Bulletin of the Chartered Institute of Ecology and Environmental Management

CIEEM

inpractice

Issue 106 | December 2019

Future of Land Management

In this issue

Land Management Conflicts and Solutions

Keywords: conflict resolution, ethics, land management, mechanisms

Roger Crofts FCIEEM

Arguments about land use continue. No one decision-making system is able to resolve these. This Viewpoint argues the case for improvements needed to provide a more informed basis for land management decision making in the UK to help stimulate debate in CIEEM.

Introduction

Land management is currently one of the most important issues for ecologists and environmental managers. Land demand for housing, new infrastructure and renewable energy installations continues unabated. Major uncertainties exist for agriculture post-Brexit. Continuing loss of biodiversity and the rapidity of climate change challenge current practices and create uncertainty. Focussing on single land uses will not resolve the conflicts because so many are interconnected and decisions on one will have consequences for others. There are no easy answers.

Recognising land use conflicts

There are many battles about the best use of land. It is needed for housing, new transport links and renewable energy installations. Simultaneously, there is demand for safeguarding the best agricultural land, and providing more space for nature. Some land uses are inherently in conflict with others, and some are complementary. For example, around the urban fringes housing and associated development conflicts with the safeguarding of the best quality agricultural land and the retention of public amenity. In the uplands there are conflicts between sheep rearing for food, moorland management for field sports, tree planting for home grown timber, electricity generation to reduce carbon emissions, and nature protection. It is challenging to find a way to accommodate these diverse land uses and to resolve conflicts between different users.

Figure 1. Grant-aided afforestation of vegetated moorland in 2018 causing loss of soil, water and nutrients justified under climate change policy. Photo credit Roger Crofts.

This is partly due to the mindsets and intransigence of the parties involved. Despite some dialogue counter opinions are often polarised: *Blame Somebody Else, Not Invented Here, Not in My Backyard, Not in Anybody's Backyard*. These well-known syndromes dog the debate about land use. Without changes in the mindsets of participants, conflict will continue. One way forward is to adopt behavioural change approaches.

Changing behaviours

A few years ago, following a seminar on land management with global experts, I worked with a lawyer and a psychologist on principles to improve land management through behavioural change (Hine *et al*. 2015). Our new paradigm comprised the following elements:

1. **Recognise varying behaviours amongst stakeholders**: their reaction to pressure for change can be used to induce behavioural change.
2. **Use an inclusive process to develop solutions**: engage in meaningful dialogue to bring all communities of interest together and shape common solutions.
3. **Develop an ethical charter for resource use and management** based on the 'public good argument'.
4. **Use multifaceted approaches to induce positive attitude change**: replacing the 'carrot and stick' approach with a combination of economic incentives (not subsidies), peer pressure, and applying behavioural change in practice.

5. **Develop policy to reflect local reality and high-level imperatives**: meeting of global and local inputs to replace top-down solutions.
6. **Ensure that all policy has multiple objectives** so that all stakeholders agree that land use is a multi-objective activity embracing ecosystem management, delivering environmental services, producing food and stimulating economic development.
7. **Exchange knowledge on an equal basis between all parties** changing from knowledge transfer from the 'expert' to knowledge sharing whereby practical experience is recognised as an equal partner.

This behavioural approach needs to be supported by an ethical basis, a set of basic principles and improvements in existing mechanisms.

Changing our philosophy

An ethical charter is needed. We can use the tenets of the Earth Charter (Earth Charter Initiative 2000) and the United Nation's Sustainable Development Goals (United Nations 2015). The Earth Charter principles are valid for addressing conflict resolution: respect and care for the community of life, ecological integrity, social and economic justice and democracy, non-violence and peace.

In practice, the sustainability ethic is not being adopted in the UK, maybe because development and prosperity are considered to be essential, even given the cost of natural resource depletion and intergenerational equity. For example, the current agricultural support system is still production focussed despite the Codes of Practice and greening elements.

Does who owns the land have a bearing on this? I doubt that it does, as I have observed both good practice and unacceptable practice among local communities, intergenerational owners, and governments. What matters is how the land is looked after: an intergenerational stewardship approach is needed, achieved through a combination of principles and mechanisms.

Adopting some basic principles

There is plenty of literature on good practice, including the Codes of Practice from within the UK government departments (e.g. Defra 2018). There is a role for CIEEM to lead a debate about the basic principles of land management from an environmental perspective. Below are three suggestions.

Figure 2. Loss of prime agricultural land to housing in East Lothian. Photo credit Roger Crofts.

Recognise **natural capital** as a fundamental component in valuing land**.** The current basis of development potential is surely outmoded. Recognising the value of the natural capital in land, such as the ecosystem functions and services provided, might encourage a less exploitative mentality.

Greater recognition of **protecting natural processes and features** Is needed. The arguments about exploitation in protected areas, such as gold and potash mining, remain unresolved, while both landscape quality and biodiversity continue to decline. An objective-based approach to management within all types of protected areas is a well-tested way forward using the IUCN Management Categories system (see Dudley 2008 for details; and Crofts *et al*. 2014 for implementation in the UK). In addition, we need to address how much land should be managed for nature. The Lawton report (Lawton *et al*. 2010) addressed this and more recent international campaigns have argued for *Nature Needs Half* (https://natureneedshalf.org/). But is this sufficient or should all of the land be managed with nature as well as society in mind?

Recognise natural diversity through both **biodiversity and geodiversity**. Biodiversity is recognised through the Convention on Biological Diversity, but geodiversity has no formal international status. However, the *nature's stage* concept (Anderson and Ferree 2010) provides a new basis for an integrated approach to remove another conflict if the interdependencies within nature are recognised and geoconservation becomes an equal partner with biodiversity conservation (Crofts 2017).

Improving existing mechanisms

Improvements can be made to existing mechanisms to reduce conflict.

Spatial land planning is undertaken through unconnected decision-making systems that are often unable to resolve conflict. The town and country planning system operates largely to favour development, with natural environment and community interests as secondary. The development of **regional spatial strategies**, trialled in England and Scotland, provides a way forward with active stakeholder participation. They need government encouragement to be widely adopted throughout the UK to provide an integrated approach to land use choices.

Placing **responsibilities and defining roles** of all owners, managers and users of land, alongside providing financial support for land operators, would be a step forward in reducing confusion and conflict. Existing codes of practice for agriculture and forestry are voluntary and not tied to receipt of public money. By contrast, the

Figure 3. 800-year-old oaks managed intergenerationally for nature and oak tree products at Dalkeith Oakwood SSSI. Photo credit Roger Crofts.

Figure 4. Integrated farm and water management in the Severn valley near Tewkesbury. Photo credit Roger Crofts.

Scottish Outdoor Access Code (Scottish Natural Heritage 2005) and the *Scottish Land Rights and Responsibilities Statement* (Scottish Government 2017) place unambiguous roles and responsibilities on all participants. Implementation has been mixed, but the approach is worthy of trialling throughout the UK.

The Landcare movement, developed in Australia and adopted in many countries, is based on the concept that owners and local communities should work together using their knowledge and experience to resolve conflicts and develop new ways of caring for the land (Catacutan 2009). These concepts should be part of the secondary schools' curriculum in the UK to inform future citizens about the combined effects of the climate emergency, biodiversity loss and continuing land degradation. It is termed **land literacy**: understanding all aspects of environmental, economic and social aspects of the land and its use.

Conclusion

Thinking fundamentally about how to reduce land management conflicts with an ethical basis, adopting some basic principles and improving mechanisms will, I hope, stimulate debate within CIEEM.

Acknowledgement

Thanks to Paul Goriup and Des Thompson for comments.

References

Anderson, M.G. and Ferree, C.E. (2010). Conserving the stage. *PLoS One*, **5(7):** e11554.

Catacutan, D., Neely, C., Johnson, M., Poussard, H. and Youl, R. (2009)**.** *Landcare: local action—global progress***.** World Agroforestry Centre, Nairobi.

Crofts, R. (2017). Putting geoheritage conservation on all agendas. *Geoheritage,* **10(2):** 231-238.

Crofts, R., Dudley, N., Mahon, C., Partington, R., Phillips, A., Pritchard, S. and Stolton, S. (2014). *Putting Nature on the Map: A Report and Recommendations on the Use of the IUCN System of Protected Area Categorisation in the UK*. IUCN National Committee, UK.

Defra (2018). *Code of Good Agricultural Practice*. Defra, London.

Dudley, N. (Editor) (2008). *Guidelines for Applying Protected Area Management Categories.* IUCN, Switzerland. Available at https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf. Accessed 14 October 2019.

Earth Charter Initiative (2000). *The Earth Charter*. Earth Charter, Costa Rica.

Hine, D.W., Crofts, R. and Becker, J. (2015). Designing Behaviourally Informed Policies for Land Stewardship: A New Paradigm. *International Journal of Rural Law and Policy,* Special Edition 1, Soil Governance. June 2015.

Lawton, J.H., Brotherton, P.N.M., Brown, V.K., Elphick, C., Fitter, A.H., Forshaw, J., Haddow, R.W., Hilborne, S., Leafe, R.N., Mace, G.M., Southgate, M.P., Sutherland, W.J., Tew, T.E., Varley, J. and Wynne, G.R. (2010). *Making Space for Nature: a review of England's wildlife sites and ecological network*. *Report to Defra*. Defra, London.

Scottish Government (2017*). Scottish Land Rights and Responsibilities Statement*. Scottish Government, Edinburgh.

Scottish Natural Heritage (2005). *Scottish Outdoor Access Code*. SNH, Inverness.

United Nations (2015). *Sustainable Development Goals 2015-2030*. UN, New York. Available at https://sustainabledevelopment.un.org/?menu=1300. Accessed 18 October 2019.

About the Author

Roger Crofts trained as a geographer and then worked on economic development as a Scottish-based civil servant before establishing Scottish Natural Heritage as its Founder CEO. He currently advises on environmental governance and management, especially in Scotland and Iceland. He was awarded the CIEEM Medal in 2016. www.rogercrofts.net

Contact Roger at:
roger.dodin@btinternet.com