

Lost in translation? The role of knowledge at the local scale in adapting to climate change

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To ensure communities are resilient to climate change we need to plan for adaptation to changing climatic conditions in the short and longer term. A key feature of resilient communities is their ability to adapt and learn in particular, their ability to build a range of knowledge for learning and problem solving. Climate change policies, plans and decisions need to be made, yet how to acquire, synthesise and use knowledge to inform planning policy and decisions for climate change are critical challenges. Climate change is scientifically complex and the 'facts' are unknown, uncertain and disputed. It brings values, resources and rights into conflict which mobilises a wide range of political and stakeholder interests. Additionally the potential impacts of wrong decisions can be costly and damaging and limit opportunities for the future.

Since its emergence as an issue in the 1960s climate change has largely been framed as a high level, and 'top down' issue in the province of both 'experts' and international agreements around mitigation of greenhouse gases. Scientific knowledge, represented as an international 'certified core of experts' have occupied centre stage as the UN-led IPCC became the key synthesizer and source of climate change knowledge presented the 'consensus view of the leading climate change experts in the world'. While useful at national scales, these high level assessments not only privilege certain types of knowledge but also mask some of the societal and individual choices that need to be made with respect to climate impacts. Also, adaptation by communities needs to be locally organised and so the application and interpretation of climate change information often takes place at a much more local level.

Local governments have been identified as a key agency to manage the response to climate change at a community level – first through mitigation, then adaptation as acceptance grew that society is already pre-committed to certain impacts in the short-to-medium term. Yet local government decision making is largely determined by decision making at other scales. Additionally the knowledge that local government decision makers bring to the decision making process determines their willingness to embed climate change in council planning and operations.

For local government, planning for adaptation is challenging. Firstly planning for adaptation takes place within the context of a series of planning undertaken by local government. This has two consequences: climate change is just one issue with which local government is currently wrestling; and local government planning for most issues is nested within a multi scalar planning system that can be represented as a 'series of cascading decisions across a landscape'. Secondly, the knowledge currently available to local government is contested, uncertain, and deficient in 'localness' (i.e. in detail, local input, and local engagement) and therefore varies in local relevance for

action. Thirdly, planning for climate change is urgent and the decision stakes are high, yet achieving a negotiated understanding of what is necessary and possible yet engaging the community around such decision making requires time and resources.

This paper focuses on the important elements of knowledge of climate change at the level of local government and the way in which that knowledge is framed and translated within the local government context. We consider what types of knowledge are important to support adaptation to climate change and what types of knowledge are available and used within local government climate adaptation planning processes.