

Evolutionary resilience and adaptation to climate change in European coastal regions

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Introduction: This paper aims to apply a four-part resilience framework to critically examine the approaches to climate change adaptation in coastal regions in Europe. The framework has been developed by Davoudi *et al* [1] by drawing on three broad perspectives on resilience engineering, ecological, and evolutionary [2].

Methods: Rotterdam in the Netherlands and the Norfolk Broads in the UK are selected as case studies. These coastal areas are among the ten case studiesⁱ undertaken for a four-year European FP7 research project, ARCH.

Results: The paper argues that the approaches to climate adaptation in these coastal areas veer between a standard ecological understanding of resilience and a more rigid engineering model. Their emphases are on identifying exposure and vulnerability to risk from climate events, and applying a recovery-focused approach, with the overall aim of bouncing back as quickly as possible from the consequences of such exposures to a normal state, rather than on the dynamic process of transformation which can envisage radically different future trajectories.

Discussion: The paper highlights that developing resilience involves planning not only for recovery from shocks, but also cultivating preparedness, and seeking potential transformative opportunities which emerge from change.

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References:

[1] Davoudi, S. (2012) 'Resilience, a bridging concept or a dead end?', *Planning Theory and Practice*, **13**(2) pp. 299-307

[2] Davoudi, S. *et al.* (2013), *Planning, Practice and Research*,. forthcoming.

Notes

ⁱ See State of the Lagoon Reports on <http://www.arch-fp7.eu/>