Planning for Coastal Community Resilience

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Introduction

The coast of the island of Ireland contains highly productive and diverse ecosystems, which in turn support a range of socio-economic needs and desires including tourism, recreation, fisheries, industry and power generation. These activities are situated within an area continuously subject to change and coasts are increasingly acknowledged as vulnerable places facing uncertain and unpredictable futures. In the UK and Ireland many coastal communities have experienced protracted decline over recent decades and face a range of challenges including, changing demographics, seasonality of employment and decline of traditional coastal industries (McElduff *et al.*, 2013). Recent studies point toward a 'new era' for coastal communities in terms of a growing events and leisure tourism sector (e.g. coastal golf courses); an increasing appreciation of coastal heritage (e.g. coastal piers and harbours); as well as diversification into 'new' alternative industries (e.g. marine renewables). However, some coastal communities have struggled to respond effectively to past cycles of decline and lack sufficient resources and capacity to capitalise on emerging opportunities. Regeneration is required.

Traditionally, coastal settlements have been on the margins of central government regeneration policy (Rickey and Houghton, 2009) and are often treated as indistinct from the wider environment. Consequently, regeneration policies and practices have proceeded in the same manner as urban areas, with little recognition of the distinctive characteristics and problems of coastal towns.

Drawing on qualitative research (40+ semi-structured interviews, policy analysis, field observations), carried out across a number of coastal communities on the island of Ireland, this presentation outlines the differentiated context of the coast and the consequential implications for their sustainable regeneration. In doing so it advances resilience thinking as a means of informing and securing more sustainable outcomes for coastal communities.

Coastal Regeneration: a differentiated context

Coastal communities tend to share a number of economic, social, environmental and governance characteristics and values, which differentiate them from their inland counterparts.

Economic Values: Many coastal communities on the island of Ireland have experienced relative economic decline over recent decades stimulated by changes in traditional coastal industries such as fishing and tourism. Many remain reliant on tourism which can accentuate issues of low wage, low skilled and seasonal employment (Beatty and Fothergill, 2003). Their traditional role as places of recreation and relaxation means they often have a larger than average public realm, which is more costly to maintain (English Heritage, 2007) and may create conflicts with other spending priorities. Tensions between residents and visitors can emerge as a result. Physical isolation from large urban centres of economic activity and population, and reduced hinterland present additional barriers to inward investment (Beatty and Fothergill, 2003). Recent years have witnessed an increased recognition of the economic potential of the island's marine resource in the context of 'blue growth': presenting certain opportunities for some areas to innovate and diversify their local economy. However, such developments often necessitate significant infrastructure development, large inward investment initiatives, and skills improvements, and are not always compatible with existing coastal uses.

Social Values: Demographically, coastal communities tend to experience demographic pinch-points, aggravated by an ageing population and outmigration of younger residents; likely putting the settlement on a more vulnerable trajectory. They also tend to have a more transient population than inland settlements raising concerns in terms of maintaining civil engagement in, and local leadership of, regeneration ambitions. In traditional resorts, significant increases in population size during the summer months highlight the need to consider seasonal and intra-annual fluctuations in resources and exploitation patterns.

Environmental Values: Increasing rates of coastal erosion and predicted sea level rise in the context of global climate change, create uncertainty for regeneration drivers and potential investors. The winter storms of 2013/14 provided a stark reminder of the vulnerability of the island's coastal communities to changing environmental limits. Planning has an important role in terms of responding to, accommodating, and planning for anticipated and contingent physical change – beyond hard engineering solutions which may themselves have unintended

consequences. Designing and implementing responses necessitates a systemic appreciation that respects natural and anthropogenic interactions across multi-scalar processes and contexts.

Governance Values: The statutory land use planning and regulation of the island's coastal area is both complex and challenging. It is often not fully integrated between land and sea, nor between different sectors of activity (DOE, 2006; Cooper and McKenna, 2008; Kopke and O'Mahony, 2011). Historically, coastal management policies and practices in both jurisdictions have been led by sectoral interests (e.g. the environment, transport, and economic development) (O'Hagan and Ballinger, 2010) which may have competing interests and objectives. This sectoral approach hampers the emergence of more effective forms of coastal governance and presents a significant barrier to holistic forms of coastal regeneration.

Regeneration approaches considered appropriate in inland settlements may not be transferable to coastal contexts (RTPI, 2009; Walton, 2010). Importantly, differentiation not only exists between the coastal-inland divide; there is also considerable diversity among coastal settlements (McElduff *et al.,* 2013). A 'one size fits all approach' is inappropriate: planning and regeneration approaches need to be tailored to the specific underlying conditions of an area if a regionally cohesive and locally appropriate form of intervention is to be achieved.

Policy Coupling: toward an integrated framework

Policy coupling emphasises the need to take into account not only the social and economic aspects associated with coastal living but environmental considerations also, if the vitality and viability of coastal resorts is to be enhanced and sustained. This is consistent with the principles and outcomes of sustainable development. In practical terms, policy coupling at the coast may involve economic development, the provision of social facilities and appropriate sea defences and flooding infrastructure. This perspective is built on an acknowledged view that strategic responses to managing coastal environments require an integrated and value-informed understanding of socio-economic conditions and environmental science, as well as technological and policy options (Turner, 2000; Peel and Lloyd, 2010). A social-ecological resilience perspective of coastal regeneration may be informative in this regard as it explicitly acknowledges the linkages between and interaction across social (e.g. communities, interest groups) and ecological systems (e.g. the coastal interface) (Lloyd *et al.*, 2013).

Expressions of Resilience

The concept of 'resilience' has infiltrated contemporary policy making arenas including planning and regeneration. Originally interpreted as the ability to 'bounce back' (Holling, 1973); reflecting a concern with retaining a steady-state equilibrium, the concept has evolved to denote the inter-linkages and -dependencies between social and ecological systems. This 'social-ecological resilience perspective' moves beyond Holling's

(1973) definition to encapsulate more than a system's ability to recover from disturbance or maintain the *status quo,* but also its capacity to anticipate and adapt to change and take advantage of emerging transformative opportunities (Folke, 2006). The emergence of 'community resilience' encourages us to consider this adaptive and transformative capacity at the community level (Amundsen, 2012). Emphasis here is placed on how communities may variously combine and draw on their strengths to enable agency and self-organisation when faced with change.

Resilience thinking argues that society should aim to strengthen its ability to deal with uncertainties and surprises rather than attempting to control nature or counter any change (Walker and Salt 2006; Folke 2006). This view presents a powerful critique of traditional approaches of sustainable resource management and highlights the need to embed foresight, robustness and adaptability into place-making and planning activities (Coafee and Lee 2016).

Resilience and Regeneration: a virtuous relationship?

The 'Octagon Values Model' (figure 1) (McElduff *et al.,* 2016) provides one example of how resource use and resilience thinking may be embedded within the wider sustainable regeneration discourse. Whilst not discussed in depth in this paper, four explanatory points are required.

First, the model is framed by the four established domains of sustainable regeneration – environmental, economic, social and governance. These value domains overlap: illustrating that to achieve a policy coupling approach there is a need to reconcile priorities and values. Regeneration approaches will place emphasis on one domain over depending on the specific characteristics and challenges facing a particular community.

Second, the inner octagon represents recognised components of community resilience (McElduff *et al.*, 2016). These components are linked by the overlapping curves of the sustainability domains, illustrating the interdependencies of the values which need to be reconciled if communities are to enhance their resilience.

Third, the intersecting 'petals' of the value domains illustrate the four dominant aspects of sustainable renewal at the coast: regeneration, resilience, resources, and reconciliation. Here regeneration refers to the process of managing and instigating change, resilience outlines the ability of society and ecosystems to adapt to change; resources include social, economic and environmental capital; reconciliation refers to the need to mediate competing interests and resources at the coastal interface. The arrows demonstrate that these aspects are not fixed; rather they contribute to all four value domains, highlighting the fluidity and variability of regeneration and resilience building processes.

Forth, the dashed lines illustrate the permeability of the model and the potential for overlap; demonstrating the mutually informing and co-influencing qualities of regeneration and resilience.

When applied to small coastal resorts on the island of Ireland a number of insights in terms of the effectiveness of current coastal regeneration approaches can be identified:

Figure 1: The Octagon Values Model
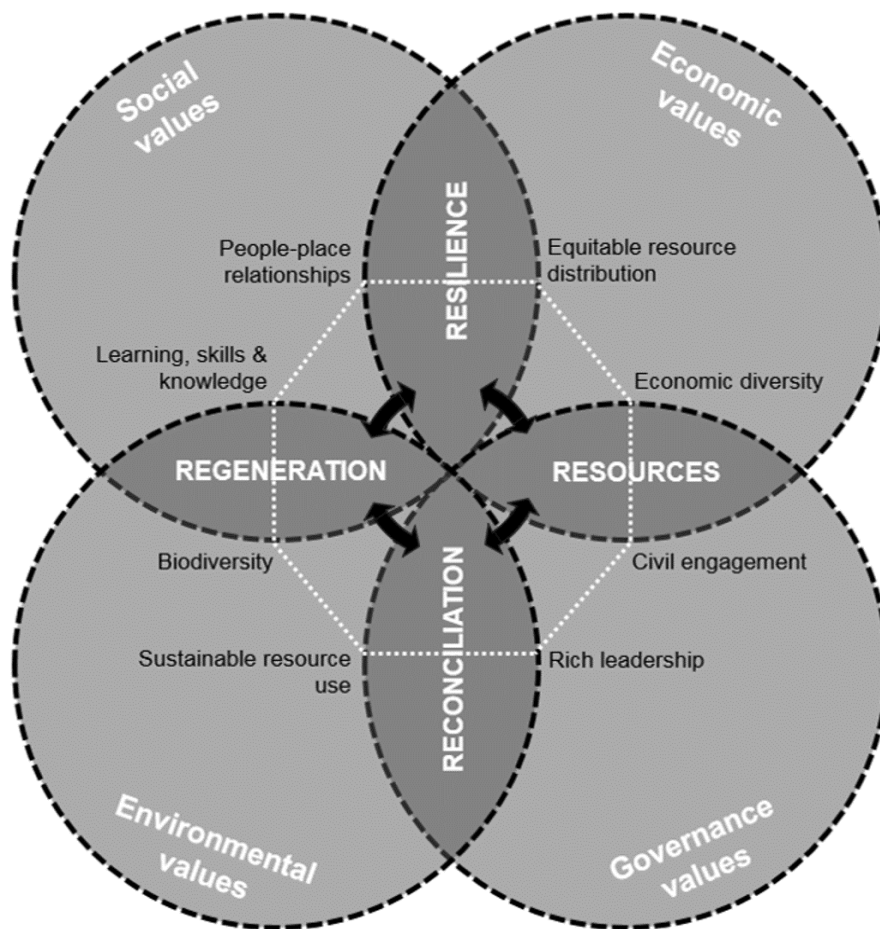
Source: McElduff *et al.,* 2016

Regeneration: There was a call for more place-tailored and sensitive interventions which respect existing cultures and traditions and foster a positive place image and identity. Tourism remains a dominant component of many coastal resort regeneration efforts across the island (e.g. Portrush, Youghal, Clifden), reflecting a certain coastal resort path dependency which may, or may not, liberate alternative thinking and approaches. Moreover, the impact of tourism development on the surrounding natural ecosystem can be identified in all the resorts, demonstrating the complex linkages between social and ecological systems. An 'island-wide awakening' to the resource potential of coastal and marine environments is evidenced in both Killybegs and Kilkeel where existing maritime skills are regarded a considerable asset to diversifying into new areas of growth. Whilst there is some

evidence of a turn toward more innovative approaches to coastal resort regeneration, an integrated approach is lacking, suggesting that coastal settlements remain relatively poorly understood.

Resilience: People-place relationships and sense of community were found to be critical in terms of fostering civil responses to local challenges and embedding resilience (McElduff *et al.* 2016). Changing demographics and transience present key concerns. In many locales, the interactions and connections made throughout the process of regeneration initiatives were deemed essential to building community resilience: stressing the importance of civil engagement and participation and reminding us that resilience is not something that can be 'built' or delivered as an output of regeneration but it may be fostered throughout the process as a potential outcome.

The prevalence of specific coastal hazards in the communities examined added an additional layer of complexity in terms of devising appropriate interventions. Yet, in many cases this were not acknowledged within their regeneration plans. This apparent oversight may be attributed to a potential lack of awareness, or appreciation, of the interlinked nature of social systems and ecological systems and/or a lack of capacity to deal with such dynamic processes. Following a resilience perspective, increasing attention needs to be paid to the frequency and intensity of coastal storms and erosion, which will require an appropriate planning response in terms of locating and designing infrastructural developments and/or improvements.

Resources: The availability and sustainable use of internal resources was regarded as a significant prerequisite to enabling holistic forms of regeneration and fostering community resilience. The natural assets of the resorts have significantly contributed to the initial growth and development of each resort and continue to provide an important resource for their regeneration. This may involve developing and celebrating heritage (for example, as in Youghal and Portaferry), or using marine and natural resources to facilitate new opportunities for energy generation and economic growth (for example as in Killybegs and Kilkeel). There is a need to balance economic growth with the protection of the natural environment. Whilst the need for some form of diversification was identified; the capacity of the communities and/or local authority to facilitate such change was questioned. It was found that the negative economic influences associated with 'living on the edge' have fostered a notable degree of entrepreneurialism. Issues relating to location, seasonality and changing demographics present key barriers to supporting entrepreneurial activity.

Reconciling interests: Conflicting perspectives, coupled with a lack of joined-up thinking between the different interests in each case, presented a key barrier to achieving holistic coastal resort regeneration. Accordingly, the provision of platforms for increased interaction, cooperation and mutual learning between different stakeholders at different governance levels was identified as being important. Across the cases, local resistance to change and apathy were identified as the most significant barriers to regeneration efforts. Stimulating interest and understanding, building local resources, and improving the quality and number of relationships within a place, synergies and innovative responses to socio-economic, environmental and governance challenges can be fully

developed and realised. All cases examined emphasised the need for strong, influential drivers/leaders who can coordinate and combine the cumulative impact of regeneration projects. These 'drivers' can vary in their role and remit.

Securing Resilient Outcomes for Coastal Communities

Five key recommendations for ensuring the future resilience of coastal communities can be drawn from the study.

First, socio-economic deprivation exists outside large urban areas and inner city neighbourhoods which have traditionally been the focus of regeneration policy and research. Traditional responses to decline may not be transferable to the distinctive context and conditions confronting coastal resorts. More bespoke interventions are required which respect existing cultures and traditions and foster a positive place image and identity.

Second, the diversity of coastal resorts presents a particular challenge to devising a coastal specific response and highlights the inadequacies of a one-size-fits-all approach. The typology of small coastal settlements (McElduff *et al.* 2013) helps isolate and reflect specific coastal characteristics; providing for a more informed and consistent approach to intervention and policy development.

Third, and notwithstanding the identified differences and search for novel solutions, there is considerable potential for drawing lessons across the island of Ireland. However, there is limited communication between coastal locales. A coastal network may help facilitate lesson drawing by providing a platform for knowledge exchange, co-learning and collaboration at a national and bi-jurisdictional level. Through the sharing of experience wasteful duplication of effort can be avoided and a more informed and holistic approach toward planning and coastal management, achieved, whilst simultaneously promoting regional balance on the island. Supportive institutional arrangements, which foster innovation and facilitate both the formal and informal exchange of knowledge, are a prerequisite to achieving this cooperation.

Forth, regeneration approaches which fail to acknowledge a place's resilience to future socio-economic and environmental change will fail to set that resort on a more sustainable trajectory. When applied critically, the concept of resilience can capture interactions between natural and socio-economic systems; therefore providing a more robust lens through which to view coastal regeneration policy and practice. This perspective stresses the need to reconcile competing interests and values at the coast and ensure the sustainable and equitable use of social, economic and environmental resources.

Fifth, there is a need to reconcile competing interests and priorities at coast. In terms of coastal management; rights and responsibilities at the coastal interface remain elusive. An integrated planning ethos and policy coupling are advocated to replace a tendency towards a sector approach. The terrestrial planning system and

the marine planning and licensing system are legally and functionally separate but overlap in the inter-tidal area. There is a critical need to ensure that Local Development Plans and marine plans are complementary, particularly with regard to the inter-tidal area. More informed and integrated responses to the regulation and management of planned development that is sensitive to the specific socio-economic and environmental context of the coast is required. Policy coupling provides the flexibility to facilitate this requirement. Importantly, this approach stresses that there is no single strategy, but a strategic response to coastal challenges.

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