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Landscape Strategies & Strategic Thinking in England

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1.0 Introduction

This paper aims to provide a picture of some key issues concerning current strategic thinking in England in relation to landscapes. It will necessarily be a short and selective picture, but should provide a feel for the main issues. The starting point is a brief reference to the key sources of present strategic thinking in policy and practice, then some examples are provided followed by a summary report on the outcomes of a recent event held at Newcastle specifically to think about landscape strategy in policy and practice; finally some reflections and conclusions are provided.

2.0 The European Landscape Convention (ELC)

The most important basis for strategic thinking in recent landscape policy and practice in Europe is the European Landscape Convention (ELC). According to the ELC, the landscape is 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' (Council of Europe, 2000). This helpful and widely accepted definition echoes the understanding that landscape is an inclusive and popular concept which is readily understood by both experts and the public. It embraces both scientific and cultural attributes. The term 'landscape' integrates many factors and interests and it is therefore a useful way of communicating complex information to people in engaging ways that are easily appreciated. Many of the most important issues that change the environment within which we live, such as the demand for new houses and roads, biodiversity losses, climate change adaptation and mitigation, and food security, are reflected in the local landscapes we are familiar with as well as having impacts upon those landscapes that have a 'highly valued' label under planning designations. The landscape is therefore a common language that bridges sectors and disciplines; art, science, government and community in countries around the world.

Many countries in Europe are now at the implementation stage of the ELC, and there are some useful examples of how this is occurring. The ELC was signed and ratified by the UK in 2006 and it came into force in 2007 (Figure 1). In the UK two pieces of research were carried out by Newcastle University in relation to monitoring of ELC implementation; one for Natural England and one for DEFRA both of which aimed to create a baseline of understanding concerning how policy nationally, and in the devolved administrations of the UK, reflected the intent of the ELC. Much of this paper is based on the understandings revealed by that research (Roe, 2013; Roe *et al.*, 2009; Roe *et al.*, 2010).



Figure 1: The European Landscape Convention

The Council of Europe does not have funds to finance implementation of Conventions. Having developed the ELC, the Council now plays a supporting role for ELC implementation, although some of the energy seems to have gone out of the Council's events in recent years. There have been a number of conferences and workshops focusing on implementation and various guidelines and advice as a result of research and practice experience in different countries. The basis for implementation is set out in ELC Articles 5 and 6 (CoE, 2000). Much of the debate has focused around the suitable tools, scales and models for implementation. Potentially useful tools have been identified such as Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA), landscape character analysis methods and the use of models to understand the driving forces of change. There have been various pieces of commissioned research and papers published relating to implementation and although there is a growing body of research literature, it is somewhat patchy in coverage. This means that good evidence for understanding the impact of the ELC is still somewhat thin. This is also reflects the uneven pattern of implementation in the countries of Europe.

In UK there was a 'post-ratification energy' with some good examples of the way implementation can occur and can be successfully incorporated into our environmental planning system. If we understand the ELC primarily relating to the planning, designing and managing of landscapes within a setting of social justice, two overall key indicators of ELC compliance can be identified:

- 1. The condition of the landscape
- 2. The way people regard and use the landscape

These rely to a considerable extent on natural and social processes, but they also rely heavily on policy and regulation of the landscape. Policies and guidance help to manage the condition of the

landscape and they should reflect community attitudes to the landscape. If we regard the ELC as now providing us with the baseline that encapsulates our overall attitude to landscape which then affects our use and management of it, then monitoring policy change in every Member State in relation to the ELC is important as is measuring landscape change. Connecting policy change with change on the ground is desirable but very difficult in the case of the ELC because of the large number of variables involved. What is possible is to identify indicators that provide a picture of change in policy and change on the ground independently and compare these against a baseline condition.

Research Key Findings 2010/11 English/UK Landscape & Policy

- · Landscape change remains a difficult issue
- Direction of travel towards improved consistency with ELC in UK policy is positive;
- Potential to make links to ELC more explicit and this may help to align the performance of all 4 devolved administrations.
- Potential for more positive 'planning' in policy and for identifying landscape opportunities
- It is important to consider the principles and intent of the ELC and all the ELC Articles when assessing implementation performance.

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Figure 2: ELC Research Key Findings 2010-11

In research led by Newcastle University to examine the state of landscape in planning policy in the UK (2010-11), a number of useful issues were identified (Figure 2) and a monitoring programme and structure to examine policy over time in order to see if implementation of the ELC actually was having effect on both English and UK policy was proposed. One of the recommendations of the final report was to establish guidelines for implementation and to instigate further research based on establishing a monitoring framework for change on the ground. However as a result of changes in government, cuts in spending and reorganisation of both Defra and Natural England, only the first of these – the production of implementation guidelines – ever came to be carried out.

This picture has pretty much continued for the last four years. The focus and energy that had built up concerning the ELC completely disappeared. Both Defra and Natural England had severe resource cuts in landscape staff and continue to be reorganised and 'restructured' which is disruptive to any implementation and monitoring operations. In addition, political priorities have changed several times at government level in England since the ELC came into force. All this means that in terms of positive progress towards ELC implementation between 2011-2014 there was either stasis or what seems like a backward movement politically and in policy circles in terms of attention to the potential of a strategic landscape approach. The concentration has been on carrying out statutory duties and tasks, and there has been a fall back to previous work, such as the development of Natural Character Areas, rather than continuing to develop new thinking and approaches based on the catalyst of the ELC¹. The initial work on landscape change and landscape quality objectives taken from the ELC objectives has morphed into 'Statements of Environmental Opportunity' (see: Natural England 2014). The problem here is the lack of steer from government level on positive and

¹ Even on this there has been little apparent movement over the past year (see https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making last updated in September 2014)

strategic landscape approaches and therefore a failure to consider landscape in holistic terms which could incorporate an emphasis on adaptive management, stakeholder engagement and dialogue, and multiple objectives at a landscape scale (Sayer *et al.*, 2013). In addition, while the commissioning of good research is imperative in order to provide the basis for understanding landscape change, a clear and continuing commitment to monitoring and research is necessary in order to build up the required evidence, knowledge and understanding to produce effective landscape strategies.

3.0 Example Landscape Strategies

While in top-down landscape policy in England, the focus remains on protecting landscapes and maintaining protected areas, there are also references to the ELC principles of the importance of understanding and enhancing the ordinary landscapes where people live through on-the-ground initiatives. A number of organisations have used a version of the term 'Living Landscapes' to provide a picture of a more holistic strategic approach to conserving landscapes and the people and biodiversity within those landscapes. An example is the Wildlife Trusts approach (see http://www.wildlifetrusts.org/living-landscape/our-vision) which purports to 'think big' in its 150 schemes around the country to helping people restore wildlife to 'whole landscapes'.

The National Association of AONBs and National Parks England (2015) has recently produced a document which provides a picture of English protected landscapes as multi-functional and important 'Living, Working Landscapes'. This document, while not exactly a strategy, provides the basis for strategic landscape management and is interesting for a number of reasons. Firstly because it picks up very clearly on an Ecosystem Services approach to justifying the protection of landscapes and identifies a range of services that emphasise the value of landscapes. This issue of value is important. The document suggests both tangible, monetary values in terms of the production of the landscape (agriculture, tourism, educational benefits, etc.), but also landscape as an important provider of intangible values (such as local identity, through historic features, food, perceptions of health and wellbeing). This mirrors other thinking and initiatives that are now occurring around Europe. For example as evidenced by a recent symposium based on food and landscape research at the Swedish National Heritage Board (Riksantikvarieämbetet) in Stockholm². The Heritage Board has funded a major project examining food heritage and landscape³. Sweden has no specific landscape policy (Gren, 2015) but the Heritage Board, which is responsible for heritage and historic environment issues, has taken some interesting initiatives in relation to ELC implementation. This project reflects the considerable interest in the links between food and landscapes in many countries around the world, particularly in relation to the potential for urban agriculture to transform cities, but also for using the interactions between people and their food cultures to build closer understandings of the power of landscape identity and intangible aspects of landscape character.

² See http://www.raa.se/app/uploads/2015/02/Program-Matens-och-matkulturens-roll.pdf

³ See http://fou-

ans lag. raa. se/raa/de fault. asp?goto=raa. A&eid=Nzk1QjA4MDQxMDc5NUMwODAwMTA3ODQyMDgwMzAwMDgwMjE1Nzg3NDA0MDlwQzA4MDcwMTA2Mjk=



Figure 3: Food production landscapes near Orvieto, Italy: There is increasing interest in the process of landscape creation and identity through the interaction between people and food throughout Europe and in many other countries around the world.

Throughout the cuts and lack of steer from government in relation to strategic landscape thinking in England, there has been some good work continuing on the ground. An example of this is the Durham Heritage Coast Partnership. The management structure of the Heritage Coast Partnership is a modification of the successful multi-agency Turning the Tide on the Durham Coast Partnership. The *Turning the Tide* project started the process of both restoring the natural processes in the landscape of this coastal area, and involving the community, which had turned its back on the degraded landscape affected by coal spoil. The Durham Heritage Coast Partnership carries out a number of activities to support community involvement. One of these is an annual forum which provides an opportunity for a wide range of local and community interests to input into the management of the area. Small specialist working groups are also sometimes formed to assist with or provide guidance upon specific projects and initiatives. This helps to extend the number of individuals and interest groups which become actively involved in the management of the coast.



Figure 4: The Durham Heritage Coast at Noses Point: the beach here has been cleaned by both human action and continuing natural processes to remove the coal spoil that made it infamous.

In 2012 Durham Heritage Coast was the regional and national winner of the UK Landscape Award established under the European Landscape Convention. The citation highlights the astonishing landscape change on this coast and the new and 'wonderful landscape mosaic of great natural, historical and geological interest with dramatic views along the coastline and out across the North Sea' (http://www.durhamheritagecoast.org/). It also highlights the use of interpretative and artistic explorations and work to engage communities, particularly the 'new gateways' which aim to encourage people to explore this fantastic coast. These have been created 'with the active involvement of the local communities with art and artistic interpretation a key feature' (Ibid). The Durham Heritage Coast Partnership had special mention in the ELC awards in 2011. Most recently collaborations have been built with Finland including the creation of a song-writing partnership. At

the annual Low Tide Day event in 2013 a song 'We All Go Back to the Sea' was performed with local choirs and various other songs were composed and performed by individuals from the two communities⁴. These kinds of artistic collaborations are a growing feature of many landscape research and community projects at the local level in England; they indicate a growing broad understanding of 'landscape' that may stretch out to sea and cover everyday and degraded areas, as suggested by the ELC (Figure 5); on the Durham coast there is recognition that landscape is something which is much more than just the physical land that can be seen (Figure 6).

Article 2 - Scope

Subject to the provisions contained in Article 15, this Convention applies to the entire territory of the Parties and covers natural, rural, urban and peri-urban areas. It includes land, inland water and marine areas. It concerns landscapes that might be considered outstanding as well as everyday or degraded landscapes.

Figure 5: European Landscape Convention (CoE, 2000)

Ian McMillan, poet and radio presenter, who was on the judging panel summed up the views of the judges:

"This is an internationally important exemplar for transforming a despoiled landscape through careful investment and enormous amounts of enthusiasm and hard work. A bold vision has created a landscape of beauty rich in wildlife and cultural heritage in which local communities can feel justifiably proud. This is the beginning of a renaissance which will enable towns and villages of this part of the former Durham Coalfield to develop a relevant new identity."

Figure 6: The Durham Heritage Coast UK Landscape Award 2010 Judges' statement (Source: http://www.uklandscapeaward.org/results/index2010.php)

The key point to emphasise here is about the importance of fostering longer term partnerships and a growing understanding of the potential of including the creative arts within participatory processes to reveal people's relationships with landscapes and encourage interaction with the landscape.

A more recently established example of a strategic landscape partnership is the Heart of Teesdale Landscape Partnership. In 2011 the Heritage Lottery Fund (HLF) approved funding of £1.9 million for this partnership project. The area is recognised as having has many natural features and associations with significant historic, cultural and wildlife sites of appeal and interest to visitors as well as locals and academics and those involved in the creative arts. This Landscape Partnership incorporates organisations and individuals who can 'contribute in some way to the project through their activity in the area, ownership of land, knowledge and skill, preparedness to help, or contributions of funds or in kind assistance' (http://www.heartofteesdale.net/). This includes local authority members, public and voluntary organisations and members of the local community with specific expertise.

⁴ See http://www.durhamheritagecoast.org/our-coast/things-to-do-and-see/our-coast-in-pictures/videos/

The initial bid was submitted by a small group dedicated to the conservation of the area, which they described as a 'lost' landscape outside the Yorkshire Dales National Park and the North Pennines AONB. The area is, however, of equal beauty to that bounded by the AONB. It has many important landscape features and associations, with historic and cultural sites that have been and continue to be of considerable appeal to scientists, artists and authors, as well as visitors from the locality and farther afield including William Wordsworth, Charles Dickens, Sir Walter Scott, John Sell Cotman, J.M.W Turner and the early photographer Elijah Yeoman, amongst others (Ibid). The area also has valuable and high quality habitats of national and international importance.

This project represents the increasing number of landscape partnerships which provide a means to apply both strategic thinking and management, and detailed neighbourhood scale action on the ground. One of the new terms being applied is the 'co-construction' of knowledge and action based on a lot of small projects which when added together make more than the sum of the parts in terms of changing both the landscape, and the way insiders and outsiders view that landscape. It also allows communities to tap into a variety of charitable organisations and funding, most importantly Heritage Lottery Funding (HLF), which remains the main funder of landscape change projects in England, and also to access what could be termed 'top-up' funding from other organisations such as the Arts Council, England. A really substantial example of this kind of project which has attracted funding for strategic landscape change is 'The Sill' based in Northumberland at the Hadrian's Wall UNESCO Heritage Site. A major purpose of The Sill is to enable the landscapes of Northumberland National Park and surrounding Areas of Outstanding Natural Beauty to be opened up to more people, including children, families, older people, disabled people and those who are less confident in exploring natural places. The Sill will be a 'National Landscape Discovery Centre'. It publicises itself as 'a bold, ambitious project that will transform how people of all ages understand and explore the landscapes, history, culture and heritage of Northumberland and the wider North East' (http://www.thesill.org.uk/about). The aim is that it will be a 'gateway from which extensive learning, research and business activities will be provided, becoming a leading education facility for landscape, conservation, countryside management, leisure, and tourism skills' (Ibid). There will be an activity programme that aims to 'inspire people to celebrate, value and conserve Northumberland's unique natural and cultural features' (Ibid). The emphasis here is on encouraging and facilitating people's interaction with a highly valued landscape, opening up access, providing a focus on landscape in all its multi-facets but also supporting local communities through the creation of new jobs and opportunities. Perhaps this can be seen as an example of physical expression of a 'landscape approach' to rural development. It has many supporters and also some who are against the idea. The aim is that it will be ready by 2017. The total costs for The Sill, both capital and revenue, over five years will be £14.2 million. Nearly £8 million has already been gained from the Heritage Lottery Fund (HLF). This is the highest HLF grant ever awarded to a national park.

Apart from these kinds of partnership projects, another particularly interesting area in landscape strategic thinking is in the emergence of green infrastructure plans. There are various examples of these in England that have emerged over the last five years. The European Union (EU) and member countries have also now realised the potential of green infrastructure planning as a way to gain multiple landscape benefits in urban, urban fringe and rural areas. The EU has produced a strategy 'Enhancing Europe's Natural Capital'⁵ and various other working groups and policies related to

⁵ See http://ec.europa.eu/environment/nature/ecosystems/

promoting green infrastructure thinking and development. One of the things about green infrastructure planning is that it seems to be understandable by a range of sectors, including engineers, transport professionals and those interested in climate change mitigation and urban agriculture. In England GI policy tends to be seen as something separate from landscape, rather in the realm of planning and engineering. However to fulfil the full potential of GI planning, a much more holistic notion of the ecological, socio-cultural and economic possibilities still needs to be taken by policy-makers⁶ and ensuring that it is embedded with landscape strategic policy and thinking could help to enable these links.

4.0. Recent Landscape Initiatives & Strategic Issues

A promising recent indicator of renewed vigour and development of strategic landscape thinking in England has been expressed through two key initiatives:

- The establishment in 2014 of a Landscape Advisory Group (LAG) by Natural England in association with partners in policy, academia and practice. This had its second meeting in July 2015 and is providing a forum for ideas and actions grounded in the need for pragmatic thinking about research, practice and policy development.
- 2. A landscape symposium 'Landscape Forwards: Policy, Practice, Research' which brought together various stakeholders and interest groups specifically to discuss future policy practice and research issues in landscape. The symposium grew out of an idea tabled at the first LAG meeting. The event was held at Newcastle University's McCord Centre and was funded by Historic England and organised by Newcastle University, Natural England and Historic England staff.

The difficulty was keeping something to a size which allowed for good discussion because of the considerable enthusiasm for attendance at the event. The presentations and other material are all publicly available on the web⁷ for comment. The outcomes are now feeding into policy discussions in both Natural England and Historic England and into the Landscape Advisory Group. The key themes that emerged were:

a) The need to consider the conceptualisation and badging of 'Landscape'

There is a need within policy circles in particular to reemphasise the potential of a holistic landscape approach and of thinking of landscape as a medium for growth and change. It was recognised that landscape has the potential as an integrating philosophy but there needs to be recognition of the many ways of framing landscape, for example as a cultural construct rather than simply a place. It is also important to realise that landscape is constantly reinvented; this means that new ideas can be incorporated and developed such as dark skies initiatives, sandscapes, storyscapes, seascapes, skyscapes, etc. Reframing along these lines could be useful in engaging with other policy agendas such as health and

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⁶ See Roe & Mell, 2013; Llausas & Roe, 2012.

⁷ See http://www.ncl.ac.uk/mccordcentre/research/workshops/LandscapeSymposium.htm

wellbeing. The symposium participants identified the need for landscape 'advocates', particularly to capture the imagination of the general public and politicians.

b) Character areas/assessment/evaluation

Rather than reject all past work, it was highlighted that much had been achieved, in particular future landscape policy and practice should consider expanding on the character area approach to consider new emerging frames of reference for landscape strategic practice. The symposium participants recognised the need to strengthen links to the ELC and its implementation and in particular to monitor and evaluate landscapes in order to provide the evidence required of landscape change issues and ensure adequate government funding to address issues that arise. The issue of the need to focus on border areas was discussed, including trans-frontier areas because landscapes flow across many administrative boundaries. It was recognised that there was much good practice in landscape planning and management and that there was considerable potential in, for example, using National Park good practice as a roll-out message to other areas.

c) Governance

There was much discussion about governance issues and the need to consider the role of local authorities in the light of changing funding and roles. It was suggested that exploration of new ways of doing things where there is no statutory duty could be helpful and the expansion of partnerships as a long-term tool. Within such partnerships experience has shown the importance of using artists and others within partnerships to energise and engage communities. It was also suggested that a landscape approach has considerable potential for addressing governance issues and building shared ownership and common understanding of public and common goods. There is a need to understand the potential of new ways of working that are emerging and to aggregate local expertise and initiatives 'in kind' rather than relying on financing to be forthcoming from government; money should be seen as a 'seed moment' rather than a long term solution to landscape management. In the past many successful initiatives and projects may not have been 'badged' as landscape or having landscape benefits (e.g. those achieved under the Water Framework Directive) and identification of successful projects could help gain further political support for future landscape projects.

d) Celebrate

In spite of what seems like a gloomy picture in terms of environmental impacts, political inactivity in relation to landscape and lack of funding available, it was agreed that there was much to celebrate. An example in England is the Heritage Lottery Fund (HLF) achievements in parks especially. The role of National Parks and the way landscapes are run, protected etc. was highlighted as was the example of good cross-boundary working e.g. around the River Tweed. The National Forest achievements were mentioned and the work of the National Grid, the National Trust and London Green Grid. There was a strong feeling of the importance of looking ahead, not look back, and that being provocative is potentially useful to encourage issues to emerge and discussion on key topics related to landscape to occur.

There is much to consider and develop through the LAG and as a result of the extensive discussions at the Landscape Symposium (Figure 7). An important point is perhaps that often an event such as the symposium provides an outlet for hidden energies and enthusiasms, but it also may act as a catalyst for building new relationships and initiatives which are much needed if we are to address the critical strategic landscape issues that face us all.

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Emerging Themes

- Facilitation of more proactive and positive approaches to 'spreading the landscape word'; best practice examples; particularly through the media;
- Do landscape skills need to be raised? If so in which areas?
- Use ELC as a framework and link into other frameworks. How can the ELC be implemented?
- How can we identify and facilitate methods for increased integration such as that required with ecosystems approaches and biodiversity monitoring
- How can the ELC initiatives be used to help share experience more widely? How can those with responsibilities under the ELC be challenged to meet them?
- How do we raise the profile of landscape within the agriculture/rural agendas?
- How do we raise the national status of landscape? Could a national statement on landscape be promoted?
- Consider how the characterisation approach might be expanded and extended within policy and practice.
- How can others such as businesses be encouraged to advocate on behalf of landscape to raise the profile of landscape issues? How can long-term relationships be created?
- How can facilitation of the establishment of networks, partnerships and method development be encouraged to engage communities in landscape issues?
- Ideas for creating initiatives to celebrate and raise the profile of landscape awareness and activities; should we have a national celebration of landscape?

Figure 7: Emerging Themes from the Landscape Forward Symposium, 18.3.2015

5.0. Reflections and Conclusions

Finally, there is still much to be gained from a close examination of the ELC text in relation to developing strategic thinking for landscape. Quality and quality objectives are particularly important in the interpretation of the ELC text and the *value* of all landscape needs to be reflected and landscape *values* better understood. We need better ways that are more inclusive for evaluating landscapes which build on landscape character work and emphasise the role of landscapes in local distinctiveness. In order to engage with policy makers the links between quality of landscape and economic and social success, health and wellbeing etc. need to be made clearly and with supporting evidence of the role landscapes can play in these issues. More and better public involvement in landscape decision-making needs to be encouraged, facilitated and new methods developed that will enthuse and capture the attention of communities and hard-to-reach groups. It seems that an integrated and innovative or creative landscape approach as the basis for forward (visionary) planning to protect, manage and plan landscapes may be useful but the importance of pushing forward issues of justice, legal, administrative, fiscal, financial arrangements for protection, management and planning landscape, should not be forgotten. However sometimes it is helpful to

'think sideways' to get around difficult issues rather than be hindered by them; using creative and inclusive approaches that help communities of place, practice and interest to explore and address difficult issues such as landscape scale and sustainability may also be a useful way forward.

6.0. References

- CoE (Council of Europe) (2000) *European Landscape Convention European Landscape Convention* text Available at: http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm
- Gren, L. (2015) *The European Landscape Convention in Sweden 2013-2015*. Presentation on behalf of the Swedish National Heritage Board. Available at:

 http://www.coe.int/t/dg4/cultureheritage/heritage/Landscape/ReunionConf/8eConference/pptSWEStrasbourgMars2015.pdf (accessed 26.06.2015)
- Llausas, A. and Roe, M.H. (2012) *Green Infrastructure Planning: Cross-National Analysis between the*North East of England and Catalonia, European Planning Studies, 20, 4, pp.641-663.

 DOI:10.1080/09654313.2012.665032
- Natural England(2014) *Natural Character Areas Profile Case studies.* Available at:

 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/378756/nca-profile-case-studies.pdf (accessed 26.06.2015)
- National Association of AONBs and National Parks England (2015) *So much more than the view.*Available at:

 http://www.nationalparksengland.org.uk/ data/assets/pdf file/0012/578667/So-muchmore-pdf-with-web-navigation-bar.pdf (accessed 26.06.2015).
- Roe, M. H. (2013) Policy Change and ELC Implementation: Establishment of a baseline for understanding the impact on UK national policy of the European Landscape Convention, <u>Landscape Research</u> 38(6): 768-798. DOI:10.1080/01426397.2012.751968
- Roe, M.H. and Mell, I.C. (2013) *Negotiating Value and Priorities: Evaluating the demands of Green Infrastructure development*, <u>JEPM</u>, 5, pp.650-673. DOI: 10.1080/09640568.2012.693454
- Roe, M. H., Selman, P. Mell, I.C., Jones, C. and Swanwick, C. (2009) *Establishment of a baseline for, and monitoring of the impact of, the European Landscape Convention in the UK.* Report to Defra, CR 0401.
- Roe, M. H., Selman, P. and Swanwick, C. (2010) *The Development of an approach to facilitate judgement on landscape change options*. Report to Natural England. RES/0360/7270.
- Sayer, J., Sunderland, T., Ghazoulc, J., Pfund, J-L., Sheil, D., Meijaard, E., Ventera, M., Boedhihartono, A.K., Day, M., Garcia, C., van Oosten, C, and Buck, L.E. (2013) *Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses,* PNAS,10(21), 8349-8356. DOI: 10.1073/pnas.1210595110.