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FOCUS ARTICLE



The UN local communities and Indigenous peoples' platform: A traditional ecological knowledge-based evaluation

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This review evaluates the potential of the proposed local communities and Indigenous peoples' platform to effectively engage traditional ecological knowledge (TEK) for climate policy. Specifically, we assess the platform's potential to enable greater representation and participation of Indigenous peoples (IPs) within the United Nations Framework Convention on Climate Change (UNFCCC). An analytical framework based on the extensive TEK and environmental management literature is developed, with a set of criteria identified against which to evaluate the platform. We find that although the process of designing the platform appears to be inclusive of Indigenous views, the structure itself does not recognize the roles that unequal power relations and colonialism play in marginalizing IPs. Limited attention is paid to the institutional barriers within the UNFCCC and the drawbacks of pursuing knowledge "integration" as an end in itself. Based on this, recommendations for improving the platform structure are put forward including using a rightsbased framing, giving greater decision-making power to IPs, and developing mechanisms to ensure the holistic integrity of TEK and build the overall resilience of climate mitigation and adaptation systems.

This article is categorized under:

Social Status of Climate Change Knowledge > Sociology/Anthropology of Climate Knowledge

KEYWORDS

climate policy, indigenous peoples, marginalisation, traditional ecological knowledge, UNFCCC

1 | INTRODUCTION

The United Nations Framework Convention on Climate Change (UNFCCC) has faced much scrutiny, with members of both academia and civil service criticizing the degree of its inclusion and representation of marginalized voices within climate governance (Okereke & Coventry, 2016; Polack, 2009; Tomlinson, 2016). As an effort to mitigate this, the adoption of Decision 1/CP.21 at the UNFCCC's annual Conference of Parties (COP) held in Bonn at the end of 2017 officially established the "Local Communities and Indigenous Peoples Platform" (henceforth referred to as the "Platform"), with the purpose of exchanging experience, sharing knowledge, and accelerating the inclusion of Indigenous peoples (IPs, including some unofficial groups recognized only as "local communities") within the UNFCCC process (UNFCCC, 2017a).

The platform aims to "catalyze learning, engagement, and policy coordination that benefits local communities and IPs, as well as the international community" (UNFCCC, 2017b), through diversifying knowledge systems and promoting knowledge integration. The UNFCCC Secretariat (2017b) characterizes the goals of the platform as:

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- 1. *Knowledge*: creating a space for documenting and sharing best practice and experience, while "respecting the unique nature of and need to safeguard Indigenous and local community knowledge systems";
- 2. *Climate change policies and actions*: facilitating the integration of Indigenous knowledge systems and the engagement of IPs and local communities to inform climate change-related actions and policies; and
- 3. *Capacity for engagement*: building the capacities of local communities and IPs to engage with the UNFCCC process, particularly in implementing the Paris Agreement.

As the exact structure of the platform is still being agreed upon, it is an opportune time to evaluate its evolving form and present suggestions for how its design can be optimized for the benefit of IPs and climate change governance.

The purpose of this review, therefore, is to: (a) assess the literature on the role of IPs within the UNFCCC in conjunction with the scholarship on traditional ecological knowledge (TEK) and environmental management to develop a theoretical framework against which to evaluate the platform; (b) assess how well the platform addresses and fulfills the theories and recommendations presented within the literature on TEK; and (c) present recommendations for how the platform can be developed or restructured to engage IPs and their TEK.

2 | THEORETICAL UNDERPINNINGS

2.1 | IPs and the UNFCCC

Due to the recent formalization of the platform, little research has been carried out to assess its potential in giving IPs effective voice and representation in global climate governance and justice. The only major academic work on the platform is a perspective piece (Riedel & Bodle, 2018) scoping potential governance arrangements for the platform under the Paris Agreement. The publication presents a number of recommendations for the structure of the platform, including how existing governance mechanisms within the UNFCCC can be utilized. However, the thrust of the publication is advisory rather than a critical examination.

Going beyond this, a substantial literature does exist examining the representation and participation of IPs within the UNFCCC more generally.

The UNFCCC plays a leading role in establishing and reinforcing norms, principles, and priorities when it comes to climate action among nations (Betsill et al., 2015), meaning that participation of IPs within the negotiations process is critical to providing them with agency to influence overarching climate discourses. Although the UNFCCC has historically been criticized for not accounting for either IPs or Indigenous knowledge (Smith & Sharp, 2012), more recent studies have demonstrated that there have been significant changes since COP16 in Cancun, with official recognition of how climate change would affect the human rights of IPs (Ford, Maillet, Pouliot, Meredith, & Cavanaugh, 2016). For instance, the Paris Agreement preamble text states the need for stronger and more ambitious climate action for IPs (Ford, Maillet et al., 2016). In addition, a call for IPs knowledge and representation also figures prominently in the recent IPCC 1.5 degrees report (IPCC, 2018).

Despite these formal acknowledgements, a significant literature has emerged highlighting the institutional barriers hindering the ability of IPs to participant in the UNFCCC process. According to Ford, Maillet et al. (2016, p. 440):

Although there are channels through which IPOs can submit statements, recommendations and proposals to the Parties, there is currently no mechanism through which to ensure that Indigenous rights are respected, or that the special needs of Indigenous peoples are incorporated in decision texts.

This is echoed by Comberti, Thornton, and Korodimou (2016), who demonstrate how, through being given "observer status," IPs are recognized but unable to vote on decisions emerging from climate negotiations and hence have limited ability to influence outcomes. Therefore, IPs can only be represented within the negotiations through their states; yet due to histories of colonization, marginalization, and discrimination of IPs by their own states, it is unlikely that these representatives adequately incorporate their views (Comberti et al., 2016). Overall, the study demonstrates how participation of IPs is limited to side events external to the negotiation process, and when given the chance to speak they "often take the floor last—after the other eight observer constituencies have spoken, and when participants are either too tired to meaningfully engage or have already left the room" (Comberti et al., 2016, p. 9).

Similarly, Adams et al. (2014) demonstrate how, because Indigenous governments operate within Western-based governance systems, differing cultural models of such things as representation and evidence can also lead to the exclusion of their views within climate negotiations. Correlatively, Brugnach, Craps, and Dewulf (2014) find that the influence IPs have within negotiations is very much a function of their political power within their respective nation states, which is limited due to histories of marginalization. Funding is an additional institutional barrier, as it is essential for enabling IPs to attend and host meetings (Riedel & Bodle, 2018). Most IPs cannot afford to attend the UNFCCC Conference of Parties (COP) or other meetings, unless funded by non-Indigenous organizations.

A contrasting perspective argues that in fact IPs have been able to mitigate their domestic marginalization by bypassing their national governments, such as through forming transnational advocacy coalitions and lobbying groups which directly influence the negotiations process (Schroeder, 2010); like the UN Indigenous peoples forum, the platform could therefore be framed as another structure contributing to this empowerment. Riedel and Bodle (2018) also theorize that existing UNFCCC agreements offer a basis for procedural improvement which can give IPs additional possibilities to contribute to the process of climate governance, such as through granting them greater authority than "observer" parties.

Despite this, it is evident that structural and epistemological barriers to incorporating IP knowledge and voices currently exist within the UNFCCC process, thereby raising the question of whether the proposed platform will be able to overcome these barriers and, if so, how?

2.2 | Traditional ecological knowledge

As the platform is aiming primarily to foster knowledge dissemination and integration, theoretical underpinnings made by the TEK literature are essential to consult. TEK may be defined as "a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment" (Berkes, 2008, p. 8). Commonly characterized as representing "knowledge-practice-belief complexes," TEK is said to provide "an understanding of local and interconnected patterns and processes over large spatial and temporal scales" (Adams et al., 2014, p. 1).

While some prefer that term always be plural, TEKs, as knowledge systems, are diverse, even among ethnic groups (e.g., men's and women's knowledge may differ) (CTKW, 2014). Others emphasize the importance of not limiting TEK to material relations (e.g., species distributions or interactions) at the expense of spiritual or metaphysical ones, as these are "often at the core of indigenous identity and underpin their beliefs and practices, and ignoring them can create significant impediments to equitable partnerships" (Williams & Hardison, 2013; see also Burkett, 2013).

McGregor (2004) argues that a "major dichotomy" exists within definitions of TEK, whereby Aboriginal views of TEK reflect an Indigenous understanding of relationships to creation as opposed to Eurocentric views of TEK, which could be characterized as being underpinned by colonial attitudes toward IPs. Indigenous scholars have subsequently argued for a dismantling of "cognitive imperialism" (Simpson, 2011) when it comes to TEK, whereby it is recognized that IPs already had an established system of philosophies, conceptual frameworks, and ethics that flourished for thousands of years prior to their settler-centered history. Further, Kawagley, Norris-Tull, and Norris-Tull (1998) emphasize that Western science comes with a prototype for what counts as science today, meaning that Indigenous perspectives are often not considered legitimate. This paper, therefore, adopts an open-ended definition of knowledge which questions what "knowledge" itself is, rather than one that is subjective and distortionary.

A previous WIREs Climate Change review (Smith & Sharp, 2012) has assessed the TEK literature, exploring key debates around the epistemic obstacles pertaining to the concept. This review therefore builds on this to develop a more intricate theoretical framework identifying key criteria that would be relevant when evaluating the platform.

Several studies present the value of TEK and argue for its incorporation within Western-based science to inform environmental governance, arguing that combining diverse knowledge types enables the management of uncertainty within socio-ecological systems (Bohensky & Maru, 2011), enabling TEK to help build resilience. Furthermore, Indigenous communities are less likely to oppose mitigation decisions if they adequately represent local views and values (Brugnach et al., 2014). Additionally, Cuerrier, Brunet, Gérin-Lajoie, Downing, and Lévesque (2015) argue that TEK is crucial in understanding how sociocultural systems evolve over time, since it provides long-term records that are inaccessible by standard scientific methods. Similarly, Mistry and Berardi (2016) present evidence of how Indigenous lands contribute substantially in maintaining carbon stocks and developing sustainable land-use practices. These arguments serve to justify the incorporation of TEK in climate policy.

However, this "incorporationist" or "integrationist" perspective toward TEK has a number of political considerations which are often overlooked, such as: a) who has the privilege of integrating TEK and according to what ethical, ontological, and epistemological frameworks?; and (b) how do the incorporating frameworks (i.e., science), which are necessarily selective, affect the integrity of TEK as a system of knowledge? A lack of attention to these fundamental issues often creates drawbacks for IPs who find their TEK being integrated into mainstream scientific knowledge frameworks in ways that minimize or distort it. It is crucial to address these asymmetries of incorporation to ensure that the platform structure does not undermine Indigenous priorities and ways of knowing and reproduce colonial patterns of exploitation and dispossession.

Political issues inherent in TEK integration have been examined by numerous authors (e.g., Berkes, 2009; Hill et al., 2012; Nadasdy, 1999), who focus on how power relations shape the incorporation of TEK within knowledge and management frameworks, recognizing that inequitable integration may reinforce rather than break down Western cultural biases, and

consequently promote further marginalization of IPs. This may result particularly when the two knowledge systems are characterized by differing underlying worldviews (Parsons, Fisher, & Nalau, 2016), which can lead to selective assimilation over integration (Mistry & Berardi, 2016), stripping TEK of its holism and cultural characteristics so that it can be fitted as discrete "data" into Western knowledge frameworks (Johnson, 1992).

Based on this, a review of the platform would incorporate an assessment of the extent to which it goes beyond this dynamic toward a more just and equitable model, particularly through the use of decolonizing methodologies (Smith, 1999) and incorporating IPs in all phases of research, including design, data collection, results interpretation, and policy implementation (Thornton & Scheer, 2012).

3 | ANALYTICAL APPROACH

The platform acts as a bridging point between these two distinct domains of the literature, being the first formal attempt at bringing TEK into the UNFCCC process and thereby advancing the representation of IPs within climate policy. Therefore, we draw extensively on the TEK literature to develop a framework by which to evaluate the platform's evolving structure. This framework, presented in Table 1, lays out recommendations on the form that knowledge integration should take to adequately represent the interests of IPs and help mitigate their marginalization.

The analytical framework is designed around three themes: power, institutions, and colonial histories; social and cultural contexts; and participation, representation, and self-determination. Four criteria are identified for each theme against which to assess the platform.

Policy documents and other relevant information available online regarding the platform were collected, primarily from official UNFCCC Secretariat documents and press releases throughout the past year, as well as from external news articles and blogs. We then applied the analytical framework to all information gathered on the platform, and assessed it against the identified criteria.

4 | ANALYSIS AND FINDINGS

4.1 | Power, institutions, and colonial histories

Overall, official UNFCCC documents and press releases on the platform contain limited references to the roles of colonialism and marginalization in shaping both knowledge production and the ability of IPs to participate in the UNFCCC process.

A press release by the UNFCCC Secretariat (UNFCCC, 2017b) heralds that one of the key considerations of the platform should be inclusivity, and highlights that the platform should have a "constructive focus," with mutually beneficial dialogue.

 TABLE 1
 Analytical framework

Theme	Criteria for analysis
Power, institutions, and colonial histories	 Acknowledgement of the roles of colonialism, marginalization, and Indigenous histories in shaping both traditional ecological knowledge (TEK) and how societies respond to climate threats (Belfer, Ford, & Maillet, 2017) References to a rights-based approach (Comberti et al., 2016), with a focus on the empowerment of Indigenous communities to enable effective influence on policy development and decision-making (Brugnach et al., 2014) Recognition of the relations between knowledge and power (Diver, 2017), with a reframing of knowledge integration to account for power imbalances and prioritize originality over assimilation (Bohensky & Maru, 2011) Attention to the institutional and systemic barriers to effective cooperation (Nadasdy, 1999), and prioritizing "Indigenous codesign" and "co-management" (Ross, Sherman, Snodgrass, & Sherman, 2016) that challenges Western-centric worldviews and power structures (Parsons et al., 2016)
Social and cultural contexts	 Attention to the role that individuals, cultures, and societies play in constructing and developing knowledge, retaining its holistic complexity (Comberti et al., 2016) Recognition of complex social-ecological systems, with research questions being framed to account for effects of TEK on local scales (Adams et al., 2014) Acknowledgement of the place-based and space-based characteristics of TEK (Bohensky & Maru, 2011) to avoid decontextualization (Ford, Cameron et al., 2016) Account for the evolving characteristics of Indigenous knowledge and identities, with a framework that incorporates this dynamism (Diver, 2017) and is responsive to community priorities (Kagle & Baptiste, 2016)
Participation, representation, and self-determination	 Inclusion of a framework that identifies the actual needs of Indigenous communities and tailoring knowledge (co)production dissemination accordingly (Adams et al., 2014) Understanding of the similarities and differences between TEK and scientific knowledge (Bohensky & Maru, 2011), with a "respectful acknowledgement of their distinctiveness and epistemology" (Mistry & Berardi, 2016) Prioritization of self-determination and cultural integrity (Brugnach et al., 2014), with agency given to Indigenous peoples (IPs) to define and determine the structure and purpose of knowledge integration (Nadasdy, 1999) Identification and deconstruction of assumptions and myths surrounding TEK (Parsons et al., 2016), with inclusion of IPs throughout the design, execution, and implementation stages (Thornton & Scheer, 2012).

However, no mention is made of institutional barriers and power differences that would need to be overcome to ensure this inclusivity. Furthermore, the press release also states that IPs have a "long history seeking to engage with global governance arrangements" (UNFCCC, 2017b), with the platform providing the opportunity to create strategic linkages. However, no reference is made to the underlying forces historically that have led to the marginalization of IPs in the first place, going against our first criterion. Not acknowledging these power relations, and failing to engage in the decolonizing and de-marginalizing work necessary to understand IP and TEK on their own terms, could undermine the "constructive" role of the platform, as it would not only fail to overcome these forces of marginalization, and instead potentially uphold them (Belfer et al., 2017).

In fact, when the platform was being agreed upon, there was much debate over how much agency would be given to nonparty stakeholders, including IP (Centre for International Governance Innovation, CIGI, 2017), but ultimately all decisionmaking power was retained by state actors. This further demonstrates that, regardless of how inclusive the process of designing the platform is, it will be unable to overcome the institutional barriers to participation within how the UNFCCC itself is governed, which means that it will fail to overpower statist voices.

Similarly, an official report on the platform released by the Secretariat as an outcome of COP23 (UNFCCC, 2017c) highlights the value that Indigenous knowledge can bring for adaptation and resilience. However, the aims of the platform are framed primarily from a collaborative standpoint, with references to sharing best practice and building a mutually beneficial forum. Again, we would argue that this overshadows and neglects the roles of colonialism and marginalization in shaping TEK and Indigenous livelihoods historically, and avoids addressing the underlying questions of overcoming marginalization; the focus remains on extracting knowledge for statist needs.

In addition, the report stresses that "capacity for documenting their traditional, Indigenous and local knowledge systems would need to be built" (UNFCCC, 2017c, p. 10). Arguably, this sounds like the imposition of a Western paradigm on Indigenous knowledge systems, as if they lack inherent capacities of maintenance, transmission, and documentation themselves. The international development literature has also critiqued this notion of capacity building, highlighting how state development can actually do more harm than good due to Eurocentric notions of development being considered universal (Sachs, 1992). Further, there is a question of who is diagnosing the capacity deficits, the extent to which this is sovereign driven and the like-lihood of this leading to paternalism without continued financial commitment (Eade, 2007). Only one reference is made here to capacity building for non-Indigenous stakeholders (e.g., states) to "contribute to overcoming discriminatory attitudes towards Indigenous peoples" (p. 10); the focus very much remains on building the capacity of IPs to fit within the current, Western-dominated framework.

Overall, when assessed against our framework presented in Table 1, the platform fails to address the roles of colonialism and marginalization in shaping TEK and includes no references to unequal power relations. While there is acknowledgment of the institutional barriers within the UNFCCC, the overall purpose of the platform appears to be that of sharing "best practice" rather than of empowering Indigenous communities and acknowledging their rights.

4.2 | Social and cultural contexts

The official UNFCCC press release (UNFCCC, 2017b) on the platform stresses the importance of incorporating flexibility within the platform to allow for growth and experience within Indigenous communities. This seemingly fulfills our fourth criterion around incorporating dynamism within the framework.

Furthermore, the Secretariat report states that the platform aims to support knowledge integration and sharing "in such a way as to respect the unique nature of Indigenous and traditional knowledge" (UNFCCC, 2017c, p. 6), and goes on to elaborate on the specific, cultural characteristics of TEK, which appears to fulfill our criterion for adopting the cultural and placebased contexts of knowledge.

However, the degree to which these principles are adhered to in practice is questionable, and depends on the processes of knowledge documentation and integration themselves, which are still at early stages of development. Indigenous scholars such as Lomawaima (2000) have argued that it is the responsibility of Western scientists themselves to find out what protocols are followed within individual communities in order to gain permission to use their cultural information. Further, Smith (1999) call for "decolonising methodologies" when accessing knowledge that require academics to approach research with IPs as partnerships that enable Indigenous leaders and knowledge keepers to fully drive, plan and design the process. At present, the platform does not appear to have the appropriate structures in place to account for adherence to such principles.

In addition, another press release states that a primary goal of the platform would be to "promote the exchange of experiences aimed at strengthening and preserving traditional knowledge of Indigenous peoples" (COP23, 2017). However, this language was not adopted as part of the official text of the platform, where the aims seem to be much more focused on integrating TEK within existing knowledge systems rather than preserving the integrity of TEK. In the end, the language within the official texts concerning the platform was much weaker than what Indigenous groups had hoped for (Intercontinental Cry, 2017).

Returning to our criteria, although there is emphasis on the need to recognize the social and cultural contexts of TEK in the official text of the platform, what is lacking are details on the specific mechanisms that would enable this to be accounted for in practice, and there is a question of the extent to which these mechanisms will incorporate Indigenous views of how research methodologies themselves can be decolonial.

4.3 | Participation, representation, and self-determination

One way of assessing the inclusiveness of the platform is by examining the process employed in agreeing upon its structure. Following the Paris Agreement, the platform was designed based on a call for submissions from relevant parties for ideas around its purpose, content and structure (UNFCCC, 2017a). Once the submissions were gathered, a multistakeholder dialogue took place at COP23 to agree on its exact structure and aims.

According to the official Secretariat report (UNFCCC, 2017c), of the 29 submissions received, 9 were from Indigenousled organizations and another 12 from other nongovernmental organizations, making them highly dominated by nonstate actors. The report also states that "submissions underline the importance of free, prior and informed consent (FPIC) based on the right to self-determination of Indigenous peoples, and of the respect of cultural norms associated with such knowledge" (p. 7). Therefore, if the platform structure is indeed based on these submissions, then it would fulfill our criteria around selfdetermination and give agency to IPs to dictate its form. In addition, the report states that "to ensure transparency in the process and FPIC, Indigenous peoples and local communities from all the regions of the world could participate in the operationalization of the Platform, including in decision-making" (p. 7); this also provides evidence of a focus on participation and transparency within the platform structure.

These findings are also echoed by non-UNFCCC documents. For instance, one news article (CIGI, 2017) states that "party negotiators frequently called on Indigenous peoples' representatives to provide substantive input on the text relating to rights, Indigenous knowledge systems and the UN Declaration on the Rights of Indigenous Peoples" and that "the principles put forth by the IIPFCC were adopted verbatim in paragraph 8 of the COP decision"; this once again suggests evidence of the inclusive-ness of the process.

Regarding our second criterion, the official report does indeed include a section identifying the differences between scientific knowledge and TEK, and also states that "the exchange of experience and sharing of best practices should address Indigenous peoples' own priorities" (UNFCCC, 2017c, p. 7). However, when it comes to our third criterion around integration, while the report does highlight the importance of integration to ensure that Indigenous views are represented, the critiques of knowledge integration, as highlighted within the literature review, are not addressed, and linkages are not made between knowledge integration and preserving the cultural integrity of TEK.

Overall, then, it appears that self-determination and inclusiveness are indeed key considerations within the design of the platform. However, it is important to recognize that the mechanisms through which these principles will be adapted going forwards are not yet in place.

5 | DISCUSSION

5.1 | Synthesis across the themes

The outcomes of this review suggest that, although the process of agreeing the platform structure appears to be genuinely inclusive and representative, the structure itself fails to acknowledge factors such as unequal power relations and histories of colonialism that lead to the marginalization of IPs within the UNFCCC in the first place. Without adequately acknowledging and deconstructing these factors, it is unlikely that the platform will be able to overcome existing institutional barriers or lead to the empowerment of IPs through knowledge recognition and integration. Instead, the framing of the platform is very much from a consensual, knowledge the specific characteristics of TEK that require attention when it comes to knowledge integration, no formal mechanism exists yet to ensure that these characteristics are preserved beyond standard requirements of FPIC. In addition, the official texts of the platform make it clear that final decision-making authority still lies exclusively with state actors.

These findings build on the existing literature, as other studies have argued that "even when agencies articulate a desire to incorporate Indigenous knowledge into environmental management, state-driven policy frameworks are often too rigid to meaningfully incorporate customary norms directed by TEK" (Diver, 2017, p. 2). Furthermore, as Nadasdy (1999) highlights, processes of compartmentalization and distillation lead to the decontextualization and deracination of TEK when it comes to knowledge integration, unless explicit counter mechanisms are in place to address this.

However, it is worth recognizing that the platform could also serve as an opportunity toward shifting overarching discourses of climate governance. IPs have been theorized as creating their own "political identity" by engaging with climate negotiations, using the global climate debate to further their struggle for rightful control of their land and natural resources (Doolittle, 2010).

Therefore, it could be argued that although the platform in its current form fails to mitigate the underlying marginalization of IPs, it could alternatively serve as a starting point toward increasing the agency of IPs and broadening the political space through which they can engage with these formal processes. For instance, Lightfoot (2016) argues that the 2007 UN Declaration on the Rights of Indigenous Peoples has the potential to achieve "a subtle revolution," giving IPs the right to self-determination which would ultimately complicate the structure of international politics and challenge Western notions of sovereignty. A similar argument can be made for the platform, whereby it could begin to force changes in the international system and force discussions on sovereignty and human rights to enter mainstream environmental discourses. In fact, the platform could also be characterized as a "boundary object" (Star & Griesemer, 1989) that intersects multiple social and cultural ideologies and ultimately facilitates coordination through its ability to be reframed according to how it's used.

5.2 | Recommendations for the platform structure

As the platform modality is to be finalized in the 2018 UNFCCC negotiations, the opportunity is ripe to suggest recommendations that can be incorporated based on the above findings.

To begin with, the TEK-based framework itself lays out a set of criteria that the platform should fulfill in order to adequately represent Indigenous views and rights. In addition, studies such as Nawrotzki and Kadatska (2010) suggest that any project promoting knowledge integration should include a set of ethical precepts and formal mechanisms ensuring that the property or resource rights of IPs are protected at local scales. Furthermore, within the UNFCCC context, some (cf. Comberti et al., 2016; Ford, Cameron et al., 2016) have argued for Indigenous groups to be given the same negotiating status as states. While the platform has taken some steps to improve the voice of IPs through its own UNFCCC fora, its goal of increasing the capacity of states to engage IPs knowledge and perspectives in climate change research, policy development, and governance will not be realized without significant further action.

Our analysis suggests three main recommendations to ensure that the platform fulfills its mission of supporting IP voices and ways of knowing as part of global and local climate governance: (1) the need to reframe the platform aims so that they are rights-based rather than simply knowledge-based, going beyond valuing Indigenous knowledge within a Western context to address Indigenous intellectual authority and IP's marginalization as a whole, thus ensuring IP's intellectual authority in knowledge bases affecting the understanding of their lands, livelihoods, and cultural wellbeing; (2) the inclusion of a mechanism to ensure that final decision-making power for policy affecting TEK and practices still lies with Indigenous groups rather than just states; and (3) the elaboration of policies to ensure that the integrity and holism of TEK are not compromised, primarily through promoting extensive recording and recognition of the full cultural and political contexts informing knowledge production and use by the UNFCCC, and efforts to "braid" knowledge systems rather than integrate or assimilate the minority systems in to the majority one (Kimmerer, 2013).

6 | CONCLUSION

The aim of this review has been to assess how adequately the proposed platform represents the views and rights of IPs, based on an assessment of the TEK and environmental management literature.

Overall, this review has demonstrated that the platform does not fully respond to the well-established literature on the ethics and politics of incorporating TEK, in particular falling short when it comes to the institutional and structural barriers to integration, with no mechanisms yet proposed to address the critiques of straightforward TEK incorporation as form of distortion at best, and neocolonial appropriation at worst. Future development of the platform should ensure that decision-making power is shared by Indigenous groups so that it can be used as a tool to uphold their rights rather than a mechanism merely to bolster Western knowledge frameworks.

As emphasized by Comberti et al. (2016, p. 3):

IPs are a force of resilience, and sources of local environmental knowledge, with diverse livelihoods, histories, cultural memories and adaptation pathways. Along with historical experiences engrained in cultural memory comes a potentially invaluable source of wisdom and diversity to inform adaptation options, relevant in successfully navigating the current climate crisis globally.

Therefore, it could be argued that it is in the interest of effective climate adaptation—also a UNFCCC priority—to ensure that the cultural integrity of TEK is preserved and incorporated in a manner that strengthens the resilience of the world's 6,000 diverse groups of IPs, who have been the historical locus of human adaptations across nearly all the climatic regions of the globe.

Overall, the evidence suggests the need for a shift away from TEK incorporation toward a multiple evidence-based (MEB) approach, which "braids" together Indigenous and scientific knowledge systems to build the resilience of interlinked socialecological systems (Raygorodetsky, 2017). This would enable preservation of the integrity of different knowledge systems while subsequently leading to new insights and innovations, thereby building the overall resilience of climate action. Further, Hill et al. (2012) emphasize that "indigenous-driven co-governance provides better prospects for integration of TEK and Western science for the sustainability of social-ecological systems" as compared to efforts driven by non-Indigenous agencies. Thus, in addition to the rights of FPIC and rights in decision-making, the right of initiative should also be prioritized to ensure that IPs are also included in agenda setting in both the science of understanding climate change and the policy responses necessary to mitigate and adapt to it.

There is a question of whether these recommendations can be taken up and incorporated at all without moving away from UN structures altogether, which could be characterized as being inherently imperialistic through their embedded power dynamics. For example, Coulthard (2014) actually argues that the political recognition of IPs by formal structures, particularly the state, can be a reinforcement of the very structures of colonial domination that it aims to disassemble due to historical contexts and the settler-colonial power that the state holds. It can therefore be argued that, so long as the platform operates under state-driven UN institutions, it is bound to be inherently imperialistic rather than revolutionary. However, the literature cited above on boundary objects and subtle revolutions also suggests that a refined version of the platform could play a role in redefining these power dynamics. With the platform still being in early stages of development, only time will tell whether its outcomes will favor the former or latter theories; in either case, it can still be characterized as a test for whether the institutional power of the UN can be transcended, and if so, how.

One way to take this work forward would be to conduct a series of structured interviews with various IPs involved in the process of developing the platform in order to gain their views on: (a) how inclusive the process was in accounting for Indigenous views and perspectives; (b) the extent to which TEK was considered in the development of the platform; and (c) how best it should be structured given concerns with TEK incorporation and IP's environmental and cultural justice. It would also be illuminating to ascertain the views and opinions of the platform from IPs who have been more peripheral to the process, in order to gain a wider understanding of how the platform is being received and could more effectively engage IPs. Furthermore, an empirical assessment should also be carried out to investigate how the existing work of the IIPFCC within the UNFCCC could formally tie in with the platform.

Finally, the framework we have developed using theories of TEK provides a timely opportunity to critically assess a number of individual, local-scale projects involving knowledge integration among IPs. Such an assessment could further inform the evolving structure of the platform itself, ensuring that it is not only "constructive" but also equitable and just in moving beyond the politics of recognition, which have dominated UN engagements with IPs to date, and toward more effective representation and support of their perspectives, capacities, and needs in the face of social and environmental change.

CONFLICT OF INTEREST

The authors have declared no conflicts of interest for this article.

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FURTHER READING

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9 of 10

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