



## **Briefing paper**

### **Workshop 1: Community Resilience to Extreme Events**

#### **Purpose of this briefing paper**

This briefing paper has been produced to provide workshop participants, and those with an interest in the topic but unable to attend, with an overview of our research project. The briefing paper also serves to provide some starting points for discussion. We have written this paper with a focus on academic definitions and explorations, given our academic backgrounds, but are acutely aware that this is our biased position. Hence, we would welcome comments and discussion at the workshop and beyond about these topics and how we can make positive progress towards building community resilience to extreme events that is open and inclusive to inputs from a variety of voices. While academics can be guiltier than most for focusing on definitions and theories, we feel this is an important starting point for the network.

#### **Introduction to workshop and research project**

In this workshop, we aim to explore current understanding of, and engagement with, community resilience in the face of extreme events. The workshop will bring together community members, resilience practitioners, policy-makers and researchers in order to begin conversations about how build a movement that develops community resilience.

This workshop is part of a research project called 'Building a Movement: Community Development and Community Resilience in Response to Extreme Events' that forms part of the work of the University of Stirling's Extreme Events in Science and Society research programme, and is funded by the National Centre for Resilience. Whilst 'community resilience' is a topic that has been at the forefront of recent Scottish Government strategy and policy, there remains a gap in identifying what community resilience is currently enacted (particularly in Scotland), and how such experiences can be used to encourage further development of community resilience. This research project aims to address this gap. We believe creating a network of people interested in community resilience will be the first step in building and feeding into a movement(s) around creating a fairer, healthier and more ecologically sustainable Scotland.

#### **Research Team**

- Dr Sandra Engstrom, Lecturer in Social Work, University of Stirling (<https://www.stir.ac.uk/people/257512>)
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#### **Policy context**

Community resilience is currently a topic of considerable political and policy relevance. For example, the Community Empowerment (Scotland) Act 2015 aims to give community bodies greater ownership or control of land and buildings, and to strengthen their voices in decisions relating to public services. It builds upon the Land Reform (Scotland) Act 2003 by extending the Community Right to Buy to include urban as well as rural communities, and by giving Scottish Ministers new powers to compel owners of land deemed "abandoned" or "neglected" to sell this land to interested community groups. Meanwhile, the Scottish Government's Resilient Communities Strategic Framework and Delivery Plan for 2017 – 2021 is an initiative aiming to create "communities that are



inclusive, empowered, resilient and safe". Among its strategic aims are to empower communities to address any resilience issues that affect them, enabling them to take measures to "prevent, prepare for, respond to and recover from emergencies, in a way that complements the work of the emergency responders". Glasgow (along with Belfast, Bristol, Manchester and London) is also currently one of the 100 Resilient Cities initiative, set up by the Rockefeller Foundation to support cities around the world to become more resilient to the physical, social and economic challenges that are a growing part of the 21st century (see <https://www.100resilientcities.org/>).

## **Who are the Extreme Events in Science and Society group?**

'Extreme Events in Science and Society' (<https://extremeevents.stir.ac.uk/>) is one of twelve over-arching research programmes at the University of Stirling, bringing together researchers from across the University to conduct interdisciplinary research. Extreme events can range from bereavement to flooding; disease to social unrest. We research how societies and ecosystems might better respond to extreme events and prepare for the unexpected. We seek to enhance resilience at all levels, from societal to individual, and thereby influence policy. By enhancing resilience, those affected by extreme events are better able to cope; communities are given a voice; and risk and vulnerability on local, national and global scales are reduced.

## **What is the NCR?**

This project is funded by the National Centre for Resilience (NCR) – a partnership organisation led by a steering group of resilience experts that aims to build Scotland's resilience to natural hazards such as flooding and landslides (<https://www.gla.ac.uk/research/az/ncr/>). The NCR is funded by the Scottish Government and Scottish Funding Council, and hosted by the University of Glasgow. The Centre aims to improve understanding of the impact of natural hazards and provide support to responders and communities, including practical tool kits and resources for those who operate on the ground. It also aims to develop co-operation between practitioners, academia and policy-makers, in order to inform better practice in dealing with extreme events. Workshops such as this are an important means of addressing these aims.



## **What do we mean by 'extreme events'?**

Searching academic databases for the phrase 'extreme events' reveals that the majority of academic literature in this area focuses on weather or climatic events, and/or natural disasters such as storms, floods and earthquakes. Such events are also the primary focus of the NCR. The Extreme Events in Science and Society Research Programme, however, keeps the definition more open. For example, the term is also used in at least one article to refer to the rise of extremism in a given area (Ryan et al 2018). To us, extreme events might also include disease outbreaks, social unrest, or events leading to a serious economic downturn. Being open-minded to a wide-ranging definition of extreme events is a key component of our programme's research and we will explore this with the group at this workshop.

## **What do we mean by 'community resilience'?**

Community resilience is a vast topic in academic research, with a search for the term on academic databases returning over 1.7 million results. Inevitably, across such a range of articles and academic disciplines, there are many different ways in which the term 'community resilience' is defined and

understood. Even the separate words ‘community’ and ‘resilience’ are difficult to define with any precision. Below, we first explore interpretations of each of these terms with reference to literature on community resilience.

### **Community:**

While common sense definitions of community often focus purely on geographical location, an increasingly interconnected world gives rise to a number of alternative understandings of the term. Cinderby et al (2014), for example, point out that communities are increasingly virtual and physically dispersed (p.51), often consisting instead of a ‘social network’ that extends beyond a given geographical area (Jones et al 2010). The term community has long been used to refer to those connected by similar interests and affiliations that cut across multiple areas. For example, as Johnston et al (2000, p.101) point out, ethnic groups within the UK are often referred to as ‘communities’, regardless of whether or not they live in the same immediate locale.

In relation to community resilience, Ntonis et al (2018) identify three types of communities, other than those pertaining purely to geographical location:

- **Communities of interest:** groups within a geographical area, or across multiple areas, with similar affiliations.
- **Communities of circumstance:** communities that are based on people’s shared experience of a common adverse incident.
- **Communities of supporters:** communities that are based on groups of volunteers within organizations.

Importantly, Ntonis et al (2018) point out that geographical communities tend to be the main targets of community resilience initiatives, with no specific guidelines given to the other types of communities listed above. They argue that this lack of guidelines amounts to a considerable shortcoming, since the emergence of communities of ‘interest’, ‘circumstance’ and ‘supporters’ is common in the aftermath of extreme events.

### **Resilience:**

Following Magis (2007), Cinderby et al (2014, p.51) provide a succinct definition of resilience based on themes cutting across numerous studies: the “capability of individuals or systems (such as families, groups, and communities) to cope successfully in the face of significant adversity and risk” (see also Lyons et al., 1998). Southwick et al (2014), referring to a panel event in which various experts offered their views on the meaning of ‘resilience’, also point to *adversity* as a key theme cutting across definitions – again, this refers to the ability of both individuals and/or communities to remain positively functioning following adverse events. Importantly, then, resilience operates at different levels – including the individual and the community. Ryan et al (2018) explore the links between resilience at different levels, and find that “there is no empirical evidence to suggest that individual resilience alone predicts community resilience and in turn national resilience” (p.673). Community resilience, then, cannot simply refer to a collection of resilient individuals, but instead encompasses more complex sets of relations cross-cutting these different levels.

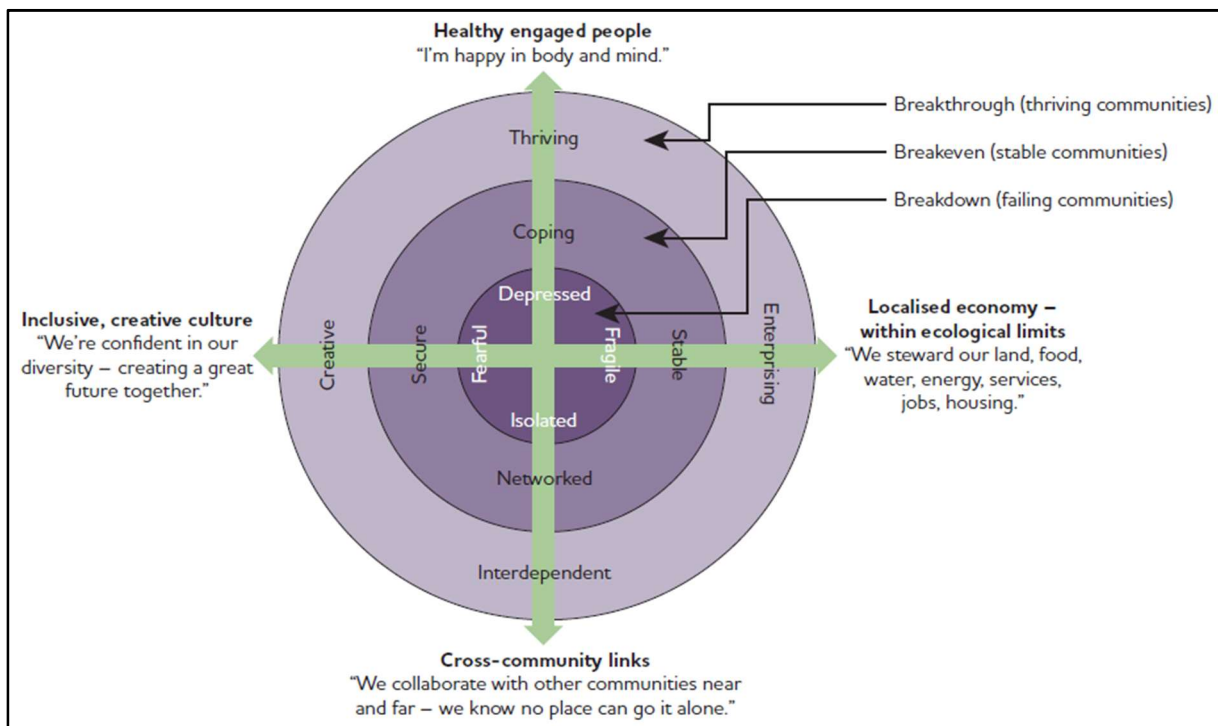
Olsson et al (2015) offer a cautionary note with regard to the use of the term ‘resilience’. Resilience, they contend, is a term more associated with the natural sciences – for example, to refer to the capacity of ecosystems to respond to climate change. When used in the social sciences, however, key ideas such as agency, knowledge and power are often not taken into account, meaning that the term “can become... a depoliticizing or naturalizing scientific concept or metaphor when used by political actors” (p.9).

**Community resilience:**

Patel et al (2017) recently investigated the definitions of ‘community resilience’ in eighty relevant research papers, and found no evidence of a common, agreed definition. The term community resilience, they contend, is used and understood differently in different areas of research. Wilding (2011) found a similar lack of consensus with regard to the definition of community resilience, but argues that this could be a good thing, since it gives local people the opportunity to decide what it means in their particular context. Meanwhile, as Usher-Pines et al (2013) contend, discussions around the definition of community resilience, while important, nonetheless carry the potential to distract from the task at hand – that is, to better prepare communities to respond to and recover from extreme events.

**Building blocks of community resilience**

In-keeping with Usher-Pines et al’s (2013) contention above, academic literature has recently moved away from developing a one-size-fits-all definition of community resilience, to instead identify the common elements that *make* a community resilient (Kirkpatrick 2019). To this end, Patel et al (2017) identify nine core elements of community resilience that were common across the studies they reviewed: local knowledge; community networks and relationships; communication; health; governance and leadership; resources; economic investment; preparedness; and mental outlook. Wilding (2011), meanwhile, has developed a framework that proposes four key characteristics (or dimensions) of communities that are becoming more resilient. These are visualised below, and include healthy and engaged people; an inclusive culture creating a positive sense of place; a localising economy; and strong links to other places and communities.

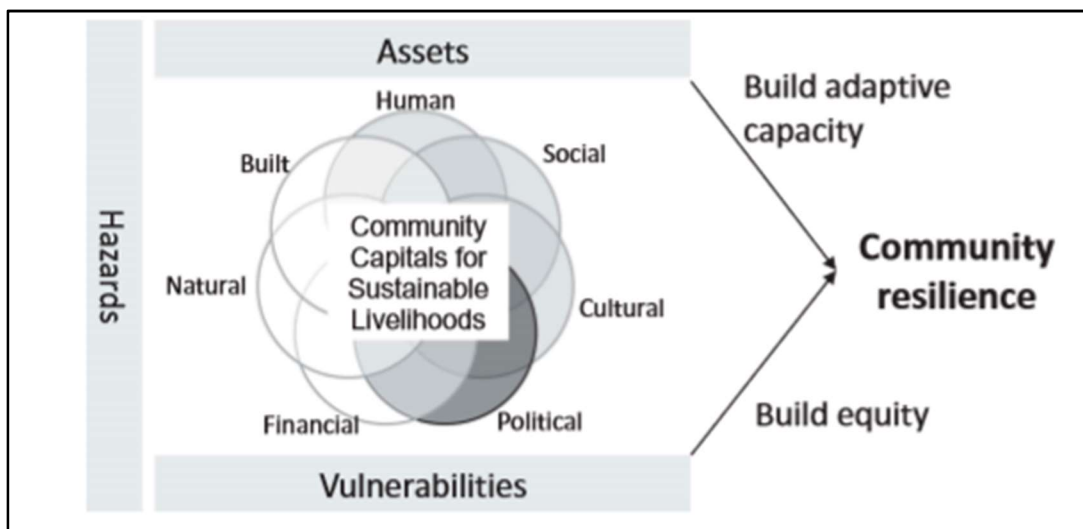


**Compass visualisation of the different axes of community resilience (Cinderby et al, 2014, adapted from Wilding 2011)**

Other frameworks used to identify aspects of a community's 'resilience' include the USAID resilience framework, as discussed by Haggard et al (2019). As explained by these authors, a resilient community, according to this framework, is one that can achieve as a minimum the following four outcomes in the face of ongoing "shocks and stressors" (p.1):

- Adequate nutrition
- Food security
- Economic security
- Ecological sustainability (see also Frankenberger et al 2013)

Cafer et al (2019, p.1), however, point to limitations of this framework, namely, that a focus on these four outcomes "ignores other important system-level capacities". They instead develop a formula for determining a community's level of resilience that takes into account the number of systems in a given community that are addressing resilience, the number of assets available to these systems, and the number of hazards for which community systems have prepared (pp.7/10). This "community resilience framework" is depicted below.



Cafer et al's (2019) community resilience framework

### **Social capital and beyond**

Researchers have also drawn upon existing social theories to try to determine the features that make 'resilient communities'. One theory used in several studies is that of 'social capital'. This idea was originally developed by French sociologist Pierre Bourdieu (e.g., 1980, 1986), and with regard to community, developed by Robert Putnam (2000) in a study of the decline of community in the USA. Social capital includes the following forms of 'capital' (Wilding 2011):

- **Bonding capital:** close ties between people going through similar situations, e.g. family, close friends.
- **Bridging capital:** looser ties to similar people – e.g., online.
- **Linking capital:** ability of groups to access resources from beyond their immediate community. Ensures that people with different levels of power and status meet and learn from one another.

Aldrich (2012) argues that after an extreme event, high levels of the social capital are key to a community's recovery – more important, in fact, than factors such as the community's socioeconomic status, or the amount of aid received. Poortinga (2012, p.286), meanwhile, also



points to the importance of “bonding and bridging social cohesion, civic participation, heterogeneous socio-economic relationships, and political efficacy and trust” for community health.

Cinderby et al (2014) and Poortinga (2012) expand the focus on ‘capitals’ beyond social capital, instead pointing to five ‘capitals’ which have “relevance to identifying options to improve community resilience and sustainability in the face of climate change impacts” (Cinderby et al 2014, p.52). Healthy and resilient neighbourhoods, they contend, often have a balance of all of these forms of capital. It should also be noted that Cafer et al (2019), cited above, similarly point to the existence of different “capitals” when setting out their community resilience framework. These capitals are:

- **human capital** (e.g., ‘skills and education’)
- **social capital** (see above)
- **built capital** (e.g. access to amenities)
- **natural capital** (e.g. access to green space)
- **economic capital** (e.g. income, savings or government grants).

### **Process or outcome?**

Importantly, several researchers in this field argue that regardless of the definitions or frameworks applied in the studies cited above, community resilience ought to be seen as a process, rather than an ‘outcome’ – that is, it is never a static entity that can necessarily be ‘achieved’ (Norris et al 2008, Ntonis et al 2018). Rather, it is a continuous process of adaptation, and development/ maintenance of the key features that would mean greater resilience in the face of an extreme event.

### **Summary**

In this briefing paper, we have aimed to provide an introduction to the upcoming workshop, and its accompanying research project, ‘Building a Movement: Community Development and Community Resilience in Response to Extreme Events’. As well as outlining the recent policy context, we have introduced the debates and discussion surrounding the definition, and/or key characteristics, of community resilience. Since this is a current and emerging area of research, there is a need to further develop understanding of what makes a community resilient, how to determine a community’s level of resilience, and how to ensure that this resilience continues to be built. We are therefore aiming to build a network that brings together the key voices in this discussion. We recognise that academics are only part of this discussion, and that the voices of policy makers, resilience practitioners and community members are of equal, if not greater, importance. This workshop is a first step towards achieving this aim.



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