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POLICY PERSPECTIVE

IPBES and Biodiversity Expertise: Regional, Gender, and Disciplinary Balance in the Composition of the Interim and 2015 Multidisciplinary Expert Panel

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Introduction

The global governance of biodiversity and ecosystem services is currently being transformed with potential consequences for research and policy agendas the world over. The catalyst for this change is the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). This expert organization was established in 2012 and brings together 124 governments and more than 1,000 international experts with the objective of addressing the degradation of biodiversity and ecosystem services to improve human well-being. Although it is similar in structure to the long-standing Intergovernmental Panel on Climate Change (IPCC), IPBES has a much broader mandate. It not only aspires to provide policy-relevant knowledge to governments, multilateral environmental agreements, and other publics, it also hopes to build capacity, support policy-making, and encourage new knowledge generation.

The establishment of IPBES has benefited from the experience of previous global environmental assessments

Abstract

The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) is an expert institution expected to transform the governance of biodiversity and ecosystem services. IPBES expands on previous initiatives and positions itself as a knowledge-policy interface open to different ways of knowing biodiversity. In this contribution, we analyze how the principles of regional, gender, and disciplinary balance that were adopted by IPBES have been applied to the Multidisciplinary Expert Panel (MEP): the body of experts responsible for the scientific and technical functions of IPBES and embedded in its knowledge-making practices. In doing so, we compare the selection of the interim MEP in 2013 with the new MEP in 2015 and find a small improvement in gender and disciplinary balance that varies across the United Nations regional groupings. According to the ambition of IPBES, there is significant room for improvement, but "opening-up" expertise in an intergovernmental setting proves challenging.

> (GEAs). IPBES operates in an intergovernmental context, which sets it apart from previous biodiversity initiatives, such as the Global Biodiversity Assessment (1995) or the Millennium Ecosystem Assessment (2005). This means that the Platform is effectively owned by governments: they set the agenda, and negotiate and define the IPBES rules of procedure. Perhaps more striking is the ambition of IPBES to broaden the scope of knowledge and expertise underpinning its work. In contrast to previous GEAs, IPBES aims for expert participation that takes account of gender balance, ensures representation from both developed and developing countries, and includes a diverse range of disciplines and knowledge systems.

> The development of more pluralist approaches to the design of GEAs is increasingly promoted by both practitioners and academics (e.g., Turnhout et al. 2012; Mooney et al. 2013). First, diverse expertise has been underlined as a necessity for substantive reasons. Given the complex nature of biodiversity and ecosystem services issues, there is broad recognition that addressing these cannot be achieved without the inputs of social sciences,

natural sciences, and indigenous and local knowledge (ILK) systems (Duraiappah & Rogers 2011). Furthermore, the importance of gender and local contexts in understanding biodiversity and ecosystem services has also been highlighted (e.g., Agarwal 2010; Poe et al. 2014). However, GEAs face contestation and a notable critique is that they are often dominated by experts from the Global North. Famously, the first chair of the IPCC, Bert Bolin, highlighted the importance of experts' regional distribution when he remarked: "Don't you think that global credibility demands global representation?" (Agrawala 1998). Such statements reveal that the credibility of GEAs not only depends upon the scientific quality of the experts mobilized, but also their diverse experiences and place-based affiliations. Consistent with these claims, extensive social research has highlighted that expertise is also a form of representation with simultaneous epistemic and political dimensions (e.g., Ezrahi 1990; Brown 2009). It matters who produces knowledge and how. Increasingly, the normative assumption that engaging with diverse knowledge will make institutions of scientific advice more meaningful, while reinforcing democratic accountability, has led several scholars to call for more inclusive GEAs (Koetz et al. 2011; Beck et al. 2014).

In this contribution, we reflect on the attempted opening up of expertise in IPBES, which has adopted guiding principles to achieve regional, gender, and disciplinary balance in all of its work. Building on the idea that diverse expertise in GEAs will enhance their ability to be meaningful for multiple audiences, we reflect on whose knowledge and expertise is recognized in practice. To achieve this, we draw our attention to the scientific and technical body at the heart of IPBES: the Multidisciplinary Expert Panel (MEP). With its small size, the MEP is a highly visible body and has an important functional, as well as symbolic, role in establishing the credibility and relevance of IPBES. Crucially, for understanding expertise in IPBES, the selection of the MEP is currently the only expert nomination and selection process where outsiders are able to scrutinize both nominated and selected experts.

Zooming in on the MEP

The MEP is an appointed body of 25 experts charged with overseeing the scientific and technical elements of IPBES. The MEP works alongside the administrative body, the Bureau, to coordinate the work program and is responsible for the selection of authors, experts, and reviewers, and overseeing the scoping, drafting, and review of each deliverable. This means that MEP members act both as coordinators and participating experts, and have great capacity to articulate and influence IPBES knowledgemaking practices. In particular, MEP members are involved in mobilizing the larger expert groups and the MEP has a key role in bringing together diverse professional and disciplinary networks.

Thus far, the importance of expert diversity in the MEP has been acknowledged in the IPBES rules of procedure, where it is most particularly framed by the principles of regional, gender, and disciplinary balance. In contrast to the selection of experts involved in the larger experts group, where nominations can be made both by governments and stakeholders, MEP members can be nominated by governments only. The selection process of the MEP is evidently more political. Once nominated, potential MEP members are placed into expert pools corresponding to the five regional groups of the United Nations (UN): Africa; Asia-Pacific; Eastern Europe (EE); Latin America and The Caribbean (GRULAC); and Western Europe and Other (WEOG). Each UN region then separately nominates five regional members, which are elected by the Plenary. Despite the principles mentioned above, there was recognition from both inside and outside IPBES that the "interim MEP," which was selected in 2013, had insufficient disciplinary diversity and poor gender balance (Opgenoorth et al. 2014; UNEP 2014).

While this initial MEP might be regarded as "an experiment," a new MEP was selected in January 2015 for a 3-year term and provides an opportunity to re-examine expert diversity and institutional learning in IPBES. Here, we take the stated IPBES principles of regional, gender, and disciplinary balance as a framework to describe and compare the composition of these two MEPs (see Methods in Supplementary Information). The use of categories and the idea of balance as a means of achieving expert diversity in IPBES has the dual function of both opening up and closing down how expertise is understood. Although they ostensibly promote diverse representation, reducing expertise to categories can obscure important assumptions in the processes of expert selection. Despite this, the categories have been adopted by IPBES and are used here as proxies to gain insights into whose expertise counts in this new institution and the role of diverse expertise in the governance of nature.

The composition of the proposed and selected experts of the interim and 2015 MEP are shown in Figure 1.

Regional balance

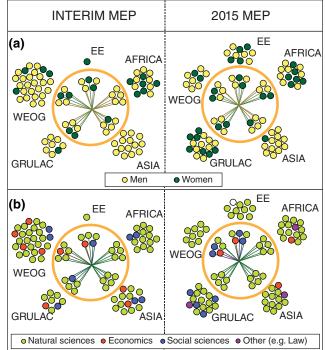
The rules of procedures of the selection process ensure that regional balance is achieved by nomination of five experts by each UN region. However, this obvious



circularity should not hide the fact that there are important differences between and within the regions. Despite similar numbers of proposed experts in the two selection processes (89 in 2013 and 87 in 2015), proposals for the interim MEP were unevenly distributed between the regions, which has been corrected for the 2015 MEP. Eastern Europe, for example, only proposed six experts in 2013, which increased to 15 in 2015. However, considering representation only at the regional level can also obscure some of the politics in the MEP selection process. Although members of the MEP are intended to represent their personal expertise only - nationality and professional affiliations should, in theory, be of no consequence - in practice, subregional representation matters. This could be seen most visibly in the selection process of the interim MEP, where disagreement in the Asia-Pacific region resulted in the nomination of 10 experts to the MEP, with two groups of five experts on a 1-year rotation. It is also worth noting that the definition of regions in IPBES has been subject to extensive deliberation: early negotiations included discussion over alternative regional structures, such as biogeographic delineations. While no consensual alternative could be found, the UN regional structure was adopted as the "status quo" solution.

Gender balance

During the selection of the interim MEP, women were underrepresented in the proposed experts of all UN



regions (19 out of 89 candidates), and seven were ultimately selected for the MEP, representing 28% of members. For the 2015 MEP, more women were proposed (29 out of 87 candidates) and nine were selected for the MEP, representing 36% of the members. However, there was still a significant gender imbalance among proposed experts. In particular, both Asia-Pacific and Western Europe and Other proposed less than 30% women. The 2015 MEP shows only slight improvement toward the 50% gender balance advocated by the Platform. This comparison suggests that increasing the number of women in the initial pool of proposed experts would offer the Plenary a better opportunity to achieve this balance. Currently, there is a significant selection bias toward men in all regions, which is also reflected in the composition of the Bureau (currently including only three women out of ten members). Ultimately, achieving gender balance has a critical role to play in the credibility of IPBES - it would demonstrate that the Platform can do what it sets out to do - and would provide acknowledgment of the important relations between gender and biodiversity conservation (e.g., Rocheleau 1995).

Disciplinary balance

The disciplinary balance of the interim MEP was dominated by natural scientists and included just two social scientists and two economists (16% non-natural scientists). Africa and Asia-Pacific were entirely represented by natural scientists, Latin America and Caribbean selected one social scientist, Western Europe and Other selected one economist, and Eastern Europe selected one of each. The representation of Indigenous and Local Knowledge (ILK) was ensured by natural scientists, four in particular, having experience in working with local communities. The 2015 MEP had a higher proportion of non-natural scientists, with four social scientists, including an anthropologist with ILK expertise, and two economists (24% non-natural scientists). Although this may reflect the greater range of disciplines available in the pool of proposed experts, all of this diversity is credited to the European regions, which selected three nonnatural scientists each.

Selection of the MEP in IPBES has so far emphasized disciplinary distinction between natural and social scientists, economists, and ILK holders, as is presented here. However, for experts who have previously participated in the research and management of socioecological issues, the distinction between natural sciences and social sciences can be blurred. While disciplinary distinctions currently offer a useful guide in the selection of the MEP, alternatives exist. For example, at the inception of the IPBES process the definition of multidisciplinarity established in the rules of procedures recognized the participation of "scientists [...], policy and technical experts, natural resource managers, [and] other relevant knowledge holders and users" (UNEP 2013: p. 14). This definition is not limited to disciplinary and academic expertise, and could also act as a useful guide to the selection of MEP experts. It may also be worth considering a delineation of experts by their epistemological positioning (although identified as challenging in Malone & Rayner 2001). Interpretive and positivist scholars work with different conceptions of what "science" is, and fostering conversation between these different strands may be helpful to articulate different ways of knowing and thereby achieve meaningful policy-making (Castree et al. 2014).

The challenges of achieving greater diversity

Despite clearly stated aims and agreed principles of regional, gender, and disciplinary balance, achieving diverse expertise in the IPBES MEP has proved difficult. Much of the challenge stems from the rigid rules of procedure that were negotiated by consensus and determine how expert selection is carried out. Given that only governments have a right to propose and select members of the MEP, experts need to be both connected to government communication channels and recognized by that government as credible experts in biodiversity and ecosystem services. The practical circumstances under which "calls for nomination" are circulated and the selection of appropriate experts also differs hugely between governments. The additional involvement of stakeholders in the proposal of MEP experts, as debated in earlier Plenaries, may have provided more flexibility and greater reach. As it currently stands, reflexive and responsive action must come from governments.

Conclusion

Expanding upon previous initiatives, IPBES has come to position itself as a knowledge-policy interface open to different ways of knowing biodiversity. While such ambition is noteworthy, the comparison of expert composition in the first two MEPs suggests that achieving this in the context of an intergovernmental process, dominated by consensus, is challenging. As the Platform moves into its third year of operation, the selection of the MEP has shown a small improvement. In contrast to the interim MEP which was predominantly male-natural scientists, the new MEP includes more social scientists in European regions, and more women overall. Yet, differences in the application of the principles of regional, gender, and disciplinary balance across the five UN regions are noteworthy and there is significant room for improvement. Ultimately, achieving balance in the MEP will require buy in from member states and knowledge communities, who would need to engage with and act upon these principles in the nomination, funding, and mobilization of experts.

In IPBES, diversity matters. Different experts bring different "ways of seeing." The "ecosystem services" approach, for example, is subject to very different interpretations among experts who may seek to promote ecosystem services valuation or explore alternative approaches (e.g., Turnhout et al. 2013). In mobilizing the larger groups of experts and participating in the IPBES work program, members of the MEP have a key role in articulating and influencing knowledge-making practices. If IPBES establishes itself as a central feature of biodiversity governance, as the IPCC has for climate change, it will prominently shape future research and policy agendas. The assessment and policy support functions of IPBES hope to inform and influence national and international policy agendas; the knowledge generation function intends to identify knowledge gaps and help define future research paths; and its combined activities have the potential to forge knowledge exchange networks between practitioners, policy makers, indigenous and local communities, and academic researchers. With the potential for such extensive reach into how we understand and manage biodiversity and ecosystem services, the question of whose expertise counts in IPBES becomes ever more important.

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