

## **Globalisation and Agricultural Landscapes**

### **Change Patterns and Policy Trends in Developed Countries**

Whilst agricultural landscapes are part of the local ecosystem and community in which they are situated, they are becoming increasingly affected by the same global dynamics, and are converging in character.

Combining landscape ecological research and an examination of relevant public policy, this book investigates the dynamic relationship between agricultural landscapes and the global change processes, such as urbanisation, by which they are being transformed. Landscape change is analysed in the context of biophysical patterns, market dynamics and specific public policy frameworks through a series of case studies from different OECD countries spanning Europe, Asia-Pacific and North America. Particular emphasis is placed upon the way that landscapes are changing under differing policy combinations, including the EU Common Agricultural Policy.

This is an ideal resource for graduate students and researchers in landscape ecology, agriculture and rural geography and planning as well as policy analysts working in the agricultural sector.

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The series is published in collaboration with the International Association for Landscape Ecology (IALE), which has Chapters in over 50 countries. IALE aims to develop landscape ecology as the scientific basis for the analysis, planning and management of landscapes throughout the world. The organisation advances international cooperation and interdisciplinary synthesis through scientific, scholarly, educational and communication activities.

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## Preface

This text has developed from a shared interest in the relationships between globalisation and rural landscape change and sustainability. We believe that consideration of the implications and intersections of global policy agendas for markets and sustainability through comparative analysis of the changing structure and function of a range of local agricultural landscapes offers a distinctive contribution to the wider scholarly and policy debate on landscape sustainability.

Our primary objective is to enhance understanding of the ways in which contemporary agricultural landscapes are changing in response to emerging market conditions, technological developments, and changing sociocultural and environmental conditions for farming, under different public policy frameworks. A second objective will be to provide theoretical and practical policy insight into the potential for local agricultural landscapes to adapt to global influences in sustainable ways. Specifically, we examine the way in which the global market liberalisation policy and international sustainability agendas intersect within agricultural landscape systems of selected Organization for Economic Co-operation and Development (OECD) economies in Europe, Asia-Pacific and the USA. Two complementary analytical perspectives are drawn together: landscape ecological research on change in agricultural landscape systems, and landscape planning and agri-environmental policy analysis.

The content of the text has been shaped through the preparation and presentation of a symposium at the 2007 World Congress of the International Association for Landscape Ecology (IALE), held in Wageningen, the Netherlands. The symposium was titled ‘Globalisation and the sustainability of agricultural landscape systems’, and many of the chapter authors were participants. Landscape ecology has emerged as a powerful synthetic approach to sustainability science, and its particular emphasis upon spatial relationships provides an ideal framework for

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consideration of agricultural landscape change. Policy dimensions have been less well developed within the discipline, and a complementary goal of this text (and a rationale for its origins at the IALE Congress, and its publication within this Cambridge University Press series) is to help strengthen the cultural and policy dimensions of landscape ecology.

Our focus upon agricultural landscapes reflects several considerations. Agri-environmental systems are at the interface of nature and society, and their management has vital significance for many dimensions of global sustainability. Agricultural landscapes are being transformed worldwide by the globalisation of markets and technologies, but even when globally connected, agricultural landscapes are also always situated in particular places, ecosystems and communities. Their condition therefore expresses local actions and reactions, in a context shaped by both place-specific conditions, and wider global influences. These external influences include changing public policy on both global markets and sustainability.

Our approach combines theoretical synthesis with comparative country-based studies from a range of advanced industrial economies within the OECD. The focus upon developed economies is a recognition of the central role played by the OECD countries in the debates upon landscape sustainability and trade reform, and reflects our collective interests as scholars in the role of public policy in landscape change in our home countries. By limiting our scope in this way, we also hope to gain greater analytical power from the country comparisons.

Although the chapters in this book represent different approaches to agricultural landscape, we find the general definition of landscape used in the European Landscape Convention embraces all the analyses represented. According to this, 'landscape' is defined as: 'an area, as perceived by people, whose character is the result of the action and interaction of rural natural and/or human factors' (Council of Europe, 2000, Article 1).

The first four chapters establish our overall analytical framework. Chapter 1 (Jørgen Primdahl and Simon Swaffield) proposes a theoretical approach that links local agents in particular landscapes with the global policy agendas of open markets and sustainability. In Chapter 2, Clive Potter examines two competing policy paradigms that are seeking to shape the future of farmed landscapes in industrialised countries. In Chapter 3, Anette Reenberg, Tobias Langanke, Søren Bech Pilgaard Kristensen and Tina Svan Colding present an integrated approach to analysis of change in particular landscapes, based upon land systems. They suggest ways in which landscape ecology can contribute to understanding coupled human environment systems, and in Chapter 4, Jacques Baudry, Santiago Poggio, Françoise Burel and Catherine Laurent use landscape ecological concepts to analyse the changes taking place in two geographically different landscapes, in

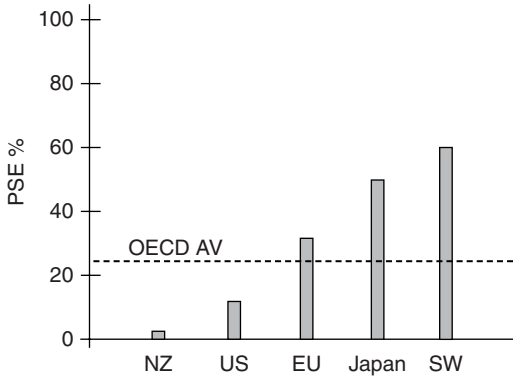


FIGURE 1.  
 Different levels of producer subsidy equivalents (PSEs) (see page 20) based upon data from the OECD (Organisation for Economic Cooperation and Development (2008): Factbook 2008, Paris).

France and in Argentina, that are linked through global agribusiness. They highlight several key questions about the biodiversity effects of globalisation that provide a useful background to the subsequent country-based analyses.

The next eight chapters are based upon specific country studies. The key variable across the different studies is the macro policy framework regarding agricultural subsidies. Figure 1 shows the different levels of producer subsidy equivalents in the country examples featured in the chapters, which range from Japan and Switzerland with the highest levels of subsidy, to New Zealand with the lowest.

In Chapter 5, Nadja El Benni and Bernard Lehmann analyse landscape change in Switzerland, a country outside the EU Common Agricultural Policy (CAP), which maintains high levels of subsidy, but which is progressively realigning its policy framework to meet World Trade Organisation (WTO) requirements to decouple support from production. In Chapter 6 Simon Swaffield presents a contrasting analysis of landscape change, also outside the EU, focused upon New Zealand, which unilaterally removed subsidies as part of a liberalisation agenda. These two examples represent the two ends of the policy range illustrated in Figure 1. Next, in Chapter 7, Teresa Pinto-Correia proposes a typology of rural landscapes in Portugal, based upon analysis of key variables, as a basis for understanding the way landscapes are changing within Europe under the Common Agricultural Policy (CAP). Then in Chapter 8, Jørgen Primdahl builds upon the New Zealand and Portuguese cases by undertaking a comparative analysis of change patterns in three intensive landscapes and three marginal landscapes in Denmark, Portugal and New Zealand, and starts to draw out common themes that are discussed further in the concluding chapter.

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The next two chapters analyse landscape change in the USA and in a former member of the Soviet Bloc, Estonia. In Chapter 9, Hannes Palang and Anu Printsmann analyse the changes that have taken place since the liberalisation and privatisation of collective agriculture in the early 1990s, whilst in Chapter 10, Joan Iverson Nassauer describes the effects of US Federal Agricultural Policy upon the Midwest landscape, and projects possible ways to better align policy with public values. These two chapters also each highlight in different ways the close linkage of changing agricultural landscapes with urbanisation and changing urban systems, and in the following two chapters these urban–rural relationships are further examined.

In Chapter 11, Marjan Hidding and Marcel Pleijte analyse changing landscape patterns and policies within the Netherlands, one of the most urbanised countries in the world, and then in Chapter 12, Makoto Yokohari, Marco Amati, Jay Bolthouse and Hideharu Kurita examine the challenges facing Japanese urban fringe landscapes as urban populations age, revealing the emergence of a new form of urban agricultural landscape. Finally, in Chapter 13, Simon Swaffield and Jørgen Primdahl draw together the themes from the book and highlight several key policy and research questions.

For whom are these studies intended? The effects of globalisation and the intersection of the open market agenda with the sustainability agenda in landscape are of vital importance to a range of stakeholders. International agencies, nation states, local and regional communities, and individual farmers, scientists and decision-makers all need to understand the actual and potential effects of market liberalisation upon agricultural landscape systems, and to find ways to reconcile and integrate these effects with the science and practice of sustainable landscape management. We hope that the book will be useful to academic researchers, policy analysts, and land managers, in extending their knowledge and understanding, and suggesting directions for future policy and research. We believe it will also be of particular value to postgraduate students interested in landscape change and to those with a more general interest in rural landscapes.

It is also important at this initial stage to explain our approach to the incorporation of considerations of climate change. There was an early debate amongst the IALE symposium organisers about the relative emphasis to be placed upon the relative effects of trade globalisation and climate change policies. We decided to consider climate change within the broader sustainability agenda, primarily because our case studies are, inevitably, historical. They tell us much about the effects of globalisation over the past 20–30 years, but can provide little empirical insight into the landscape effects of climate change, or of emerging climate change policies. In the final chapter, where we synthesise the findings from the different country examples, we explore the relationship between landscape change and

policy responses to globalisation, noting how climate change is intensifying the challenges and issues considered in both the market and sustainability agendas.

It is customary to clarify the relative roles of multiple editors. In this project, Simon Swaffield and Jørgen Primdahl have been equal partners throughout. We were co-organisers of the IALE symposium, together with Professor Joan Nassauer and Professor Teresa Pinto Correia, to whom we owe particular thanks and acknowledgement for their help in shaping the whole project. In this text, Jørgen and Simon are co-editors and co-authors of two chapters, and have varied the sequence of our names in different parts of the text in order to minimise the tyranny of alphabetical order.

As editors we owe a major debt to our contributors, who have prepared a set of tightly argued and well-integrated chapters, and who have responded with good grace throughout to our editorial comments and suggestions. They include a number from the original IALE symposium, plus several new contributors who have further strengthened the text. We also owe thanks to the IALE Congress organisers (particularly Rob Jongman), whose support enabled the project to gain initial momentum.

We have of course many other acknowledgements to make in terms of our editorial role. The University of Copenhagen and Lincoln University have supported the project in a number of ways, including help towards travel. At Lincoln, Michelle Collings cheerfully and efficiently took on the task of compiling the final manuscript, including illustrations, captions, index and copyright details. At Cambridge University Press, Alan Crowden was the commissioning consultant, Dominic Lewis and Lynette Talbot guided the initial stages of the project and Christopher Miller and Jo Endell-Cooper coordinated the production. At home in Governors Bay, New Zealand, and in Roskilde, Denmark, our wives and partners, Jenny and Vibeke, and our respective children, have patiently tolerated the way our working collaboration over a number of years has inevitably overflowed into family life. Thank you all.

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