



Governance & Participation

**Why?**

Effective environmental decision-making requires an equitable and inclusive system of consultation and planning

Improving engagement and governance requires:

- New activities and approaches to develop wider awareness of key issues
- Clearer understanding of the role of different 'stakeholders' in the decision-making process
- Adaptation of current schemes to better meet local and regional contexts

Policies, implementation schemes and management plans need local 'buy-in' to become successful 'in the long-term'. A range of participation models and governance systems are being reviewed and appraised. These include spatial planning frameworks and visualisation techniques for the development of shared visions of the future, and to communicate complex issues.

**Outcomes**

- Investigation of stakeholder perceptions, preferences and values of landscapes
- Evaluation of social networks and governance schemes, especially related to regional planning and National Park fora
- Exploration of future landscapes, including the role of the Virtual Landscape Theatre in promoting increased awareness of change
- Explanations of land manager relationships with landscape

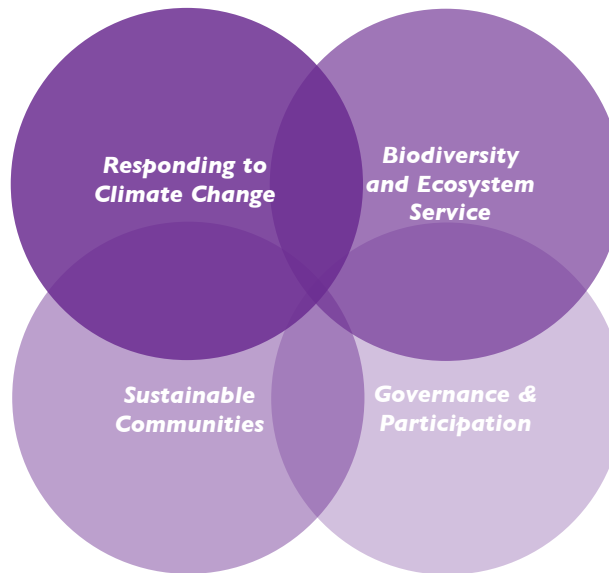
**Contact:**

Prof. David Miller d.miller@macaulay.ac.uk

"Environment – Land Use and Rural Stewardship" (Programme 3) will contribute to the evidence base for the five strategic Government objectives of a **Healthier, Smarter, Safer & Stronger, Wealthier & Fairer**, as well as, **Greener**, Scotland. In particular, enhanced knowledge will inform policy schemes that shape and sustain rural landscapes and communities for the benefit of all Scotland's people.

The research theme on "Protecting and Enhancing Landscapes and Rural Communities" will take a holistic approach to understanding the 'actors', drivers and processes underpinning sustainable rural development by integrating knowledge from the natural and social sciences. The approach will involve improved participation enhancing the exchange of knowledge between researchers and stakeholders leading to more informed policy.

The research is constructed around four interacting modules based upon key challenges for both policy and society.



The research theme is being tackled by teams of environmental, social and economic scientists from The Macaulay Institute and the Scottish Agricultural College.

**Theme Co-ordinator: Dr Iain Brown**

Macaulay Institute Aberdeen AB15 8QH

I.Brown @macaulay.ac.uk

Tel: +44 (0) 1224 498200



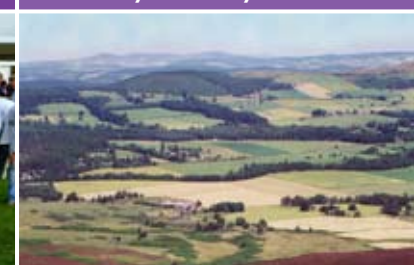
Responding to Climate Change



Biodiversity and Ecosystem Service



Sustainable Communities



Governance & Participation

**Protecting and Enhancing Landscapes and Rural Communities**

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**Responding to Climate Change**

### Why?

Climate change has been identified as the greatest threat to future development and prosperity

Responding to climate change requires:

- Better information on potential impacts and the range of responses
- Clearer understanding of the role of different greenhouse gases in emission-reduction strategies
- Linking attitudes and behaviour to the viability of different response strategies

Ambitious targets for emissions reduction will have an important impact on Scotland's rural landscape and its communities. At the same time, significant climate change is now inevitable, and we need to plan for this. Steering a successful path through this uncertain future requires innovative new methods of public engagement and decision-support tools to improve our collective knowledge base and develop far-sighted responses.

### Outcomes

- Identification of potentially sustainable pathways to a low carbon economy
- Evaluation of integrated responses including both mitigation and adaptation
- Improved understanding of emissions from different land use and community activities
- Guidance and tools for strategic handling of climate change risks and uncertainty

### Contact:

Dr. Robin Matthews [r.matthews@macaulay.ac.uk](mailto:r.matthews@macaulay.ac.uk)



**Biodiversity and Ecosystem Service**

### Why?

By exploring the role of biodiversity within the emerging concept of 'ecosystem services', we aim to consider the broader indirect benefits that it brings to human society.

Protecting and enhancing biodiversity requires:

- Policy responses that have a greater level of local or community involvement
- Improved knowledge of the role of species and habitats in a multi-functional landscape
- Adaptive management schemes that can incorporate flexibility and resilience in response to environmental change

Schemes promoting biodiversity have often had mixed success because of their narrow focus and piecemeal development. Understanding ecosystem services at the landscape scale can allow greater scope in integrating management objectives with differing land uses and local contexts.

### Outcomes

- Policy guidance and development of biodiversity goals in the Scottish Rural Development Plan
- Understanding the links between species, habitat and management at the landscape scale
- Identification of the local cultural issues which can clash with high-level biodiversity plans
- Evaluation of the ecosystem services concept for delivery of enhanced biodiversity

### Contact:

Dr. Gerald Schwarz [g.schwarz@macaulay.ac.uk](mailto:g.schwarz@macaulay.ac.uk)



**Sustainable Communities**

### Why?

Sustainable development is crucial to ensure a prosperous and healthy future for rural Scotland

Encouraging and promoting sustainable communities requires:

- Improved understanding of links between national policy and local initiatives
- Developing synergies between local social, economic and environmental benefits
- Design and review of appropriate and inclusive decision-making procedures

Community initiatives across Scotland are usually distinctive and diverse. By distinguishing key factors that initiate and maintain such initiatives, and related issues such as community cohesion, the research will inform the ongoing development of the Scottish Rural Development Plan and the Sustainable Development Strategy

### Outcomes

- Evaluation of the relative success of different collaborative structures: policy-directed and grassroots initiatives
- Policy guidance and briefing on the factors promoting community cohesion
- Assessment of the changing pattern of rural-urban interactions, especially related to land markets
- Appraisal of new economic niches and the role of Information & Communications Technology (ICT) in rural communities

### Contact:

Dr. Sarah Skerratt [s.skerratt@sac.ac.uk](mailto:s.skerratt@sac.ac.uk)