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IPBES as a transformative agent: opportunities and risks

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Summary

The Intergovernmental Science–Policy Platform for Biodiversity and Ecosystem Services (IPBES) has played an important role in assessing knowledge and raising awareness of biodiversity loss, and it is now also mandated to assess and support processes of transformative change. This perspective paper argues that the transformative change assessment entails key elements of transformative agency, which, along with the performative role of IPBES, makes it relevant to re-conceptualize the organization as a transformative agent. This new role will change IPBES and brings attention to risks related to undermining the credibility, relevance and legitimacy of IPBES, but it also brings opportunities for innovations that may strengthen the organization, including furthering public reasoning, acknowledging ambiguities and disagreements, ensuring scientific autonomy and balancing governmental power in the organization. As IPBES takes on the fundamental challenge of transformative change, critical scrutiny and democratic debate regarding its function as a political actor are more important than ever.

Introduction

As biodiversity continues to decline, the Intergovernmental Science–Policy Platform for Biodiversity and Ecosystem Services (IPBES) has concluded that transformative change is now required, with transformative change understood as 'a fundamental system-wide, reorganization across technological, economic, and social factors, including paradigms, goals and values' (IPBES 2019: 6). Based on the conclusions in IPBES's Global Assessment Report (IPBES 2019), IPBES's member states agreed in 2021 to support this transformation by having IPBES conduct a thematic assessment of the underlying causes and determinants of transformative change and identify pathways to achieve the 2050 vision for biodiversity (the Transformative Change Assessment, or TCA; IPBES 2021). Given this decision to deliberatively and strategically participate in shaping, catalysing and facilitating system-wide structural changes, we argue that it is relevant and reasonable to re-theorize IPBES as an 'agent of transformation'. We further argue that this development of IPBES's role will bring changes to its internal practices as well as to its relationships with external parties – changes that create opportunities to develop and strengthen the organization and its contributions to environmental governance, but that also risk undermining its credibility, policy relevance and legitimacy (CRELE) that thus far have been instrumental to its authoritative role.

In the more general discussion on how to create transformative change, it has been argued that 'in science as in society, decisions about change … should not lie with those with attachments to the old order' (Lahsen & Turnhout 2021: 8). IPBES, built and supported by existing power structures in science and in politics, may have difficulty overcoming interests that want to preserve rather than transform the current system (cf. Linnér & Wibeck 2019). Furthermore, addressing transformative change through a 'scientific assessment' risks contributing to it being conceptualized and approached in an overly depoliticized, technocratic and largely managerial way. Thus, as IPBES takes on a new role and conducts the TCA, it is important to further discuss what this new role may bring in terms of opportunities and risks. To contribute to this discussion, this paper will: present arguments for why IPBES should be conceptualized as a transformative agent; discuss the risks and opportunities connected to the credibility, policy relevance and legitimacy of IPBES; and highlight IPBES as a political actor whose authority and role in sustainability transformation require continuous critical scrutiny and democratic debate.

Re-conceptualize IPBES as a transformative agent

We present three interconnected arguments for why the TCA makes it relevant to re-conceptualize IPBES as a transformative agent: its enabling role, strategic activities and performative power. In line with Scoones et al. (2020), we see IPBES's enabling role – to provide knowledge that creates the capacity for other actors to take transformative action – as an important approach to advance transformative change. From this perspective, the Plenary's decision to request the TCA to provide knowledge (capacity) in support of transformative change (cf.

Montana 2020) makes it relevant to conceptualize the organization responsible for this assessment – IPBES – as a transformative agent, defined as an individual or collective actor that strategically shapes, catalyses and facilitates transformative change. Following the definition established by IPBES (2019: 6), this means system-wide structural changes in dominant paradigms, goals and values, as well as in terms of technological, economic and social organization. Although individual actors always need to be understood as embedded and restricted by their structural context, transformative agency indicates the capacity also to act and influence these same structures. It also directs attention to the responsibilities, accountability and power of identifiable actors (Linnér & Wibeck 2019).

Drawing on the literature on institutional entrepreneurs and social-ecological systems, Westley et al. (2013) identify strategic activities and skills important for individual agents to promote progress towards transformation. Among others, these include: generating knowledge that integrates diverse ideas and viewpoints; providing visions and 'imaginaries' that attract broad support; bridging stakeholders and building trustful relationships; developing new options and solutions; and facilitating conflict resolutions and negotiations. The comprehensive tasks set for the TCA as outlined in IPBES's scoping report (IPBES 2021) give IPBES similar kinds of roles. The assessment will strengthen the knowledge base for informed decision-making by: integrating different knowledge systems; assessing and comparing different visions and scenarios for a sustainable world, their implications and pathways for their realization; engaging a wide range of actors and communities; addressing trade-offs, choices, synergies and tensions; and presenting actionable knowledge and policy options (cf. Beck & Mahony 2018). As the TCA's objective is to engage in activities similar to those performed by transformative agents to provide policy-relevant knowledge for governments, citizens, the private sector and others to act on, it is reasonable also to conceive of IPBES as a key agent of change (cf. Montana 2020). The TCA will not be a neutral and value-free process devoid of agency in the sense of the deliberative exercise of individual or collective will (Scoones et al. 2020). Instead, having a seal of credibility and legitimacy from both the scientific and intergovernmental communities, IPBES needs to be recognized for its performative power (Beck & Mahony 2018). By answering questions such as 'what is transformative change?', 'how can transformative change be used to achieve globally set objectives on biodiversity?', 'what enables and accelerates transformative change?' and 'how can different actors be educated about transformative change towards a sustainable world?', the TCA and IPBES will guide both external and internal actors on how to think and act. Thus, IPBES can be understood as a transformative agent, empowering actors and shaping what political and policy options are seen as possible, necessary and desirable (cf. Beck & Mahony 2018, Castree et al. 2021). As such, IPBES cannot be simply understood as a 'scientific actor', assessing and synthesizing knowledge in a neutral and value-free way, but rather it needs to be understood as a 'political actor', exercising influence and authority in the 'bargaining, negotiation, and compromise that determines who gets what, when and how' (Pielke 2007: 31).

Risks and opportunities for IPBES as a transformative agent

Research has proposed that for IPBES to sustain its authority it must not just talk about what is needed to create transformative change, but also support this transformation (Vadrot 2020). This role has also been recognized as 'the most significant challenge IPBES faces' (Schmeller & Bridgewater 2021: 2861) due to political controversies, insufficient scientific knowledge and uncertainty regarding how to translate concepts such as ecosystem services into effective policy and legislation. To retain its authority, IPBES must produce knowledge that is credible (i.e., of high quality, validity and adequacy), policy-relevant (i.e., responding to policy and societal needs) and legitimate (i.e., produced through fair, unbiased and inclusive processes; Cash et al. 2003, Sarkki et al. 2014). These so-called CRELE attributes offer an analytical framework that emphasizes the relational aspects of credibility, relevance and legitimacy (Parker & Crona 2012), as well as how changes in these relations, such as IPBES taking on the new role of a transformative agent, also affect the levels within and the trade-offs between these criteria (Heink et al. 2015). Many organizations at the intersection between science and policy have come to use the CRELE attributes as guidance in managing and evaluating their work, and so has IPBES (Gustafsson & Lidskog 2018, Stevance et al. 2020). However, the criteria have also generated substantial academic debate and criticism and have been argued to be unsuitable targets or evaluative criteria for the organization (Heink et al. 2015), reflecting an intra-scientific perspective that does not capture the political side of the science–policy interface (Dunn & Laing 2017). Here, we agree with Sarkki et al. (2014) that although the factors are indistinct, overlapping and contested, they are useful heuristic devices that direct the attention of researchers and practitioners to relevant issues for a continuous discussion on the function of IPBES. Hence, in the following, we use these attributes to structure our discussion on the risks and opportunities for IPBES when engaging with the TCA.

Credibility

While the credibility of IPBES is largely founded in science, strong arguments have been made for the need for more inclusive and diverse forms of knowledge production if IPBES is to be able to contribute to transformative change (Stevance et al. 2020). In taking on the TCA, with a focus on political and social structures, IPBES extends beyond its core expertise of ecological science in favour of new expertise in the social sciences and humanities (Evans 2021). Social scientists have been given recognition since the organization's inception, and IPBES has developed practices on how experts can work together across ontological and epistemic boundaries, as illustrated, for example, in the conceptual framework (Borie et al. 2021). The diversity of experts working with different epistemologies has nonetheless proved challenging (Díaz-Reviriego et al. 2019). Traditional norms and expectations persist within IPBES on what credible knowledge production entails (Gustafsson et al. 2019), and science has been reproduced as the benchmark knowledge system (Lahsen & Turnhout 2021). This reproduction of norms and expectations has thus far prevented changes in the body of experts and the knowledge-production process in ways that are necessary to address transformation (Borie et al. 2020).

While recognizing attempts to include more social scientists as experts in the assessments, taking on the task of supporting social transformation may require not so much 'adding' social science as fundamentally overhauling IPBES, its scientific foundation and its approach to assessments (cf. Castree et al. 2021). As argued by Massarella et al. (2021), transforming biodiversity governance would benefit from critical social science offering alternative

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analytical approaches and transformative alternatives. Hysing and Lidskog (2021) highlight that social science analysis needs to fundamentally frame the assessment rather than being used in an instrumental way for policy recommendations. An in-depth understanding of social science concepts and theories of power, interests and justice (cf. Stenseke 2016) will be fundamental to the TCA when targeting indirect drivers of biodiversity loss.

However, this also brings a need for reflections on how social science matters, what yardstick to use in order to assess the credibility of different knowledge claims and what reasonable expectations can be placed on the TCA to provide scientific answers to profoundly political questions. In engaging with transformative change, IPBES will not be able to rely on neutral and objective 'facts' to retain its credibility. Instead, the organization needs to be ready to give public reasons to justify its conclusions and publicly defend them in the face of opponents not necessarily playing by the same (epistemic) rules (i.e., 'post-truth' politics; Beck & Mahony 2018). Complementing its important role in synthesizing knowledge, the TCA offers important opportunities for IPBES to strengthen its role as a global forum for open debate and deliberation over different claims for expertise generated from different knowledge systems.

Policy relevance

One central message in evaluations of IPBES (Stevance et al. 2020) is the importance of strengthening its relevance for policy development and policy advice by ensuring stronger elements of co-design and co-production in assessments. The linear ideal of a science policy/politics relation dominates IPBES; it is one in which the policy impacts of the assessments hinge on credible scientific knowledge being produced and effectively communicated, and such knowledge being received, understood and accepted by decision-makers (Gustafsson et al. 2019). However, in practice, the interaction between 'science and politics/policy is much more fluid, open to change and plays out differently at different times, contexts and places' (Stevance et al. 2020: 72). In public, the distinction between science and politics/policy is upheld to ensure credibility, while behind the scenes, the relationship between experts and policymakers is better characterized as 'relational' (Hughes & Vadrot 2019), as a way to ensure policy relevance. As argued by Turnhout et al. (2016), becoming policy relevant requires that knowledge and problem-framing be aligned with dominant regimes (e.g., economic valuations) and what key audiences find useful (and politically acceptable). For example, the ecosystem services concept and IPBES's conceptual framework are useful boundary objects to this end (Borie et al. 2021), but they are also accused of accepting dominant structures that should be transformed (Dunkley et al. 2018).

The summary for policymakers – arguably the most influential output of IPBES – can be characterized as representing a compromise between expert and political needs and wants, where the final formulations are needed to be approved by the platform member states in the Plenary (Maas et al. 2021). Some argue that this interaction should increase to take place not only during the post-production of assessments but also throughout the process to increase the uptake of assessment results in national policy (Stevance et al. 2020). While the TCA will require broad engagement by stakeholders and policymakers feeding diverse knowledge, perspectives, needs and wants into the assessment to further its legitimacy and relevance, it is also critical that IPBES upholds and strengthens the assessment's scientific autonomy vis-à-vis policymakers. If the relationship between science (IPBES experts) and policy/politics (IPBES member state representatives) gets too close, this might not only undermine the public's trust in science (Berg & Lidskog 2018), but also raise questions about how radical (and truthful) IPBES can be in its conclusions and recommendations (cf. Turnhout et al. 2016). The TCA will have to address the full range of policy options, including those that are 'politically less palatable' (Stevance et al. 2020: 75), as well as the structural conditions behind biodiversity loss. Good decisions for sustainable transformation are dependent not only on making credible knowledge available to actors in power (Pielke 2007), but also on the powerful not excluding 'uncomfortable knowledge' that may undermine their position (Andersson & Westholm 2019). A process of reframing knowledge about problems and solutions depending on what actors in positions of power decide is relevant risks fundamentally undermining the relevance of the TCA and, in effect, also that of IPBES. In combination with a decision-making process based on consensus among platform member states in the Plenary, such a process within the TCA would risk producing biased narratives, prioritizing (current) government demands and postponing dealing with key value-based conflicts.

Legitimacy

The TCA will have to entail a plurality of pathways, visions and knowledge systems (IPBES 2021), as well as participation and deliberation across stakeholders (Beck & Forsyth 2020). Providing not only policy-relevant but also legitimate knowledge will require a synthesis of knowledge systems (Beck et al. 2014), as well as inclusive and balanced representation and fair and open processes (cf. Cash et al. 2003). Engaging a diversity of stakeholders has, however, proved challenging – a challenge that has at least partly been attributed to IPBES's state-centric and consensus-based institutional arrangements, with government representatives having a more powerful role than non-state stakeholders (Esguerra et al. 2017, Díaz-Reviriego et al. 2019). Opening up IPBES to attract and engage stakeholder representatives on more equal terms to government representatives needs to be done with care because the organization bases its legitimacy (and relevance) partly on its connection to the intergovernmental community, being guided and held accountable by government representatives through consensus decisions (Montana 2020). As IPBES engages with transformation, power asymmetries, interest advocacy and resistance to change will be critically important topics (Bulkeley et al. 2020), but they will also have to be addressed in the assessment process itself.

Furthermore, IPBES's close ties to the global biodiversity regime structured around United Nations-based organizations and multilateral environmental agreements have been seen as limiting its role in environmental governance (Maas et al. 2021). 'Global environmental science and global governance are locked into shared belief in a singular world for science to represent and assess, and for policymakers to govern. This lock-in is a clear reason behind the lack of transformation in IPBES' (Lahsen & Turnhout 2021: 5). The global scope has raised concerns that the TCA will close rather than open alternative pathways (Beck & Forsyth 2020) and limit its impact and relevance, as biodiversity is mostly subject to national and local governance and exercised in various political contexts (Stevance et al. 2020).

Sustainable transformation will need top-down, state-directed processes, but also great efforts from other parts of society. Thus, it is important that IPBES can support efforts to promote

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transformative change among a variety of actors at various levels and in various societal sectors. Strengthening political acceptance beyond government representatives requires rethinking institutional arrangements – for example, by further developing and strengthening the role of stakeholders beyond existing forums to balance the old powers of the Plenary and to increase both the input into and acceptance of IPBES's output. However, as the organization engages with issues of large-scale structural change, it risks entering into a collision course with powerful vested interests that will take advantage of open participatory and deliberative processes to shape policy output in their interests. Thus, it is a critical challenge to design institutional mechanisms that can deal with interest advocacy while not closing the process to legitimate participants, alternative visions and possible pathways to sustainable transformation.

Broadening engagement requires recognizing the political and contested nature of biodiversity governance and transformative change. IPBES's consensus decisions, mobilization and unification of the research community in the IPBES assessments have allowed IPBES to 'speak with one voice' (IPBES Executive Secretary Anne Larigauderie, quoted in Stokstad 2019) on the dire state of biodiversity and the need for resolute actions, a method that has helped establish biodiversity on the political agenda (cf. Montana 2020). To support multiple paths of transformation, IPBES needs to acknowledge ambiguities and uncertainties as well as the contested, context-dependent and political nature of transformation. This requires strengthening the capacity of groups whose interests are currently not represented (Visseren-Hamakers et al. 2021) and safeguarding pluralism (Díaz-Reviriego et al. 2019), including both for those who stand to win and for those who stand to lose from transformation. Giving fair and balanced treatment to different knowledge claims and perspectives – and providing room for different voices and perspectives to be openly and honestly contrasted – will be critical for the TCA and the legitimacy of IPBES.

Conclusions

As IPBES stands to actively engage with transformative change, the organization arguably takes on a new role in environmental governance – that of a transformative agent. By adopting this new role to enable sustainability transformation, IPBES faces both risks and opportunities. Fundamental questions arise that pertain to its continuous credibility, policy relevance and legitimacy. Further public reasoning, acknowledgement of ambiguities and disagreements, ensuring scientific autonomy and balanced governmental power are argued to be potentially important innovations in IPBES to support transformation – innovations that must be carefully designed and balanced so as not to undermine the attributes that thus far have determined the authority of the organization. Moreover, re-conceptualizing IPBES as a transformative agent offers a new conceptual lens that brings further attention to IPBES as a political actor whose authority and role in sustainability transformation require continuous critical scrutiny and democratic debate. It also brings attention to the need for further research into: the relationships with and interactions between experts and representatives of platform member states during and after IPBES assessments; how social scientific perspectives are integrated, made sense of and valued within the organization; and how IPBES's recommendations for transformative change can gain the political acceptance needed to influence policy development at global, national and local levels.

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