

Chapter 52 -Ecosystem services: Never waste the opportunity offered by a good crisis

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In elaborating the tenets of an ecosystem services perspective, a *Handbook* of this kind naturally straddles a concern to both integrate and synthesise, but also to make distinctions between preoccupying themes and concerns. The idea of ecosystem services has been presented as unifying, harmonising concept; a 'statement of the art' crafted around an orderly structure of theories, methods, applications to make sense of its work. In our scene-setting chapter we noted too an accumulating concern to recognise, understand and manage better human dependencies on nature, and the many and diverse antecedents for the perspective in the wider canon of environmental thought. Even so, the mutually configuring worlds of research and policy that seek to explicate and apply the concept of ecosystem services are also mutable, unruly and highly fluid; readers who have scratched beneath the surface will have found a highly differentiated and contested field. Thus, while it is possible to write of a maturing field in terms of willingness to engage, it remains premature, and would be misleading, to write of a field as having reached consensus about the precise character of its operating concepts, and models of research practice.

This volume has sliced through a vast body of interdisciplinary scholarship at a particularly dynamic moment. All of the chapters have précised a labyrinth of interlinked studies, and provide touchstones for those wishing to probe further. Insofar as a community is emerging with interests in critical and constructive engagement, we are still in the early stages of paradigm change; some distance from the point where the focus of scholarship is 'merely' one of refining and translating thinking. As many of the contributions that make up this volume show, there is ready stream of new theoretical and empirical spaces to open up to take thinking forward. In putting together this volume it has been interesting to

observe how often statements of current understanding offer a glimpse of hitherto uncharted issues for ecosystem services, and how previously established problems can be rethought anew when tackled from an ecosystem services perspective. Opportunities to have a positive but disruptive influence on the 'state-of-the-art' feel like a real possibility.

What though, are the ties that bind all this diversity and innovation together? Reflecting on the recent growth of field we have reached a stage in the field where the 'noise' created by a small research community has created capacities and resources that command the attention of wider groups: the curious, the perplexed, the angry and the entrepreneurial. The ecosystem services agenda is functioning as a gathering and passing through-point, and this has its own momentum effects, not least in exposing to scrutiny basic claims, arguments and ambitions. More substantively, there is an expansive and subversive element to the ecosystem services agenda that makes it an important attractor for debate. We might say that one of the general virtues of the perspective is that it has steadily challenged prevailing wisdoms about where environmental concerns begin and end. While some encountering the discourse will quibble about precise ways of classifying ecosystem services, or question more fundamentally the utilitarian starting point of the perspective, what is being advanced here is a provocation to place the natural world unequivocally at the centre of decision making; that is, at the centre of decisions about the institutions we build within our communities and across our political systems; about the businesses we grow; and about the decisions we make as citizens and economic agents.

If this is a bracing new world for some, we would argue that it is also an invitation to affiliate with environmental concerns in different and exciting new ways. Importantly, it is an invitation to help challenge the discredited, though still persistently asserted, idea that the environmental agenda is somehow a constraint on, and counterpoint to, the real stuff of human progress: environment traded off against economy, against development, against food, against culture, and so forth. From an ecosystem services starting point all of this is turned on its head. Though the idea of counterpoints and trade-offs remains a common and vexed preoccupation within this emerging field, what is brought forth here is how to make

sense of different combinations and patterns of ecosystem service provision. Thus, fundamentally, the choice is not between the natural world or not, but between different models of the natural environment that social systems wish to propagate in the context of different models human well-being. This is more than simply a conceptual re-badging of societal choice. The important point is that natural capital is explicitly recognised as the resource around which every other choice must turn, and around which the limits of our apparently unfettered freedom to procure and arrange flows of benefits from ecosystems must be negotiated. These limits are social as well as environmental, and about reflecting back on norms, as much as they are about understanding biophysical thresholds.

A world recast as one of relationships between ecosystem service providers and beneficiaries is a very different world indeed, for as the contributors to this volume have shown, we are being encouraged to test our assumptions about what we think our natural world is for, and what roles, actions and responsibilities we are presumed to identify with and take on with respect to the many and diverse benefits of ecosystems. Conceptually at least there is an indifference to where priorities for management may lie with respect to human well-being, for at its starkest, the framework is an exercise in translating the natural world in to set of standardised units around which comparisons and choices can then be explored. From the perspective of decision making the difficulty here is how to address the framework's in-built relativism. The alignment of the perspective to the practice of valuation has provided one way major and prominent way into this problem, though the centrality of this practice to the development of the agenda signals for some an unhelpful concession of the environment to an economic mind-set, where money and markets become the context in which norms and limits are defined. For others, it is to challenge the conventional purview of the economic; a positively disruptive force in a world where an economic starting point holds sway. What we can say is an ecosystem services agenda of the future will almost certainly be a key venue in which debates about the economic and more-than-economic basis of environmental policy and decision making is played out. And in this debate the need for a strong sensitivity to understanding who stands to gains or lose from decisions, and building institutions that can account and mitigate for the distributional consequences of decisions, will be key.

In drawing to a close a volume on ecosystem services it is useful to reflect once again on the challenge of mainstreaming the perspective. There have been many claims and asides made in this vein throughout the Volume, including some in our own scene-setting introduction. Let us pursue some further thoughts here but perform a different final manoeuvre. In the puzzle-solving, puzzle-framing, world of ecosystem services some of the basic parameters and approaches of the field remain open to debate at the same time as ambitions for practical uptake are being apparently realised with alacrity. This situation has a long pedigree. Some three decades ago Soulé (1985) was to remark that: “in crisis disciplines one must act before knowing all the facts; crisis disciplines are thus a mixture of science and art, and their pursuit requires intuition as well as information”. His comments were written as a manifesto for the new “synthetic discipline” of “conservation biology” an important forbearer of an ecosystem services perspective in its own right. It was also one designed align the production and utilisation of ecological knowledge to explicitly normative and political ends: namely “providing principles and tools for preserving biological diversity” (*Ibid.* 727).

The sentiments of Soulé capture something of the transdisciplinary dynamic at the heart of innovation in the field of ecosystem services – another crisis discipline - where practical questions and problems of resource management have often run ahead of a settled evidence base. This type of reasoning has, of course, a wider and more pervasive academic pedigree, not least foreshadowing Funtowicz and Ravetz’s (1991) idea of a ‘post-normal’ science and their advocacy of developing procedures for scientific inquiry and intervention for situations where “facts are uncertain, values in dispute, stakes high and decisions urgent”. The principles and tools to have emerged under the rubric of an ecosystems services perspective provide one version of this post-normal world of environmental governance. In thinking about the issue of mainstreaming we need, however, to ensure that ecosystem services research is not simply about a process of rolling-out tools and techniques to handle analytical and procedural uncertainties in the production, procurement, application and integration of ecological knowledges. Amongst the many challenges of the twenty-first century is the one about how we construct a sustainable partnership between people and nature. Ecosystem services are, we conclude, fundamental to thinking deeply and imaginatively about what it is ‘we’ want ecosystems ‘to do’, and, what it is we expecting decision makers to create, combine and

integrate knowledge about. In short, the appropriate response is the Machiavellian one that we should: *never waste the opportunity offered by a good crisis.*

As the idea of ecosystem services tightens its grip on policy and practice discourse we see that it is researchers, *as much as* practitioners, who will find themselves inheriting and confronted with questions about our relationships to nature in a modern world. Mainstreaming is not only a process of moving outwards towards questions of utility and application, but also about moving inwards towards active processes of critical reflection and reinvention in research. This is only partly about researchers developing a durable set of concepts, a credible set of data infrastructures or a robust set of decision support tools and instruments to inform choices. In general we should be wary of viewing ecosystem services research as an exercise in steadily working out the details of a single all-encompassing master plan. The extant world of resource management is messier than any such an aspiration would allow. The signal of a field in good health is one encouraging scrutiny and alternatives within the practice of scholarship if the intention is cross and explore divides and to create conversations that are true to the perspective's holistic ambitions. Drawing lines too prescriptively around ideas, methods and application leads to stifling constructions of the world that have little currency in practice. The field will grow where creativity and openness are starting points, and where the paradigm of ecosystem services remains 'a work in progress'. An adaptive view of the world requires an adaptive research agenda; critical in its mission, and mindful that solutions are never total and beyond revision.

References

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