COASTAL COMMUNITIES ADAPTING TO CLIMATE CHANGE: AN EVALUATION OF CAPACITY BUILDING AND ENGAGEMENT IN THE SOLENT, UK

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Associated with the complexity of hazards relating to climate change is the acceleration and dynamism of natural processes; the impacts of which are likely to be keenly felt in the coastal zone where littoral communities may face an increasing risk of coastal erosion, flooding and saline intrusion.Enhanced vulnerability requires solutions, and a more strategic approach to ensure that timely and effective measures are taken, whilst achieving coherence across the different sectors and levels of governance.

With a realisation of the limitations of mitigationas the principal mechanism to manage climate related impacts and their consequences, on a geopolitical scale, the alternative approach of adaptation has started to play a significantly greater role amongst coastal planners and managers. This is now embedded as one of the post 2012 pillars, having been agreed by the Parties to the United Nations Framework Convention on Climate Change (UNFCC) in 2007.

To date, adaptation has been piecemeal in naturewith research showing distinct challenges and barriers to its introduction (Lorenzoni*et al*., 2007; Gallagher and Calado, 2008). However, the availability of funding has allowed for a number of projects to run over recent years including the Innovative Management for Europe's Changing Coastal Resource (IMCORE); CoastAdapt; and the Coastal Communities 2150 (CC2150) project. Each has elucidated the challenges involved as well as demonstrating novel approaches that might be deemed 'good practice'.

In the UK, DEFRA has also funded a series of fifteen coastal 'Pathfinder' projects, to test new and innovative approaches to planning for coastal change. One of those selected is the Hampshire County Council project entitled 'Coastal Communities Adapting to Change' (CCATCH), which covers the 10 km stretch of coast from Beaulieu to Calshot in the Solent. This estuarine complex is an area of coast likely to be particularly vulnerable to coastal change since it is densely populated, low-lying and highly contested by a range of competing interests. It is also likely to include specific areas defined as Coastal Change Management Areas (CCMAs) that will not be protected by any new measures; hence requiring communities to adapt. As such the objectives of the CCATCH – Beaulieu to CalshotPathfinder *inter alia*have been to engage the local community in all aspects of coastal change; toprovide educational and interpretational opportunities so as to build adaptive capacity; and to enable the development of a shared understanding in order to provide the basis for agreeing joint action in the form of a Local Adaptation Plan. Central to this is the communication of science to enable more effective planning, and to draw conclusions that are horizontally transferrable to other vulnerable areas of the UK coast and beyond.

The project started in 2010 and is now part of a wider CCATCH – *Solent*project that represents Hampshire County Council's contribution to the Environment Agency led project CC2150.An Adaptation Plan has now been produced for the Beaulieu to Calshot Pathfinder and a project evaluation (Gallagher and Inder, 2012) carried out on the basis of the capacity building and engagement process employed. This is now informing the other five 'Priority Areas' as identified as being most 'atrisk' in the Solent.

The research presented in this paper is concerned with the evaluation of the Pathfinder and its outcomes, and will start with a review of the key elements of the Beaulieu to Calshot project. The methods employed to gather data included interviewing the key stakeholders involved in the process as well as the engagement consultants who

facilitated it. This was supplemented by a public survey to gauge the project awareness and to interview the project managers of several other coastal adaptation projects, so as to enable a comparison with the work being carried out elsewhere.

The results of the evaluation are presented and are generally supportive of the approach taken and the tools and techniques employed during the Pathfinder. However, they also highlight some clear areas for improvement and consideration. For example, on the basis that the selection of the area and the need for the project has already been established, there is a need to consider the application of stakeholder engagement in relation to the commitment to implement identifiable actions. This should also be considered both at the outset of the project and its duration, but also as a part of a developed on-going network beyond the lifetime of the funding. Engaging such commitment is clearly fundamental to implementing any specific actions identified as part of the Adaptation Plan. In order to agree the Plan, and identify actions, it was also clear that there was a need for specialist skills, and whilst these were available through the Pathfinder, there was a further need to consider the use and interaction of such consultants so as to maximise their effectiveness.

In relation to tools and techniques employed during the Pathfinder, many were considered innovative, but not all were well attended. Local specificity means that the activities selected should best reflect the nature of the area. Finally, one of the key areas identified as a lesson learned relates to the Pathfinder's communication and publicity, with the evaluation identifying scope for improvement in the project website, and its use of local newspapers, TV and radio. Employing a more developed communication strategy would certainly help with public awareness as well as lead to greater engagement with some of the activities.

References

Gallagher, A. and Calado, H (2008) Adaptation to climate change for small islands: A case study of the Azores. *Littoral 2008*. Leiden: EUCC

Gallagher, A. and Inder, A. (2012) *CCATCH – The Solent: Evaluation of the Beaulieu to Calshot Pathfinder*. Winchester: Hampshire County Council

IPCC. (2007) *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change,* M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds. Cambridge University Press: Cambridge.

Lorenzoni, I., Nicholson-Cole, S., and Whitmarsh, L. (2007) Barriers perceived to engaging with climate change among the UK public and their policy implications, Global Environmental Change, 17, pp 445-459