Abbreviated Dissertation Results

This paper is a shortened version of a Master's Dissertation done by Ellen S. Lewis, the University of Edinburgh School of GeoScience in 2013. Although this paper explains the major findings of this research, the full dissertation paper further discusses:

- Supporting literature and theory,
- The methods employed in this research,
- Results including information from interviews and risk analysis,
- Limitations of the research methods,
- Recommendations for future research and
- References

For further information on this research, or for the full dissertation, please contact Ellen S. Lewis at lewis.ellens@gmail.com. Thank you!

INTRODUCTION

The Scottish Government and the larger international development field has emphasised the importance of building strong, resilient, supportive communities. Yet, there is a lack of understanding on how resilience within our communities is built, and how to measure it. This paper aims to explore how local land and natural resource management organisations in Scotland help to build community resilience through their projects, programmes, aims and goals.

For the purpose of this research, resilience is defined as "the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change" (Adger 2000; 347). The three factors that weave into resilience are risks we face, our vulnerability to risks and our ability to adapt. A resilient community is considered one that takes action to improve, to influence decisions, and to respond to change.

METHODS

Community resilience is something that is not easy measure. However, one tool that is often used is the "capitals framework". The capitals framework is a way to identify and group resources within a community. For example, "natural capital" could be any resource that adds to a community's stock of natural resources such as minerals or clean water. High levels of capitals generally mean there is a high level of community resilience. Although all capitals are important, one capital that is most often used in understanding community resilience is "social capital." Social Capital is the amount of resources a community has to share knowledge and ideas (Pretty 2004). Since resilience is the ability to cope; Social Capital can be used to measure resilience as it relates to a community's ability to pull together, anticipate changes and respond to them.

"Social Capital" is most often measured through community driven surveys that ask respondents to report on their personal wellbeing and confidence in social relationships. In this study, information from UK wide surveys was put together to measure levels of Social Capital within the UK. These same surveys were then filled out by residents in three towns that have community owned land and natural resource management organisations. The following pages show the results from these surveys. It was found that residents in the three towns with local land and natural resource organisations showed higher levels of Social Capital than the results of the UK wide survey as a whole.

RESULTS

There were 61 respondents to the Community Survey coming from three communities (21 North Harris, 18 North West Mull, 20 Fintry and 2 Undefined). The survey questions that were used in this project fall under 9 categories that are used to measure "social capital." They can be found in the figure below.

Social Capital Indicators		
Social Trust	Community Involvement	Common Purpose
Institutional Involvement	Cooperation	Satisfaction
Giving / Volunteering	Negotiation	View of local area

Social Trust:

It was found that Social Trust levels were over 40% higher in the three communities with land and natural resource management organisations than respondents to the UK wide survey.

Feelings on Trust		
Answer:	UK Wide Survey	Community Survey
Most people can be trusted	36.9% (6240)	79.7% (47)
Can't be too careful in dealing with people	50.6% (8557)	16.9% (10)

Institutional Involvement:

Respondents answered as to whether they had done anything in the past few years to register what they personally thought about an issue, such a contact a government official. The table to the right highlights the higher levels of institutional involvement found in the Community Survey.

Register what they thought about an issue		
Answer:	UK Wide Survey	Community Survey
No, I have not	74.8% (1158)	8.1% (5)
Yes, I have	25.2% (391)	91.8% (56)

Giving/ volunteering

The results show that respondents to the Community Survey volunteered over 40% more than respondents to the UK Wide Survey, as seen in the table to the right.

Volunteer work in the past year		
Answer	UK Wide Surveys	Community Survey
Yes	20.9% (1406)	67.3% (35)
No	78.9% (5314)	33.7% (17)

Community Involvement

Outside of volunteer work, respondents answered whether they were involved in groups, clubs or organisations in the last 12 months. The table to the right shows that Community Survey Respondents show involvement rates over 30% higher.

| Involvement in clubs or organisations in the past year		
Answer	UK Wide Survey	Community Survey
Yes	48.9% (8295)	86.8% (53)
No	51.1% (8671)	13.1% (8)

Cooperation:

Responds were asked "To what extent would you agree or, disagree, that people in this neighbourhood pull together to improve the neighbourhood?" The table to the right shows the more positive outlook of Community Survey Respondents.

People pull together to improve the neighbourhood		
Answer:	UK Wide Survey	Community Survey
Definitely Agree	19.7% (3038)	25.9% (15)
Tend to Agree	48.9% (7513)	56.9% (33)
Tend to Disagree	21.8% (3351)	8.6% (5)
Definitely Disagree	6.9% (1471)	3.4% (2)

Just too Difficult to do Anything in my Local Area


Negotiation:
Respondents were asked to respond to the statement: 'It is just too difficult for someone like me to do much about improving my local area." The figure to the right demonstrates the more positive outlook of the respondents from the Community Survey than the UK wide survey.

How important is it to be able to influence decisions
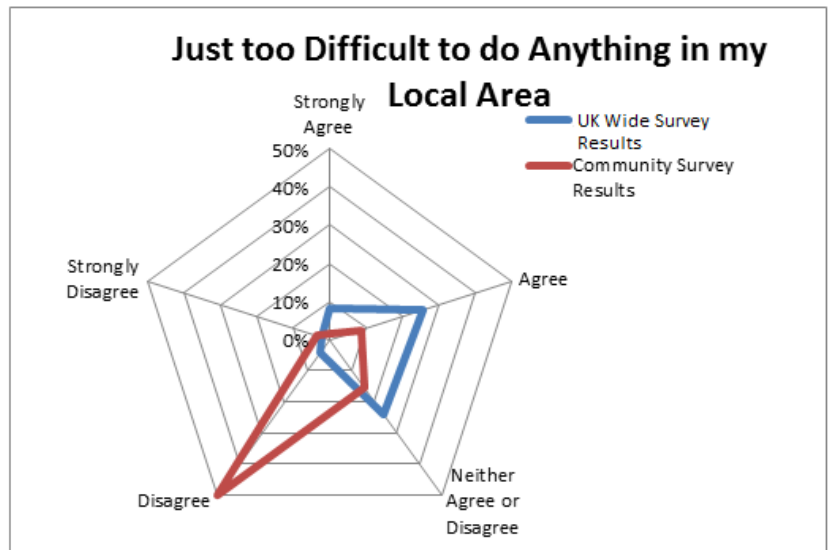
Common Purpose:
The question that was used to identify common purpose was: "How important is it to be able to influence decisions." The results for this question were found to be fairly similar between both surveys figure to the right demonstrates.
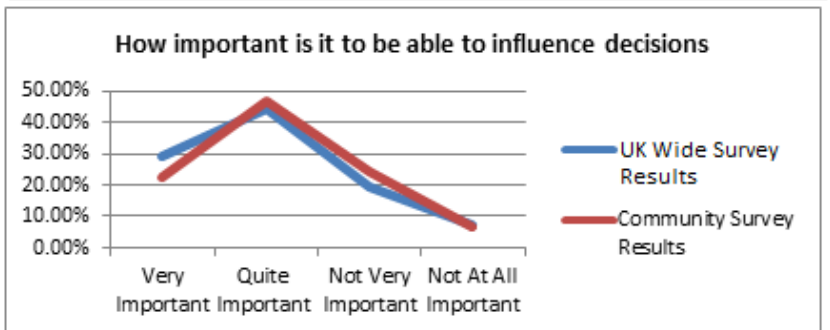
Satisfaction:
The figures below demonstrate that almost 50% of community respondents identified that they were 'very satisfied' with the local area they live. The UK Wide Survey showed that although the majority of people were satisfied with their local area, the curve was much less steep than the results in the Community Survey.

UK Wide Survey Results

Community Survey Results

Connection to local area
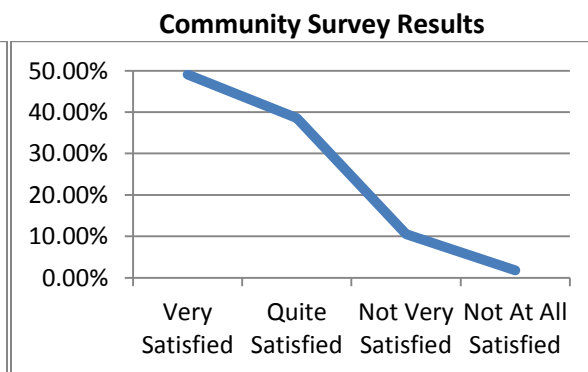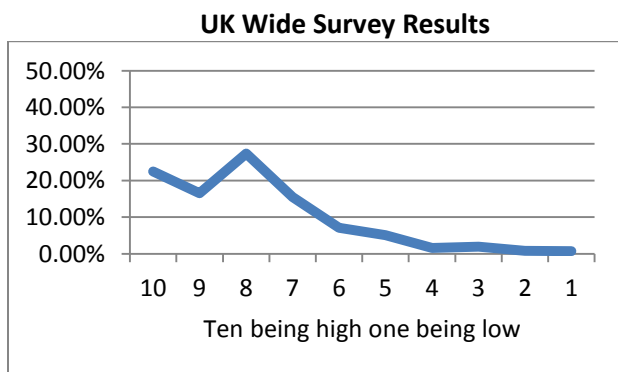
View of Local Area
The results for how strongly respondents felt they were connected to their local area were found to be fairly similar between the two survey groups, as shown in the figure to the right.
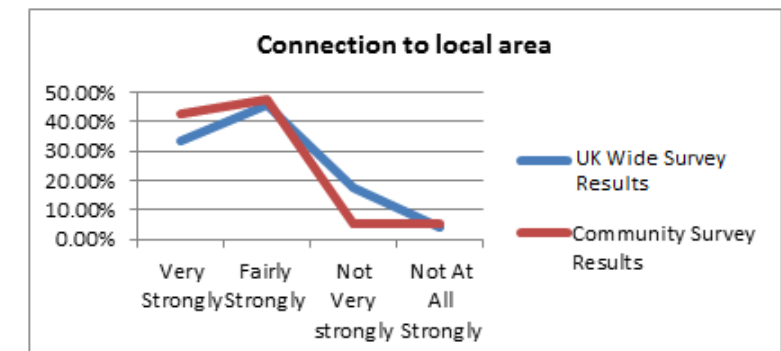
DISCUSSION
The results of this study show that respondents from several communities with local land and natural resource management organisations have, over all, higher levels of Social Capital than respondents from general UK/Scotland surveys.

To understand how local land and natural resource management organisations develop community resilience, we must return to the definition of resilience: "the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change." The results reflect that community resilience is built in three major ways:

1: Organisations build Social Capital by increasing the number relationships: Social Capital is based on the amount of resource a community has to share knowledge and ideas. The organisations within these communities provide a space for Social Capital to grow. Social Capital is created when relationships between people, organisations and institutions are built. The amount of projects, partners and people who are involved in the organisations can directly relate to higher levels of Social Capital. For example, tools of networking between groups increases knowledge base, experience sharing and information. Groups and individuals who might not have otherwise met can council on issues. These factors help to address problems, anticipate risks, gather support and ultimately, build more resilient communities.

2: Organisations provide a place for people to practice relationships: Practicing relationships is an important factor in creating community resilience. For example, negotiation, participation and cooperation are all important components of building healthy relationships. It is believed that "if communities are organized only in times of crisis… it is unlikely that they will want to cooperate with a bureaucracy at that time" (Gunderson 2002; 165). However, if communities practice their relationships, they are more likely to respond quickly to stresses. For example, direct involvement of community members who might not have worked together before come together and creating working relationships within the structure of the organisations.

3: Local decision making within the organisations allows for flexible governance: Rather than large scale government decisions on resource management, these organisations help provide for flexibility to maintain their own goals, agendas and projects. This means that they are able to internalize information, and anticipate and respond to changes in their systems. For example, community review and input can be fed directly into the organization and allow for changes based on local needs. Since resilience relates to the ability to cope with change, this level of local governance can increase community resilience.

CONCLUSION:
The results of this study show that Local Land and Natural Resource Management Organisations help to build community resilience. With the Scottish Government's emphasis on "strong, resilient and supportive communities," local land and natural resource management organisations should be recognised for the positive effects and potential they have to build and sustain community resilience (Scottish Government 2012, "Strategic Objectives).