications of Resilience

<table>
<thead>
<tr>
<th>Emergency Planning</th>
<th>Climate Change</th>
<th>Economic</th>
<th>Community</th>
<th>Business Continuity</th>
<th>Individual/ Psychological</th>
<th>Health</th>
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<tr>
<td>12</td>
<td>9</td>
<td>6</td>
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A number of those interviewed also highlighted how resilience was now being applied within the context of local economic development, an emerging theme in the recent literature on resilience. For one respondent, ‘resilience is likely to be linked very closely to economic resilience’, and links to debates about the impact of ‘peak oil’ on the ‘economic fortunes on more isolated rural areas’. While for others, the term was particularly useful in bringing together economic and environmental approaches within the context of the low carbon economy. A sentiment echoed in a recent report by Arup (commissioned by Climate North East) which argued that

‘Creating a climate resilient low carbon economy, one that regenerates existing communities and provides for the social needs of existing and future generations in the North East, is a long-term challenge that will require sustained attention over decades’.

Thus, local economic development officers, ‘now seem to be at the forefront of debates on resilience’. There was also a recognition that the Coalition Government’s plans to abolish RDA’s, and replace them with Local Enterprise Partnerships (LEPs), provided an important opportunity for the latter to develop local approaches to the low carbon economy that placed economic resilience at the heart of the policy response.
2. Resilience: Towards a Strategic Approach

Given the scale and complexity of the economic, environmental, and social ‘shocks’ facing modern societies, it can be argued that a focus on resilience could usefully go beyond individual initiatives and policy areas to bring together a range of interventions within a wider strategic context. The view of some of those interviewed suggested that resilience does have potential to serve as a co-ordinating framework and, in the opinion of one respondent, could act as a ‘strategic lynchpin’. In a similar vein, one climate change officer felt that resilience ‘can be used strategically because it can help to mainstream the ideas of adaptation and mitigation.

It was also highlighted that the resilience agenda could be effectively applied across a range of policy areas ‘including economic development, housing, and neighbourhood services’, and that, ‘we need to be thinking about adapting the way we provide services to make them more resilient’. There were also some examples of the term being used to rename more traditional emergency planning/civil contingency functions and roles. In one local authority, the Emergency Planning Officer was renamed the Resilience Manager, in another, a Risk and Resilience Team was set up.

However, the majority of those interviewed still felt that resilience was not yet being effectively utilised within the context of climate change strategies and beyond. Partly this related to the overall priority given to climate change. One officer recognised that. ‘If something is not high on the Council’s agenda then it will not be strategically significant... at the moment climate change is not high up the list of priorities which means that resilience is unlikely to be’. While for another officer, resilience ‘is of little strategic significance because it is allied to the emergency planning agenda, which has little currency in the Council’. Others saw the lack of buy-in from some senior managers as undermining the wider resilience agenda,

‘In order for resilience to be taken seriously, you need to get your stakeholders to better understand climate change. Often heads of service or those who work in non-climate services do not understand the timeframes associated with climate change’.

Others pointed to the problem of engaging elected members: ‘I don’t think that Councillors are up to speed with the environment portfolio in the same way that officer’s are. I haven’t been able to use resilience in the past to my advantage with any local politicians’.

The relationship between strategic approaches to emergency planning and community risk, (as defined by the Local Resilience Forums) and local climate change adaptation approaches, remain a problem for a number of those interviewed. While there was a clear recognition of...
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the necessary (and significant) distinctions between the two areas, a number of respondents felt that reframing an issue as ‘resilience’ could be helpful in continuing to encourage a dialogue and enhance linkage between the emergency planning and climate change agendas. For one climate change officer, the debate on wider uses of the resilience framework with emergency planners hadn’t yet taken place, as ‘I have enough trouble getting them to understand the difference between mitigation and adaptation, let alone resilience’. For another,

‘The local resilience forum is run by blokes in uniforms and is not suitable at the moment for the wider resilience agenda...this requires a more corporate approach, different individuals, different skills. It might even require a completely different mindset’.

A small number of authorities had begun to try and link key documents such as Community Risk Registers and local Climate Change Adaptation Plans. In one area, climate change officers had, ‘used the community risk register when drawing up the Climate Change Action Plan’. Such a link was deemed ‘particularly useful when bidding for additional resources as ‘you can hang the bid on evidence from both documents’.

In general however, it was acknowledged that there was still a lack of strategic ‘fit’ between resilience forum documents and those produced within the wider climate change agenda. While a number of local Climate Change Adaption Plans at least highlighted the shared evidence-base with community risk strategies, and recognised the need to work more closely in the future with LRF’s, there are still problems in mainstreaming climate change impacts into community risk registers. Clearly, this - necessarily - reflects the distinctive statutory role of emergency planning and the strong national framework within which the profession has to operate. Thus, one emergency planner argued that, ‘since the National Community Risk Register doesn’t have to consider climate change - partly because it is considered a “long-term issue”, this means that LRF’s aren’t obliged to look at it’. Indeed, it is noticeable that in the three Community Risk Registers in the North East, there is only one mention of climate change, and this is in the context of blue-tongue disease amongst sheep and cattle. Another emergency planner confirmed that, ‘we tend not to pay attention to “climate change”, because it is not explicitly mentioned in community risk registers as compared to ‘extreme weather events’. The differences between emergency planning and climate change was also confirmed by one local authority manager, who noted that these were exacerbated by Council structures in which ‘people work in vertical silos, so you don’t get the kind of mobility which would help shape inter-departmental learning’.

While the necessary differences between the two areas are clear, it is also important for emergency planners to more fully understand the implications of climate change for their
work. This has been recognised by the Emergency Planning Society (EPS) in their 2009 report, Emergency Planning: Adapting to Climate Change, when they note that while Local Resilience Forums already plan for severe weather, ‘climate change projections suggest that in future LRFs may need to consider how the long term changes in climate will affect their capacity to respond... our understanding of how to adapt to climate change is still in the very early stages and much further work is needed’.

Some respondents noted that achieving more effective linkage between the two areas could be aided by the further development of a mutual understanding of the resilience framework.

According to one climate change officer,

‘Emergency planners don’t necessarily care about sustainability, climate change officers don’t necessarily care about fire and rescue, but everybody cares about resilience’.

3. Resilience and Local Communities

There is now a large body of evidence (particularly in North America and Australasia) on the crucial role played by communities in developing their own resilience in the face of environmental, economic and social ‘shocks’. Such accounts highlight the capacity of people to learn from their experiences and to consciously incorporate this learning into their interactions with the social and physical environment. They also acknowledge that people themselves are able to shape the trajectory of change and play a central role in the degree and type of impact caused by the change.

The extent to which communities should be involved in developing their own resilience has now become a feature of debates in the UK, with high levels of social capital and emotional resilience viewed as central to whether individuals or communities faced with crises either ‘sink or swim’. The focus has also widened to encompass developing community resilience in relation to emergencies with the Cabinet Office’s National Framework on Community Resilience highlighting the importance of both individual and community capacities to ‘adapt in order to sustain an acceptable level of function, structure, and identity’.

Involving communities in responding to environmental challenges - and civil emergencies - was identified as a key issue by the majority of those interviewed. On one level, many of the respondents felt that there were clear benefits in using the term resilience to engage with the general public on questions of climate change.
As one officer argued that

‘If you want to get someone’s attention, use resilience’. Resilience has a very strong impact as a word in a way that sustainability doesn’t, plus it has the old-fashioned connotations of community’.

For another, ‘one of the drawbacks with mitigation is that it is a void argument for Joe Public, they think “I’m only one person, what can I do?” but they might respond better to resilience, it can be made more personal and more achievable.’

On another level, the focus on community resilience was viewed as important in terms of further confirming the importance of a ‘bottom-up’ process of community involvement. Hence, ‘resilience cannot be imposed, it must come from below’. Several respondents also noted the important synergy between enhancing community resilience and other local engagement agendas such as neighbourhood management, climate change schools, and managing business continuity. For one emergency planner, the development of the community resilient agenda is important both to allow officers to ‘understand what communities can do for themselves’ and to ‘persuade communities that government cannot protect everyone’. While some officers believed that it was their job to engage directly with communities to advance their resilience, others thought that these activities would sit better within generic Community Engagement teams who were better skilled in disseminating information at this level.

A few respondents raised concerns that the link between communities and resilience has not been sufficiently well thought out in their authority. For one emergency planner, while the cabinet office community resilience framework is useful,

‘..there is still too much focus on the organisations who can deliver resilience and not enough being done to acknowledge that resilience starts with the individual...in the event of an emergency, the professionals still come in and push everyone else out’

In confirming the importance of the local level in responding to climate change, many of those interviewed were concerned about the major cuts planned for local government and the impact these would have on working with communities: ‘in the present economic context whose going to provide the resources needed to effect change’.
While, for one environmental officer, ‘there is a role for communities, but we are still a long way from getting them to help themselves’.

A good summary of the concerns expressed, was provided by one respondent who felt that,

‘...communities cannot be left to fend for themselves – local authorities still need to support them, manage problems and provide the resources. I am concerned that there are so many different definitions of community a ‘place’ – street, neighbourhood, locality etc – and this could lead to confusion. I am also concerned that since some communities have high levels of social capital or “natural resilience” this will be used as an excuse for government to step back and leave communities to tackle these problems on their own.’

WHAT DOES RESILIENCE HAVE TO OFFER?

In drawing upon evidence from a study of local resilience in relation to climate change approaches in the North East of England, it can be argued that there is a growing awareness of, and interest in, the term amongst those interviewed and a clear recognition that a focus on resilience could make an important contribution to local climate change responses. In contrast, a number of concerns were also raised that suggest the translation from academic literature into policy practice may prove problematic.

In assessing these issues, five particular areas can reviewed in more detail.

A Terminology for Managing in ‘Hard Times’?

While one of the strengths of resilience is its malleability, this may also be viewed as one of its limitations. As the research here illustrates, there is still some confusion over the term’s definition and the number of ways in which resilience is understood, and interpreted, by practitioners. Clearly, if the term is to be successfully mainstreamed across departments, service areas, and agencies, it requires at least a measure of agreement over what resilience is, and what it is not. This, in turn, is dependent on a more open and wide-ranging debate taking place within, and between, local authorities and other external stakeholders.

This study found clear signs that a debate is now taking place, and identifies areas where the use of the terminology can be taken further. For example, in an area where terms such as ‘climate change adaptation’ or ‘low carbon approaches’ have acted as barriers to public understanding and, to some extent, led to consumers switching-off when exhorted to reduce their own ‘ecological footprints’ the public use of resilience both offers an everyday term with generally positive connotations and places climate change within a more cohesive
agenda of individual and community actions in a period of uncertainty or crisis. As one respondent noted, ‘it conjures up a wartime spirit and draws a community together’. Applying resilience to local climate change policy also has the potential to link the adaptation and mitigation agendas.

A number of interview participants underscored the difficulty they had in making the distinction between these two approaches understood by their colleagues as well as the general public. If this difference is difficult to grasp, then perhaps there is room for an alternative concept which is more accessible and which translates more clearly across the policy agendas. There is also concern that addressing climate change requires a holistic approach which includes both adaptation and mitigation activities; as artificially dividing the two concepts makes it more difficult to address climate change in the most appropriate way.

**Local Resilience – Overcoming Organisational ‘Silos’**

While there was some shared understanding of ‘resilience as durability’, and a few signs of links being made between Community Risk Registers and Climate Change Adaptation Strategies, climate change and emergency planning officers in the study were still, to some extent, ‘divided by a common language’. Given this, a clearer, strategic focus on resilience could be used as a ‘lynchpin’ that can bring these areas together more effectively. Three illustrations can be provided.

One opportunity lies in a more joined-up approach to encouraging community resilience, which has emerged as a key feature of both climate change adaptation and emergency planning. As acknowledged in the recent National Strategic Framework on Community Resilience, ‘Resilience is also a key part of other kinds of community activity, for example the Transition Towns movement and the Greening Campaign where resilience is a longer term ambition for communities looking to adapt to climate change …social capital built through community resilience creates wider benefits for the community. Similarly, the benefits to the community of social capital are best demonstrated in the way in which a community copes during and after an emergency’.

This focus on the adaptive capacities of communities (rather than their vulnerabilities), on how communities can change, and on how they develop their own resilience, is important. Not only does this interpretation move emergency planning away from more ‘deterministic’ accounts which imply that a community as a whole either is or is not resilient, but also chimes with the interpretation of resilience found in many of the studies on wider social and environmental agendas. A shared understanding of the needs of ‘resilient’ communities
could underpin local activities across different service areas and allow a common focus on raising the community’s awareness and understanding of risk, stressing both civil emergencies and the necessary adaptations and behavioural changes required in relation to Co2 reductions.

Secondly, a focus on resilience can contribute to stronger links between emergency planning and climate change approaches in relation to a more holistic approaches to risk management. Emergency planning usually operates according to short to medium-term timescales – immediate relief following a flooding event, or actions that could be taken over the next 5 years to mitigate its effects in the future. Conversely, climate change is usually centred on the medium to long-term – looking ahead 20, 50, 100 years to possible climate impacts. By reframing debates on risk within the context of ‘resilience’, emergency planning and climate change officers may be able to reconcile some of the timescale-centred planning and risk-management differences which currently stymie greater joint working. For the Emergency Planning Society, there is scope ‘for LRFs to work with local authorities and other partners …to strengthen understanding of local risks from long-term climate change’

Finally, there is an opportunity to bring together emergency planners concerns with responding to the immediate effects of severe weather events, and climate change officer’s focus on the average weather in a locality over a thirty year period. There is already evidence that there are opportunities for joint-working through initiatives such as the Community Flood Partnerships. Furthermore, as part of the first UK Climate Change Risk Assessment, climate change officers and related stakeholders have identified a number of climate-induced risks to the North East, including changes in biodiversity, health and heat waves, river flooding and surface water flooding. Taking a resilient approach to climate change would thus involve a greater awareness of the inter-relationship between different professions both in terms of shared data and in bringing together short-term concerns with extreme weather events and more long-term considerations on long-term changes in the climate.

Adding Value to Existing Areas

Rather than create an additional resilience agenda, which (as several interviewees pointed out) runs the risk of further complicating an already congested policy landscape, there are opportunities of dovetail the focus on more creative approaches to climate change adaptation alongside existing approaches. This is important in relation to the work of the Local Resilience Forums where opportunities exist in relation to community resilience, understanding risk and the cause and effect of extreme weather events. Findings also suggested that the economic dimensions of resilience were also being examined in a number of local authorities, and that making links between climate change adaptation and
the changes needed to promote the low carbon economy would be beneficial. With the demise of RDAs (and their Integrated Regional Strategies), the onus now lies with the newly formed Local Enterprise Partnerships (LEPs). One of the earliest reviews of the business plans of 50 local bids to set up LEPs, found that the second most important local priority selected (and just behind Adult Skills) was the promotion of the low carbon economy. Evidence that the resilience banner could be both usefully employed to highlight concerns with the environmental impact of economic development, and to develop new creative approaches to economic development such as promoting local renewable energy businesses, advocating ‘food resilience’, and highlighting the importance of new forms of local ownership.

There are also opportunities to use the emerging resilience agenda to highlight the public health impacts of climate change and that local public health agencies are well placed to build human resilience to climate-related disasters. Connections can also be made with emergency planning as adverse health outcomes are also directly associated with extreme events. Bringing together the different components of a resilient approach to public health could be achieved through the role of Directors of Public Health on Local Resilience Forums and serve as one of the priorities for the new local Health and Well-Being Boards being created as part of the Coalition Government’s NHS reforms.

Resilience and Localism

A fourth characteristic of resilience which makes it worthy of further consideration is its particular relevance to debates at the local level. Indeed, for many the development of a resilient approach to climate change is premised on government providing support to let civil society flourish, promoting democratic accountability, and ‘creating new ways of gathering information that allows local government to take on board new ideas. Resilience also connects to current debates on Localism and the Big Society.

It is also clear that resilience is not something which can be imposed on an individual - or a community - rather it is something which needs to be established from the grassroots. This is not to say however, that government, both central and local, should take a ‘hands-off’ approach to fostering resilience. Resilient behaviours can be taught, best practice can be shared, initiatives funded, and vulnerable citizens protected.

From this perspective, striking an appropriate balance between central intervention and local autonomy will remain crucial to the effectiveness of adaptation at the local level. While providing a robust national framework (through the 2008 Climate Act and the Low Carbon Transition Plan) is vital, there must still be scope for local adaptation plans to reflect local problems and priorities. There are also wider issues of process in relation to how decisions
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about climate change to be made at the national, local and community levels, and equity: what are the implications for local autonomy and principles of territorial justice?

However, the outcome of the proposed rebalancing of central-local relations in the area of climate change remains uncertain. On the one hand, local authorities are faced with the abolition of National Indicator 188 (a process indicator which many councils used to embed the management of climate risks across the local authority and its partners), and the potential dismantling of regional climate change bodies, without, on the other, being given any clear ‘route map’ clarifying new opportunities in relation to local adaptation approaches.

There were also concerns that the abolition of Government Offices in the regions (and with it their coordinating role) will lead to increased fragmentation, and the lack of a joined-up approach, amongst the different government departments concerned with climate change. There were also concerns expressed that the demise of Regional Resilience Forums will also remove a necessary level of co-ordination and communication.

Measuring Resilience

In the context of both the withdrawal of NI 188, and the general concern amongst those interviewed that ‘resilience’ would be difficult to measure and assess, a focus on the term does introduce a wide range of indicator frameworks (from national and international experiences) that aim to capture and measure resilience. Such approaches cover a number of areas including economic resilience, organisational resilience and resilient communities (see Appendix 1).

One approach that usefully combines emergency planning and climate change approaches, brings together a shared interests in promoting and measuring levels of social capital, and locates resilience in a wider economic context, is that recently developed by Cutter et al (2010) in their study of ‘benchmarking’ disaster resilience in the South Eastern United States. In addition to defining five dimensions of resilience, and establishing over 30 composite indicators (see Figure 4), the approach also suggests an operational variable for each indicator and a relevant data source.

Given the recent reduction in the range of government targets and nationally defined indicators, and the political emphasis on localism, perhaps the local development of a suite of resilience indicators would enhance collaborative working and further promote the adaptation agenda?
CONCLUSIONS: KEY LESSONS

This study of how resilience is viewed by a range of climate change and emergency planning officers in the North East of England suggests that it is still early days: and that the ‘resilient turn’ is only just beginning to be felt across a range of UK public policies. The North East study captured a measure of uncertainty over the term’s exact meaning, a sceptical attitude to whether it was here to stay (or merely the latest buzzword), concerns whether resilience was always a good thing - if it merely led to the defence of the status quo? There were also tensions between the approach to resilience adopted by emergency planners and that adopted by climate change or sustainable development officers, and a general lack of a coherent strategic framework within which the different local dimensions of resilience could
be considered. The study was also conducted against a backdrop of public expenditure cuts and the re-organisation of sub-national governance, which contributed to a climate in which the more transformational view of resilience was less influential than the view of resilience in relation to recovery.

However, much of the research supports the contention that there is growing understanding amongst practitioners of the more positive features of the resilience agenda. A number of findings emerge in this context. These include: the added value of the term itself in a period of austerity; its ability to integrate (where useful) key features of climate change adaptation and emergency planning; and to act as a ‘strategic lynchpin’ in relation to other developing areas such as economic resilience. The agenda also chimes with the contemporary focus on localism and the Big Society and offers a range of frameworks through which to monitor and evaluate performance. In short, resilience is regarded positively as an approach which could help to develop a more strategic approach to tackling climate change, and which is naturally predisposed to working at a community level. Nor is there any need to ‘reinvent the wheel’, a number of complementary developments are already taking place at the local level upon which more strategic approaches to resilience can be introduced.

Building on the importance of flexibility and making the most of opportunities (even in a crisis), a number of steps can be highlighted that local authorities could take to advance the resilience agenda. These include:

- Using ‘resilience’ as an overarching strategic framework in terms of bringing together a range of relevant documents (such as Adaptation Plans, Risk Registers, Local Economic Assessments and Public Health Strategies) within one, local authority-wide, cross-departmental Local Resilience document. There were no such documents in existence in any of the Local Authorities in the North East at the time of the research, although a small number of individual climate change officers were campaigning for issues to be ‘reframed’ as resilience in some selected documents within their own authority. Drafting such a document would be an important first step in defining resilience for all officers in the authority and for mainstreaming the idea between departments. Above all, it would signal the importance of the agenda and make uptake more uniform across policy domains and across local authorities. It would also help overcome the problem - widely acknowledged in the resilience literature - of organisational silos.

- The focus on resilient communities could also help shape local authorities’ Community Involvement Strategies. Such a development would recognise that while resilience must be built from below, support from local government is also vital. In
addition to outlining community needs and mechanisms of involvement, a focus on resilience would involve capturing the areas in which the focus on resilient communities would be most useful. These include involvement in short-term emergency planning responses and climate-related weather events, and more medium to long-term issues such as the sustainable use and reuse of resources, economies that circulate wealth and opportunities locally, community control of essential resources, and community empowerment in public decision-making.

- The Local Resilience Forums which already exist across the North East are an excellent resource, but given their statutory basis, they currently concentrate their focus on the emergency planning aspects of resilience. It would be advantageous for the Forums to include a wider contribution from other policy officers such as climate change or sustainable development officers, in order that they might take a broader approach to risk and to share ideas for encouraging a resilient approach. There might also be scope, at the national level, for reviewing the basis of the distinction between ‘Category 1’ and ‘Category 2’ local members, as defined under the 2004 Civil Contingencies Act. A more holistic approach to training and professional development would also serve to break down barriers, and provide opportunities to examine the relationship between resilience and the ‘4Rs’ commonly used in civil defence emergency management, namely: Reduction; Readiness; Response; and Recovery.

- Given the dismantling of the regional level of governance, and the resulting uncertainty over the future of regional climate change bodies (and the Regional Resilience Forms), it is important that local authorities are able to maintain mechanisms for collaborating on climate change initiatives across a wider spatial area. While there are good opportunities to cooperate on a ‘low carbon’ approach to economic development via the LEPS, this is still too narrow a focus for effective climate change adaptation. In this context, local authorities may wish to consider further developing specialist sub-regional networks that mirror the LEPs or even consider the development of more informal regional resilience and adaptation networks.

- Being able to define, monitor and evaluate the extent of local resilience will be central to ensuring public awareness, achieving political buy-in from Councillors, maximising access to funding opportunities and enabling synergies between contemporary policy initiatives. While public agencies in the UK have been relatively
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slow to develop an understanding of resilience, there are a number of resilience frameworks, index’s and ‘toolkits’ currently used by a number of national and international organisations and communities which (since they cover a range of applications) can, at least, facilitate discussion of the key arguments contained in this report (see Appendix 1).

In conclusion, the research presented here represents a first step in generating data about the relevance of a resilient approach in the current political and economic climate. It is also an attempt to ‘reframe’ resilience by extending the understanding of resilience beyond the traditional disaster management and emergency-planning interpretations to encompass a more holistic and integrated approach to climate change adaptation. The study also recognises that while the resilience debate is open to a number of interpretations, including narratives of uncertainty, vulnerability and anxiety, it is also important to examine narratives of hope, adaptation and transformation. Thus, viewing resilience as comprising ‘ordinary’, rather than ‘extraordinary’ processes, offers a more positive outlook on human development and adaptation.

Although not without its challenges, this report would contend that, in the area of local climate change, resilience is a useful concept; that it is able to facilitate better policymaking, offer a more strategic approach to managing risk, and serve to enhance the role of local communities in developing their own resilience.

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## Appendix 1: Resilience Toolkits


