

Book reviews

Reacquainting environmental assessment with biodiversity

Patrick O'Farrell

Biodiversity in Environmental Assessment — Enhancing Ecosystem Services for Human Well-Being, edited by Roel Slootweg, Asha Rajvanshi, Vinod Mathur and Arend Kolhoff
Cambridge University Press, 2010, 437 pages, paperback, ISBN 978-0521716550

It has been 18 years since the Convention on Biological Diversity, a legally binding treaty, was opened for signature at the Earth Summit in Rio de Janeiro in 1992.

The convention brought a clear message to decision makers that our natural resources are finite and that their use requires the development of sustainable use strategies, aimed at benefiting present and future generations. This convention introduced three important principles: that all biological diversity needs to be conserved, that it needs to be used sustainably, and that it must be used in a fair and equitable way. Much of this thinking was more recently reiterated in the Millennium Ecosystem Assessment, a six-year study completed in 2005, which examined the condition and trends of the world's ecosystems determining the consequences of this for human well-being. It specifically focused on the benefits that people derive from functioning ecosystems, directly linking people to biodiversity. Findings from this study indicated that the vast majority of ecosystem services are in decline, humans are having a significant negative impact on biodiversity and that this impact is on the increase. This implies that our planning and development trajectories and our decision making regarding environmental issues

have all failed to appropriately consider biodiversity and ecosystem services. Biodiversity issues have apparently been far from the minds of our policy makers.

Biodiversity is once again back in focus. The United Nations has declared 2010 the International Year of Biodiversity, calling attention to the link to human well-being, with the slogan being 'Biodiversity is life, Biodiversity is our life'. We have started to recognise, and acknowledge, the limitations of past approaches at integrating biodiversity into development. Researchers have been driven to tackle the pressing issue of how to appropriately address biodiversity within environmental assessments. The emergence of the field of ecosystem services, with its specific focus on the utilitarian value on biodiversity, offers hope.

Biodiversity in Environmental Assessment focuses on this specific issue, offering solutions aimed at integrating biodiversity into environmental assessment. It provides clear approaches for repositioning and refocusing environmental impact assessment (EIA) procedures, putting this process back on a course to sustainability. This multi-authored book is edited by Roel Slootweg, Asha Rajvanshi, Vinod Mathur and Arend Kolhoff, and the extensive experience of these editors, as practitioners, teachers and published academic authors, is evident throughout the book. The book covers a range of topics as it seeks to provide a more rigorous, yet not confounding, approach to integrating ecosystem and ecological processes into development decision making, foregrounding the necessary importance of this aspect of environmental assessment. A key message the book provides is that biodiversity concerns are not overwhelming; these can be integrated into both EIA and also the less developed tool of strategic environmental assessment (SEA) with relative ease. This can be achieved by placing the focus on

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ecosystem services, where biodiversity is tied to human well-being. The authors feel this language resonates with decision makers, and that this makes it an ideal access point. Effective assessment and sound decisions will emerge from assessments based on the role biodiversity plays in delivering ecosystem services that speak to human well-being concerns.

While each chapter is a stand-alone piece, there is sufficient overall coherence in the logic of the chapters to address these overarching concerns. The book is presented to us in three accessible sections. The first sets the scene, unpacking the concept of biodiversity and defining ecosystem services, making the necessary linkages between these concepts and linking them to the Millennium Development Goals.

The second section introduces existing tools and techniques of environmental assessment, and goes on to propose clear and well-supported ways of integrating biodiversity into these existing environmental assessment frameworks. The various stages of assessment are engaged with and we are given a step-by-step demonstration of how biodiversity issues can be integrated into EIA. The importance of the screening and scoping stages for highlighting and addressing biodiversity issues are made explicit.

The third and final section engages with emerging issues and how the proposed approach might be

taken forward. Here the authors carefully explain the potential role of biodiversity offsets and the role ecological valuation can play in generating persuasive arguments for biodiversity retention. I would have liked to see more conclusions and synthesis on the far-reaching nature of this work, but am sympathetic to the overwhelming scope of the topics covered, which no doubt constrained this.

Biodiversity in Environmental Assessment is packed full of information and shows extensive research. Considerable value is added in excellent specific case information from a wide range of contents presented in readily accessible text boxes. These excellent summaries lend validity to the proposed approach, demonstrating where practitioners have successfully enmeshed biodiversity concerns into the EIA process. This book is a major first step towards creating a more coherent and transdisciplinary understanding and a shared space, drawing together environmental assessment, conservation planning, ecosystem services assessment and social and welfare assessments. This is a book for environmental assessment consultants and practitioners, students and academics, primarily for those engaged in environmental assessment, but also ecologists, conservation biologists, sociologists and others engaged in natural resource management.

The paradigms of weak and strong sustainability

Alan Bond

Weak Versus Strong Sustainability: Exploring the Limits of Two Opposing Paradigms, third edition, by Eric Neumayer

Edward Elgar, 2010, 272 pages, ISBN 978-1848448735, paperback price approximately GBP 30.00/USD 50.00

The title of this book describes exactly what it is about, and the importance of the interpretation of these opposing paradigms should not be underestimated — whether government policy is based on weak or strong sustainability has significant implications for people and the planet now, as well as in the future.

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I think it is important to clarify that the author of the book is an economist. He makes it clear that the aim is to make the key principles clear to non-economists (like myself) and does warn that chapter 5, focusing on means of measuring weak sustainability, is more advanced. I would agree with the author that the majority of the book is within the grasp of readers from diverse backgrounds, but be warned that chapter 5 will make you glaze over if you do not have a university-level economics education.

It is worth emphasising that this is the third edition of this book. From this, we can already deduce that the book has been sufficiently successful to warrant new editions. The first chapter is relatively short and sets the context for the book. It introduces sustainable development and the associated opposing paradigms of weak and strong sustainability, and explains the structure of the book.

The second chapter focuses in more detail on sustainable development so that the later consideration of weak and strong sustainability paradigms can be better understood. It is here that one of the bases for