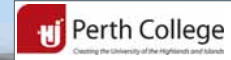


Demystifying a 'fuzzy' concept: What are the most suitable criteria for assessing sustainability in upland estate management in Scotland?



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Sustainable Estates for the 21st Century: the wider project

Estates are highly characteristic of Scotland's upland areas, and are bound up with the region's culture, identity and environment. There are many strong opinions, both positive and negative, concerning all types of estates. In particular, statements are often made regarding their economic and employment benefits, whatever the ownership.

This integrated research project, running from 2007-2010 through 4 PhD studentships at the Centre for Mountain Studies, will make a major contribution to our understanding of a key element of the region. The research aims to understand how the owners and managers of estates make decisions that permit them to ensure that their estates fulfil their diverse roles and are sustainable. The economic and employment benefits of estates to local communities, and the connections between land ownership and land management will also be explored.

Research aims

- To identify the most suitable assessment criteria for monitoring and assessing 'sustainability' at the estate level
- To implement these assessment criteria on upland estates owned by non-governmental organisations (NGOs)
- To improve policy guidance and tools for the future management of Scotland's upland estates



Background

Scotland's uplands have a unique pattern of land ownership, being divided into 'estates' owned by private owners and public, non-governmental and community organisations (Warren 2002).

Estate owners/managers have the capacity to determine management activities on their land, (within the requisites of legislation, policy, management agreements, conservation designations etc.), giving them an important role as 'stewards' of the natural environment (Higgins *et al* 2002).



The economic, social and environmental 'sustainability' of human activity is a key component of UK, EU and international government policy (Barker and Stockdale 2007).

There is the need to establish whether there is consensus regarding the definition of sustainability within the estate management setting.



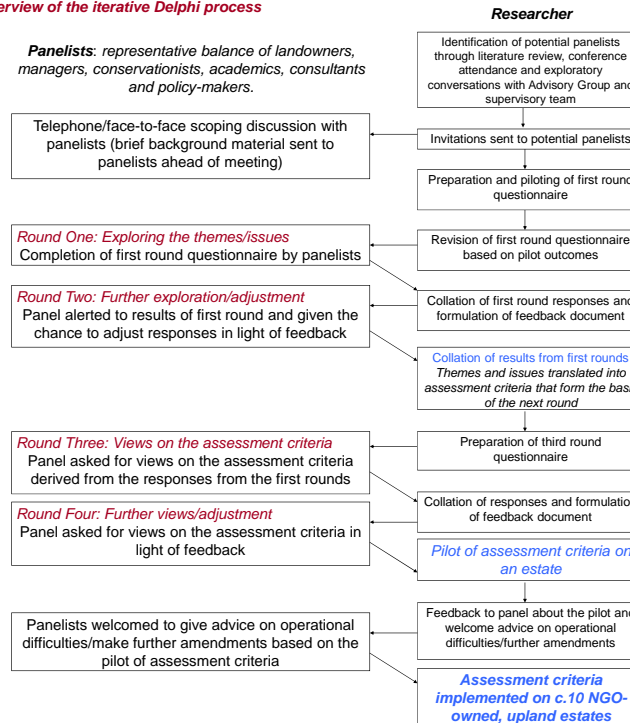
The development of suitable assessment criteria could inform the evaluation of land management practices, and provide a tool to guide policy makers, owners and managers towards sustainability.

Methodology

"The essence then, of indicator selection, is to make open and explicit the criteria used for indicator selection and decision-taking" (Miller 2001: 352)

- Sustainability assessment methods (e.g. indicators) are often designed and implemented in a top-down manner. This can antagonise stakeholders: research in UK uplands has shown that those accused of 'unsustainable' management practices often have a different perception of sustainability to other interest groups.
- Involving a wide range of groups in the dialogue about sustainability priorities may help to work towards reaching a consensus and joint working towards implementing practical steps for working towards 'sustainable estates'.
- Using the Delphi method, this research will test a combined 'top-down'/'bottom-up' approach to developing sustainability assessment criteria/definitions whereby specialists are engaged in an iterative, participatory process that allows them to learn from/discuss the responses of others.

Overview of the iterative Delphi process



Dealing with the complexity of the 'sustainability' concept: using the Delphi approach

"... a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem" (Linstone and Turoff 2002: 3)

- The Delphi approach involves a panel of respondents in an anonymous, multi-round survey that generates opinion and/or consensus (Hung *et al* 2008).
- In order to work towards consensus, responses to questions posed in each round are collated and fed back to the participants for their consideration, giving each panel member the opportunity to adjust their responses accordingly if they so wish (Garrod and Fyall 2000).
- This approach can be more effective than carrying out individual interviews since the process of structured feedback increases panel creativity by widening their knowledge and stimulating ideas (Powell 2003).
- The 20 panelists involved in this research represent current knowledge of sustainability in the estate management context. This will reduce strategic bias and lead to high quality ideas and solutions.

Applying the criteria

- Significant areas of the uplands are owned by non-governmental organisations (NGOs) and there has been a growth in this sector in the last few decades (Croft 2004).
- NGOs have a variety of management objectives that are normally derived from a social, cultural or environmental purpose (Wightman and Boyd 2001), and they are supported financially and otherwise by a growing number of members of whom most are not resident on the estate.
- The emergence of NGOs as landowners is often interpreted as a reflection of the growing concern to protect the environment, and wildlife in particular.
- There are some concerns regarding the long-term, sustainable future of NGO ownership and the associated management practices.
- There is a need to evaluate the sustainability of management practices of NGO land owners in Scotland, especially in light of recent criticisms and concerns (e.g. Mitchell 2004).



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This project is being supervised by Professor Martin Price (Director of the Centre for Mountain Studies) and Dr Alister Scott (University of Aberdeen/University of Waikato). To ensure the on-the-ground and policy relevance of the project, an Advisory Board has been established, with representatives from: the Scottish Government, the Scottish Rural Property and Business Association, Scottish Environment LINK, Cairngorms National Park Authority, and the Knoydart Trust.

