



Contents lists available at ScienceDirect

Environmental Science and Policy

journal homepage: www.elsevier.com/locate/envsci

The treatment of divergent viewpoints in global environmental assessments

Martin Kowarsch^{a,*}, Christian Flachsland^{a,b}, Jennifer Garard^{a,c}, Jason Jabbour^d,
Pauline Riousset^e^a Mercator Research Institute on Global Commons and Climate Change (MCC), EUREF-Campus 19, 10829 Berlin, Germany^b Hertie School of Governance, Friedrichstraße 180, 10117 Berlin, Germany^c Technical University Berlin, Economics of Climate Change, Straße des 17. Juni 135, 10623 Berlin, Germany^d UN Environment North America Office, 900 17th Street, Washington 20006, DC, USA^e Environmental Policy Research Center, Free University Berlin, Ihnstraße 22, 14195 Berlin, Germany

ARTICLE INFO

Keywords:

Divergent viewpoint
Environmental assessment
Co-production
Science–policy interface
Conflict
Value judgment

ABSTRACT

Global environmental assessment (GEA) processes routinely deal with a wide range of divergent viewpoints. The entanglement of disputed facts and values within these viewpoints raises challenges for their legitimate treatment, particularly in solution-oriented GEAs. We offer a conceptualization of ‘divergent viewpoints’ in GEA processes covering both scientific and the political (normative) dimensions, focusing on actors’ framing of environmental policy problems or on the suitability of particular response options. Based on extensive empirical research on three selected GEAs and a literature review, we distil nine general approaches which have been employed to respond to divergent viewpoints, and present these in terms of simplified, ideal-type strategies. We furthermore generate hypotheses about the advantages and drawbacks of each approach as well as conditions for success. Our analysis suggests that for policy-relevant divergent viewpoints highly disputed both on normative and scientific grounds, collaboratively exploring the practical implications of policy alternatives through GEAs is a particularly promising approach, although practical challenges remain. More broadly, this article contributes to a better understanding and more explicit discussion of existing, often implicit approaches within GEA processes for responding to divergent viewpoints. This article is part of a special issue on solution-oriented GEAs.

1. Introduction

The existence of multiple viewpoints and the need to generate common understandings that are coherent across divergent viewpoints is a core rationale for initiating global environmental assessments (GEAs) in the first place; and arguably, their original *raison d’être*. If scientific consensus and certainty as well as universal political acceptance (or agreement) existed on environmental problems or the formulation of policy options, GEAs would hardly be needed. GEAs are large-scale, multi-stakeholder and often intergovernmental processes that review, assemble and synthesize relevant knowledge on a particular topic in order to inform decision-making processes (Kowarsch et al., 2016; see also the Introduction to the special issue). In many cases, GEAs serve as effective platforms to reconcile divergent viewpoints through consultative science-based deliberation. They have also helped to reconcile disagreements and stimulate new research to overcome knowledge gaps and uncertainty. One notable example is the scientific assessments by the Intergovernmental Panel on Climate Change (IPCC), which have over time contributed significantly to

substantiating hypotheses of the human-induced climate change.

Despite important progress, the adequate representation and legitimate treatment of divergent viewpoints remains a fundamental challenge for GEA processes (e.g., Beck et al., 2014; Cash et al., 2003; Edenhofer and Minx, 2014; Kowarsch, 2016; Norgaard, 2008; Pascual et al., 2017; Sarewitz, 2004; Sluijs et al., 2010). As illustrated by many publications in science and technology studies (STS), opposition to assessment results and processes often occurs if the diverse stakeholders do not agree with, for instance, the scope, priorities or underlying assumptions of the GEA; ultimately, the inappropriate treatment of divergent viewpoints can exacerbate environmental controversies rather than resolving them (Cash et al., 2003; Jasanoff, 1990; Pielke, 2007; Sarewitz, 2004).

The increasing solution-orientation of GEAs further intensifies the challenge of divergent viewpoints. Jabbour and Flachsland (Jabbour and Flachsland, 2017) describe changing contexts for GEAs in terms of recent shifts in demand for greater emphasis on, and engagement with, the solution space, including policy options (see also Carraro et al., 2015). In this sense, ‘solution-oriented’ GEAs focus primarily on

* Corresponding author.

E-mail address: kowarsch@mcc-berlin.net (M. Kowarsch).<http://dx.doi.org/10.1016/j.envsci.2017.04.001>Received 31 October 2016; Received in revised form 1 April 2017; Accepted 3 April 2017
1462-9011/ © 2017 Elsevier Ltd. All rights reserved.

assessing different possible solutions to complex environmental problems. This does not necessarily imply that solution-oriented GEAs are per se more contentious than problem-oriented GEAs. However, the increasing diversity and number of stakes and stakeholders engaged in GEAs that exhibit a solutions focus has resulted in a proliferation of divergent viewpoints.¹ In particular, and more explicitly than problem-oriented assessments, solution-oriented GEAs face a broad range of divergent political stakes, interests and ethical values, as well as different forms of disputed knowledge claims (e.g., traditional knowledge) in the assessment of specific policy options.

Moreover, the international environmental governance context in which GEAs are embedded exacerbates the potential for divergence and conflict given the interdependences with other policy fields and interactions between multiple layers of jurisdiction (Stechow et al., 2016; Victor, 2014). However, avoiding disputed policy assessment in GEAs altogether to reduce the risk of legitimacy problems comes at the expense of weakening policy-relevance (Cash et al., 2003). Thus, achieving a careful balance between deeper, more meaningful engagement with relevant policy options and the heightened risk of bias (i.e., one-sided policy statements) versus avoiding (or watering down) heated issues in GEAs and significantly reducing policy-relevance and salience remains an enormous challenge (Siebenhüner, 2003). The adequacy and conditions of success (or failure) of different GEA responses to divergent viewpoints are poorly understood thus far, making GEAs vulnerable to legitimacy debates.

Our guiding research question explores what existing approaches are actually applied in selected GEA processes to respond to divergent viewpoints regarding environmental policy problems or possible response options (framework explained in Sect. 2; results presented in Sect. 3). We furthermore briefly evaluate the major strengths and weaknesses and potential conditions of success for each of these approaches (discussed in Sect. 4). Our research aims to support and frame future discussions about the design of GEA processes, and particularly, the solution-oriented, regarding the treatment of divergent viewpoints to ensure the legitimacy and ultimately the effectiveness of these GEAs.

Although many relevant case studies in the fields of STS, political science and environmental governance research exist (see below), the literature does not thus far sufficiently support GEAs regarding this challenge. The Harvard GEA project² yielded seminal studies inter alia on legitimacy issues in GEAs (e.g., Cash et al., 2003), but this project was initiated more than two decades ago and some of the most interesting contemporary GEAs (see Sect. 2 below) have been produced later. Different scholars have provided empirical and theoretical research on the politics of knowledge, the concepts of ‘consensus’, ‘diversity’ and ‘disagreement’, and the concept of ‘co-production’ of natural and social orders regarding various cases of scientific policy advice and selected GEAs (e.g., Jasanoff, 1990, 2004, 2013; Jasanoff and Wynne, 1998; Reid et al., 2006; Scoones, 2009; Sluijs et al., 2010), and have analyzed different strategies for, and contexts of, knowledge brokerage on disputed issues of environmental governance (e.g., Michaels, 2009; Saarela et al., 2015). Appendix A provides a short literature review.

Although these analyses provide a useful starting point for this study (see Sect. 2), they do not provide the integrated analysis and overview of different approaches for responding to divergent viewpoints in GEAs aspired to here. This article aims to address this research gap, building on the valuable existing studies in this regard.

2. Analytical Framework, Materials and Methods

2.1. The Meaning of ‘divergent viewpoints’

We employ the term ‘divergent viewpoints’ here in the ordinary sense of the term, as done, for instance, by UN Environment (UNEP, 2014, Sect. IV.G) regarding their GEA processes.

Viewpoints include, for instance, specific opinions and interpretations, judgments, knowledge and truth claims or assumptions. We assume that different particular views are closely related to and largely determined by the more fundamental, underlying viewpoints held by different actors, for example their general positions, attitudes, perspectives or ways of thinking – be they substantiated, well-justified or not. These viewpoints are made up of a complex combination of cognitive and moral principles, beliefs, values, knowledge, experience, social context and other factors.

Given the diversity of actors involved in GEA processes (Garard and Kowarsch, 2017), it is not surprising that a large number of different viewpoints are present and will at times be at odds with one another. Divergent viewpoints can include explicit disagreements and even conflicts, where the latter is understood as a situation ‘in which interdependent people express (manifest or latent) differences in satisfying their individual needs and interests, and they experience interference from each other in accomplishing these goals’ (Donohue and Kolt, 1992, p. 4). Divergent viewpoints can also include situations where a perceived dissent is simply a matter of suboptimal communication rather than real disagreement, dispute or even conflict.

For our analysis, we are mainly concerned with the divergent viewpoints held by actors involved in GEA processes, related to (1) the appropriate characterization of environmental policy problems and the risks at stake (including uncertainties, interdependence and multi-dimensionality), and/or (2) the suitability of possible response options (such as technologies, behavioral options, public policies). These GEA actors include very different kinds of stakeholders (see Garard and Kowarsch, 2017): authors and experts; GEA coordinators and producers; GEA-related institutions; governments and other policy-makers; decision-makers from business, industry and NGOs; target audiences; etc. Their policy-relevant divergent viewpoints can occur at any phase during the GEA process, including, for example, when developing the mandate and scope, the content development and shaping phase, the review process and negotiating the Summary for Policy Makers (SPM), where applicable. An overview of prominent divergent viewpoints that feature in the environmental governance arena is provided by Urhammer and Røpke (2013); Hulme (2009) and Robert and Zeckhauser (2011) discuss those more specific to climate change.

A closer inspection of divergent viewpoints reveals important and far-reaching fact-value entanglements inherent in most disagreements. Consequently, in contrast to other publications in this field (e.g., Robert and Zeckhauser, 2011), we assume that facts and (epistemic, ethical and other types of) values are always highly intermingled in general and GEAs in particular (Dietz, 2013; Douglas, 2009; Hulme, 2009; Kowarsch, 2016, Chap. 5). Divergent viewpoints cannot be categorized as either purely ‘scientific’ or purely ‘political’ (normative, etc.), but rather there are only gradual differences between these frequently employed categories which can rarely be disentangled in particular empirical examples. For instance, controversial truth claims regarding scientific issues can imply conflicting individual or group interests as well, and divergent institutional interests – e.g., those of UN Environment (UNEP) in positioning itself as the leading body on international environmental policy in line with its formal mandate (see Dodds et al., 2014) – can be strongly dependent on disputed scientific claims regarding the degradation of the environment and its implications for human well-being.

Conceptualizing the term ‘divergent viewpoints’ in a very broad sense, i.e., in a manner that includes both factual and value judgment issues to varying degrees, is done deliberately in this article as

¹ This is argued, e.g., by Kowarsch, M., Jabbour, J., Flachsland, C., Kok, M.T.J., Watson, R., Haas, P.M. et al. (under review). Global environmental assessments and the path to solutions. *Nature Climate Change*.

² See <http://www.ksg.harvard.edu/gea/> (accessed 31 Dec 2016).

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات