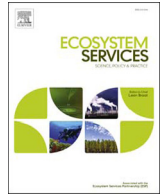




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Editorial

Five reasons why the Science publication “Assessing nature’s contributions to people” (Diaz et al. 2018) would not have been accepted in Ecosystem Services

1. Introduction

IPBES researchers Sandra Diaz et al. recently published a paper in the Science Magazine Policy Forum series (insights) (January 10, 2018, VOL 359, ISSUE 6373) with the title “Assessing nature’s contributions to people”, and the subtitle “Recognizing culture, and diverse sources of knowledge, can improve assessments”. For those (few) readers of Ecosystem Services who are not aware yet of the IPBES world, the acronym stands for “Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services”. IPBES is a “joint global effort by governments, academia, and civil society to assess and promote knowledge of Earth’s biodiversity and ecosystems and their contribution to human societies in order to inform policy formulation”. The paper proposes, introduces and explains the notion of “nature’s contributions to people” (NCP), as the better, next stage, alternative to the term “ecosystem services” (ES). I quote: “First, the NCP approach recognizes the central and pervasive role that culture plays in defining all links between people and nature. Second, use of NCP elevates, emphasizes, and operationalizes the role of indigenous and local knowledge in understanding nature’s contribution to people.”

Those who have published in Ecosystem Services, or at least have browsed the information on the website (<http://www.journals.elsevier.com/ecosystem-services/>) about its aims and scope, and editorial policy about building on existing knowledge and identifying novelty, should be able to recognize my criticism of this proposal. I focus on the comparison between the Science article characteristics and claims, and the work published in Ecosystem Services. A similar critique could be written by the Editors of Ecological Economics and the International Journal of Biodiversity Science, Ecosystem Services and Management.

1.1. Ignoring previous science publications and policy documents

The authors state that the NCP notion builds on the “ecosystem service concept popularized by the Millennium Ecosystem Assessment” and proceed to identify the differences, as quoted above. Those readers of the paper who have followed the development of the ecosystem services concept, e.g., since the term was coined Ehrlich & Ehrlich (1981), the seminal paper by Costanza et al. (1997), the global UNEP supported projects MA (Millennium Ecosystem Assessment, 2005) and TEEB (The Economics of Ecosystems and Biodiversity, 2010), the development of the detailed classification CICES (Haines-Young & Potschin, 2018), the adoption of the concept in global and continental policy (CBD, 2010, EC, 2006, 2010), and the hundreds of peer-reviewed

publications in the journals Ecological-Economics (since 1990), International Journal of Biodiversity Science, Ecosystem Services and Management (since 2009), and Ecosystem Services (since 2012) with a 20 year review of ecosystem services work (Costanza et al., 2017), may have had a “déjà vu” experience.

The authors of the Science paper have either missed all those developments, which is hard to imagine as several have published in Ecosystem Services, or have consciously chosen to ignore them, which raises questions about their intentions, and about the quality of IPBES publications to come. The Supplementary materials to this Science paper include 216 references, the selection of which confirms that there has been a clear bias when writing this paper (4 from Ecosystem Services, 2 from Ecological Economics, and none from the International Journal of Biodiversity Science, Ecosystem Services and Management). The paper does not mention any of the work mentioned above, except the MA, which is then denounced as not having paid enough attention to the NCP focal areas (see above). Even though several of the authors have published in Ecosystem Services, the group of authors now claim that a narrow ecological focus and monetary valuation characterizes all other work than IPBES work.

1.2. False claim that there is no social science perspective in the current literature on ecosystem services

The Diaz et al. paper presents the NCP notion (they do not present it as a new concept!) as the next, and better, version of the concept of ecosystem services. They proceed to redefine the current concept as narrowly focused on either the “ecological production functions to determine the supply of services or to estimate the monetary value of those ecosystem services flows so as to identify trade-offs among them and their impacts on well-being”. They then claim that this predominantly stock-and-flow framing of people-nature relationships largely failed to engage a range of perspectives from the social sciences.

Diaz et al. clearly have not kept up with Ecosystem Services. Of the more than 650 publications in Ecosystem Services in the period 2012–2017, more than half address social aspects, and are based on social science methods, specifically or in combination with economic and ecological assessments.

1.3. False claim that there is not enough attention for Culture, Local and Indigenous Knowledge

The current approaches are also put away as not having enough eye for stakeholder interests and stakeholder contributions, and

pluralistic worldviews. Finally, Diaz et al. claim that their new approach was necessary to pay enough attention to the cultural aspects, and especially Local and Indigenous Knowledge. Again, I advise this body of scientists to take notice of the dozens of publications in Ecosystem Services on Cultural Ecosystem Services, ranging from local cases to generic approaches, and a small but increasing number of publications on Indigenous Knowledge. Anthropologists seem to have discovered the concept and the Journal only recently. Next to papers on cultural ecosystem services, the role of culture in perceiving and valuing ecosystem services is addressed as well.

1.4. Proposing an existing definition of ecosystem services as a better name

The term Nature's Contributions to People is not new at all, as it has been used in many places and variations as one of the non-technical explanations of the compact term ecosystem services (originally: ecosystem-based goods and services for human well-being). The split in positive and negative contributions is announced as something innovative and subsequently explained without using and referring to the terms services and disservices, even though 2 of the 4 references to Ecosystem Services publications in the Supplementary Materials are about disservices.

1.5. Unsubstantiated claim that NCP is a better notion to be incorporated into policy and practice

The final issue I want to address, and this claim of the authors is understandable from their point of view, given that they are part of a Science-Policy Platform, is the claim that: *the NCP approach aims at coming up with products that are better and also more legitimate and therefore more likely to be incorporated into policy and practice. The argument used is: because it facilitates much more than previous framings the connection with rights-based approaches to conservation and sustainable use and their implications for quality of life.*

Diaz et al. give no evidence from any peer-reviewed publication or policy document for these contentions, which can be read as insults to those who have put honest effort in producing documented research on the relationships between ecosystem services, nature conservation, sustainability and human well-being. Ecosystem Services has published hundreds of papers which demonstrate the use of the concept in actual decision processes, Payments for Ecosystem Services arrangements and legal cases (see Special Issue Ecosystem Services and the Law, Volume 29B, available February 2018).

2. Conclusion

As Editor-in-Chief of Ecosystem Services I dare to say that we have produced in the past 6 years a body of knowledge which has already addressed all the topics the NCP authors claim need to be addressed, and have done so in a pluralistic, multi-worldview way, in more than 650 papers, many of them in Special Issues focusing on social science topics such as “shared values” and “integrated valuation”. I have refrained from including references to the Ecosystem Services publications, as they are all visible in the table on the Website (up to July 2017, soon to be updated to end of 2017).

I suggest to quickly forget this Science article, and critically check the quality of the scientific reports from IPBES, which are expected to be published anytime soon.

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