

## **Adaptation to Climate Change and Social Sciences Workshop Loughborough University, 28<sup>th</sup> February 2013**

### **Purpose**

To develop a shared understanding of the lessons learned from the social science aspects of the ARCC (Adaptation & Resilience in a Changing Climate) projects and related environmental areas; to establish links and synergies to enhance project outputs (including future work); to explore the development of relevant data sets; and to initiate possible coordinated knowledge exchange.

### **Objectives**

- to explore current methodological & subject issues, including the identification and use of language issues (e.g. do stakeholders have a commonly understood vocabulary)
- to explore current practice from related environmental domains (energy, water, waste, transport, etc)
- a discussion of data issues
- exploration of future methodological & research challenges
- identify the potential for the development of research collaborations
- outline next steps

### **Item 1 – Attendees (ARCC project in brackets)**

Stewart Barr – Exeter University  
Stuart Capstick – Cardiff University  
Sarah Curtis – Durham University (BIOPICCC)  
Robert Dingwall – Dingwall Enterprises (formally Nottingham University) (FUTURENET)  
Matt Eames – Exeter University (PROMETHEUS)  
Murray Golden – Nottingham University (FUTURENET)  
Niamh Murtugh – Surrey University  
Darren McCaulley – St Andrew’s University (ARCoES)  
Andy Plater – Liverpool University (ARCoES)  
Tim Ryley – Loughborough University (FUTURENET)  
Emma Tompkins – Southampton University  
David Watling – Leeds University (STEP-CHANGE)  
Katie Williams – UWE (SNACC)  
Liz Varga – Cranfield University (TUCP)

### **Apologies:**

Mehreen Gul – Heroit-Watt University (LCF)  
Alberto Zanni - Loughborough University (FUTURENET)

### **Item 2 – Individual summaries of research activity and interests**

All participants should have received copies of the questionnaires circulated in advance which give a brief written note of the relevant interests of the participating researchers. Completed questionnaires were received from Stewart Barr, Stuart Capstick, Sarah Curtis, Robert Dingwall, Matt Eames, Murray Golden, Niamh Murtugh, Darren McCaulley, Andy Plater, Tim Ryley, Emma Tompkins, David Watling and Liz Varga. Questionnaires were also

received from Mehreen Gul and Alberto Zanni who had to withdraw at the last minute and sent their apologies.

If you are missing any of these summaries and would like a copy please e-mail Phil Sivell.

**Item 3 – climate change adaptation and resilience - what are the relevant ARCC areas that are best suited to social science methods & approaches, what are the issues faced?**

**Notes of discussion points & issues/questions raised**

- How do we avoid ‘locking in’ to adaptation? (i.e. locking in an adaptation response to a particular set of conditions, which may prove to be the “wrong conditions”.)

‘Dynamic resilience’ – e.g. traditional societies are often more resilient. Do we have methods to let us investigate dynamic resilience?

Does <http://www.urban-futures.org/> address this? The follow-on project is <http://liveablecities.org.uk/>.

- Are there other methodologies? Do we need to work on other approaches?

Are economic methodologies now driving decision-making in government rather than scientific evidence? This is a challenge for those working on climate change.

At some point, policy makers have to commit to a decision about the future.

- We can learn from the transferability of evidence in time and space.

For example, people coped without our technology in the past, how might that inform the future? i.e. Are there lessons that we can learn from history, and should (a) historian(s) be involved? There was also a note of caution - be careful of assuming that traditional communities have useful knowledge: what about those communities that failed?

- While there is merit in a flexible response, i.e. keeping options open and flexible, this may not be (a) available or (b) inexpensive.

- When dealing with future, we need to
  1. Be informed by past
  2. Understand what future will/might look like, using alternative/multiple visions of the future
  3. And something between 1 and 2?

We also need to think about the present.

- We need to consider the full range of adaptations: physical, individual; and societal. We know some of the technical solutions to adaptation – but why is it not happening? We need to consider technical and social issues together, not separately. Lessons from current work are not being shared and acted on. How do we identify the relevant “current” lessons?

- How can we integrate social science into technology and engineering disciplines?

Need to consider issues relating to the current political context, and also consider how people respond to some outputs (e.g. the description ‘1:100 event’)

## Key messages for Research Councils and ARCC

- There is a need to spend time on investigating differing theoretical approaches.
  - Social science brings a whole different way of looking at things, not just different methodologies to apply.
  - Funding should be more integrated.
  - Research Councils are now better at understanding the importance of cross-disciplinary working, but it less clear that this is consistently delivered across decisions on supporting cross-disciplinary projects.
  - It is important that Research Councils continue to support the interface between social science and natural/physical sciences.
- It was noted that not all disciplines are open to working in cross-disciplinary environment. Getting engagement from the conventional economic community was considered to be difficult.

The group shared their difficulties in engaging the economics academic community – it was suggested that this may be due to the hierarchical way that the discipline seems to work.

Each discipline has its own 'rules', so everyone needs to be aware of this. It increases the importance of establishing shared understanding across disciplines from the start of the project.

The impact agenda can be helpful, because social science brings engagement and dissemination from the start of a project. Projects are not just importing ideas from social science, but seeing them make a genuine contribution to the work.

## Item 4 – social science methods and approaches - how can social science methods & approaches be used and developed further to improve ARCC research?

### Notes of discussion points & Issues/questions raised

- What disciplines have other useful methodological approaches?

Suggestions (not exhaustive) were: anthropology, history, social practice, philosophy; and law. One uncertainty was around any potential funding constraints associated with this way of working, i.e. working across such diverse disciplines can be difficult as a result of the problems in identifying suitable funding streams – the research councils can find it challenging to fund projects cutting across/bring in such a diverse range of specialities..

- (discipline specific) Language is an issue

Policy does not engage well with different disciplines, perhaps because it doesn't understand them? Additionally, different elements of the social sciences use language in a different way – so this needs to be explored and understood. There may be meanings applicable to particular theories. Stakeholders' perspectives also need to be taken into account.

- Are some social sciences better-suited to these kinds of engineering/tech, long-term projects? How can the less well-suited disciplines be integrated?

A common theme is 'change'. This could be a way to link existing work by different Research Councils and others that is, currently, not being brought together.

- EPSRC/Research Council approaches

It may be difficult for EPSRC to ask questions around theories and concepts, because it is generally very focused on the need to 'operationalise' research outputs. But work to develop the theoretical basis of this research needs to be done too. It would be a good fit under ARCC. EPSRC may have to take risks!

A possible approach that might be acceptable to EPSRC is co-production of knowledge. e.g. Pickering Flood Defence Group (see <http://knowledge-controversies.ouce.ox.ac.uk/video/>) – social and natural sciences learning from the community as much as vice-versa (<http://knowledge-controversies.ouce.ox.ac.uk/>) (PI is Professor Sarah Whatmore, University of Oxford). Would this approach be acceptable to EPSRC? A similar approach worked well in BIOPICCC, possibly because this was a 'well-blended' project from the start. It is important to remember that some disciplines are better at working with users/stakeholders than others.

ESPRC perspective has shifted (positively) over recent years. There are some differences between programme (where there is a general vision) and responsive modes. The message for EPSRC is – there are clear benefits of the cross-disciplinary approach.

In general it was felt that the Research Councils have not embraced co-funding, and it is unlikely that there would be funding for social sciences to be involved.

The use of cross-disciplinary panels to review projects is to be welcomed

It would be useful to see how social science has influenced research outputs. One idea was to attempt to demonstrate the difference by take a single situation but have different social science theories applied and look at how these influence the outcomes.

It was observed that stakeholder partnerships tend towards engineering and more immediate solutions. Is this always desirable? It means that there is less progress on theory.

#### **Item 5 – co-ordinated knowledge exchange: what would be the best way forward?**

It is important to demonstrate how social science is a part of an engineering solution: it is not an 'add-on'.

- Ideas for future work included:
  - A briefing on social science methods
  - A synthesis report on the social science contributions to ARCC projects
  - A generic briefing on the importance of social science aspects to ARCC – what does it add to the project
- Data sharing

This needs more activity within institutions – ARCC and more widely – as there tends to be a mistaken assumption that data can be shared easily. Beware that for some data there can be anonymity and confidentiality, including commercial confidentiality, issues that make it difficult to share it.

#### **Item 6 – next steps, including support from the ARCC CN team**

- The research question that can't be asked, because it won't get funding is 'How are we responding to risk?'. Where does social science see this agenda going?
- We could do more to share what's happening with current research, and for the future look to new collaborations and proposals.
- A day-long workshop to address a single problem, e.g. Futures, asking participants for their research questions. Or take an example of an adaptation issue (e.g. Manhood Peninsula <http://peninsulapartnership.org.uk/>) and see how different approaches would address it.
- A review of learning across EPSRC/LWEC. Is this a role that UKCIP could undertake (Roger Street, UKCIP/LWEC Climate Adaptation Fellow) ?
- ARCC could facilitate an exercise to bring together complementary approaches and to look at the result. It would help to consolidate EPSRC's existing investment in social science, and could lead to a tangible product. It was suggested that both AHRC and ESRC offer funding specifically to support seminar series designed to bring together scholars working in the same field.

These funds do not directly fund research and participants are not required to have RC (or any) external funding but simply to demonstrate a shared scientific goal. Typically, these grants support the meeting and admin costs of about 20 people to come together for 4-6 meetings over a two year period. Papers have to be written and discussed at each and made available, often by a website, which could also be funded to some extent by the grant. There are often also earmarked elements for international participants so that each seminar might have a participant presenting a paper from Europe or North America. The AHRC version of the scheme can be found at <http://www.ahrc.ac.uk/Funding-Opportunities/Pages/Research-Networking.aspx>

ESRC version is at <http://www.esrc.ac.uk/funding-and-guidance/funding-opportunities/3677/research-seminars-competition.aspx>

ARCC is the right organisation to do this. Key characteristics would be:

- Series of events
- Involving stakeholders
- Different themes
- Novel/new/emerging theories and outputs
- Clear purpose
- Adding value to existing work

Non-ARCC projects would need to have clear purpose for attending further events, such as

- Innovative methodologies
  - Funding/proposals
  - Time aspects
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- ARCC challenge to the LWEC group – Roger Street (UKCIP/LWEC Climate Adaptation Fellow) to raise through LWEC colleagues

Climate change issues are now less of a political and social priority, but are we prepared for the time when (inevitably), climate change becomes increasingly important once again?



ARCC CN  
26 March 2013