

Interdisciplinary exchanges

HOSTED BY THE UNIVERSITIES OF SHEFFIELD, NEWCASTLE AND LEEDS

In September, Interdisciplinary Exchanges held its third workshop, hosted by the University of Leeds, which focused on the issue of local adaptation to climate change. Here we review the main themes and debates that emerged from this workshop.

Workshop Speakers:

Jami Dixon University of Leeds, *'Discourses on Obstacles to Adaptation and Disciplinary Perspectives'*

Katharine Vincent, University of Witwatersrand & Kulima Integrated Development Solutions, *'Local level adaptation planning in Malawi and challenges across sub-Saharan Africa'*

Martin Rokitzki, Oxfam GB, *'NGO Perspectives on Local Adaptation Challenges and Research Needs'*

Local Adaptation to Climate Change

Adaptation to climate change has been widely discussed in recent weeks, particularly at the UN Climate Summit in New York, where US\$18 billion was pledged to help the global South meet the challenges of mitigation and adaptation.



www.un.org/climatechange/summit

Climate smart agriculture and resilience were also major themes at the summit, and many of the issues discussed at the workshop were high profile at the event, including the role and availability of appropriate weather and climate data to assist farmers in decision-making. Our

discussions often emphasised the complexities and difficulties of such an approach, however: scientific knowledge is often not well integrated with local knowledge of particular landscapes and experiences; communicating knowledge with the local level is often inefficient and hampered by bureaucratic procedures and timescales

"Sometimes we produce too much data and not enough knowledge"

Whilst global level commitments highlight the growing awareness and emphasis placed on adaptation to climate change, our speakers and participants at the workshop were particularly interested in how such strategies can be put in to practice, how local level actors will participate, and the required institutional arrangements to facilitate

successful adaptation in planning.

We also addressed questions about how our own research can cross the implementation divide and, as one of our speakers, Martin Rokitzki, said:

"We often talk about the science-policy interface, but we need to think more about science-practice interface because this is key to implementation"

The difficulties we face in researching and supporting implementation in practice, however, often come back to a fundamental lack of clarity over how we understand the issue which, for example, inhibits synthesis in research and hinders the creation of co-ordinated strategies between local people, governments and NGO partners.

Understanding Adaptation

Long seen as the poor relation to climate change mitigation, the rising emphasis and perceived importance of climate change adaptation conceals a complex topic. There is considerable lack of clarity around the idea, and multiple terms used interchangeably in its discussion.

At the workshop our speaker, Jami Dixon, outlined this theme, which became a key topic throughout the day. It is vital to recognise that adaptation can be positive or negative, driven by pressure or opportunity, can include short term strategies or long term transformations, be anticipatory or reactive and autonomous or planned, and can be conceptualised as an outcome or as a process. Whilst transformation is often seen as the ultimate goal of adaptation, and preferable to ‘coping’ strategies, there is still considerable uncertainty about how to achieve this.

In addition to the myriad aspects of adaptation, academic literature is often case study based, locally specific and there are limited comparisons or synthesis, making recommendations and findings difficult to scale up. We discussed options for addressing this complexity and bringing further clarity to adaptation research, including:

- Classifying adaptation strategies according to success of failure
- Conceptualising adaptation according to

Implementing Adaptation

Two of our workshop speakers, Katharine Vincent and Martin Rokitzki, brought a practitioner perspective to our discussions. Katharine discussed an example of a project working to capitalise on commitment to adaptation strategies by integrating it into planning processes in Malawi, whilst Martin addressed the problems of making research useful for practitioners and local communities.

It is important to note that adaptation does not only take place through specific projects, or through adoption into policy, but often constitutes actions already taking place by local people. The challenge is to find ways to support these activities both locally and in planning and policy processes. Obstacles to the successful integration of adaptation into development planning often include a lack of technical capacity, lack of political will, inadequate policy frameworks, poor inter-sectoral co-ordination and competing priorities and limited financial resources. Furthermore, there is often a fundamental lack of data to measure or monitor activities and their success, and a mismatch between the timescales of adaptation strategies, donor support and policy

different types of adaptive elements

- Analysing adaptation according to the scale and timing of the intervention
- Utilising a framework that considers obstacles to adaptation in terms of barriers, constraints and limits.

This led to much discussion around the utility of frameworks, and how they can be used to generate plans for action. Whilst frameworks are useful for communicating ideas across multiple contexts, they must avoid being reductionist, for example by encouraging us to look at things in isolation, which can ultimately lead to maladaptation. We also conclude that it is vital not to conceptualise adaptation only according to negative aspects, but to recognise the opportunities within adaptation. In planning for adaptation, it is also vital to recognise that such actions take place within complex socio-political-economic contexts and imperfect knowledge, and that these are not driven purely by economics or decisions made purely on the basis of climatic factors.



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implementation. Many countries are also hampered in their efforts by rigid planning structures inherited from colonial powers that do not facilitate inter-sectoral communication or easily integrate unfamiliar sources of information on adaptation, such as participatory techniques and scenario planning. Overcoming these challenges, and finding successful ways to initiate longer-term planning for climate change adaptation remain key challenges.

Partly this longer term planning needs to address the information that is used to create strategies for adaptation, including building capacity and access to employ longer-term climatic data, trends and forecasts into decision-making. However, it also requires further recognition of the past experiences and potentially valuable knowledges of those experiencing climate change, and the central role that local actors can and should play in planning for adaptation.

“All adaptation should be development, but not all development is adaptation”

We must also recognise that the priorities and actions of local people ‘on the front line’ represent a context of vulnerability, in which climate is just one aspect.

Going Forward with Adaptation: Priorities and Questions

Conceptual Challenges

Through the workshop, we recognised that, as a minimum, researchers should make clear the conceptualisation and classifications we use in our discussions on the topic. There may be no easy way to categorise adaptation, or a single framework that can be applied to enhance synthesis and comparison, but clarity around the way terms are used and the framings that are employed is urgently required. This clarification should specifically include:

- Whether adaptation is being discussed as a learning process or an end result
- The scope and scale of adaptation being examined (the actors involved, geographical extent and timescale)

Practice-Orientated Research

In trying to orientate our research on adaptation to have practical use and meet the needs of local people, there are three key challenges we face:

1. There is a mismatch between science and practice needs, and what is valued on each side. This is especially true in the way questions about adaptation are framed and issues are understood. Whilst scientists and academics often focus on the specifics, practitioners are often searching for more generalised answers to broader issues.

2. Co-producing knowledge with local communities should be a priority for adaptation research and practice. This should work specifically to acknowledge and integrate other forms of knowledge and priorities into the adaptation agenda.
3. Researchers need to embrace this co-production and to align our priorities in research towards the needs and priorities of end users. Channelling our efforts in this way, poses problems for successfully contributing to the impact agenda for research, whilst also meeting the requirements of academic outputs, for example through journal publications.

Research Questions:

- It is often assumed that repeated coping is more expensive and less effective than anticipatory adapt, but is this true?
- What is the optimal balance between reactive and anticipatory approaches to adaptation?
- Which is more successful, to integrate adaptation into development planning at local level or to enable community-based adaptation?
 - What are the factors that determine this?
 - Can the two strategies be effectively combined?

All quotes are from workshop participants, unless otherwise stated.

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Workshops in the series:

Community-based natural resource management (Jan 2014, Sheffield)

Food security, poverty and biodiversity (April 2014, Newcastle)

Local adaptations to climate change (Leeds, September 2014)

Payment for Ecosystem Services (Leeds, January 2015)

Natural resources and environmental conflicts (Sheffield, March 2015)

Final review and strategic planning (Location tbc, July 2015)

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