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Global Governance and Sustainable Development: a Discussion from the Socio-Political and Socio-Ecological Perspectives

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Abstract

This paper demonstrates sustainable development and governance as contested concepts, constructed, and appropriated, to meet diverse agendas. It argues that sustainability and governance are inextricably linked. It examines how different disciplinary approaches have framed the relationship between sustainability and governance and identifies and discusses two dominant perspectives: the socio-political and the socio-ecological. It argues that these two viewpoints have framed debates about alternate approaches to promoting sustainable development and sustainability transitions through governance. The study emphasises how each perspective has produced a unique vision of governance by emphasising power, scale, system dynamics, uncertainty, involvement, and solutions. However, it reveals that the recent emergence of sustainability science has highlighted the need to transcend these two prevailing viewpoints and rethink governance in terms of a solution-oriented strategy that supports structural reforms on both a socio-political and a socio-ecological level.

Keywords: Globalisation, Governance, Human Environment, Sustainable Development

Introduction

Sustainability in all of its manifestations is increasingly been seen as a governance issue (Adger & Jordan, 2009; Mason, 2011; Akinola & Amin, 2021). Nevertheless, despite more than three decades of discussion and scholarly investigation, the precise connection between governance processes and sustainable outcomes is still unclear. The lack of precision is partly because both governance and sustainability are "moving targets" in the sense that globalisation is continually changing the environments in which new sustainability problems and novel governance arrangements emerge. There is little doubt, however, that novel governance structures and the theories developed to explain them have influenced the direction of sustainability agendas and initiatives in recent years. At the same time, the idea of sustainability has greatly affected global efforts to create governance frameworks that can address new global concerns like financial instability or climate change. The United Nations Environment Programmes (UNEP) Finance Initiative is a recent illustration. It is based on sustainable insurance, sustainable finance, and sustainable banking concepts.

The fluidity imposed by globalisation demands that the globalised, academia rises to the task of developing clear ideas and ways for successful "governance for sustainability" (Kemp, Parto & Gibson, 2005; Jordan, 2008; Anwuluorah, 2019). This paper proposes to harmonise two opposing but complementary theoretical frameworks “social-political” and “social-ecological” that have historically been used to discuss the governance issues surrounding sustainable development and sustainability. This paper is not a compendium of governance approaches, but rather a synthesis of two overarching perspectives on the link between sustainability and governance.

Governance and sustainable development both emerged as popular terms in the late 1980s. Since its conception, sustainable development has been a normative concept to ensure intergenerational and intragenerational equity, making it fundamentally a political and ethical question of distribution (Akinola & Amin, 2021). The recognition of mutually reinforcing dynamics between loss of ecological integrity, rising inequalities, and a world paradoxically characterised by increasing wealth and consumption consolidated the idea that the world was on a course of an unsustainable trajectory. Therefore, an effort to address ecological degradation, justice, and human growth in the context of ongoing economic prosperity gave rise to the concept of sustainable development (Kemp, Parto & Gibson, 2005).

The United Nations member states launched the Sustainable Development Goals (SDGs) in 2015 as a blueprint for global development. The 17 set distinctive goals call for partnership among the developed and

developing nations to work with strategies that improve the economy, education, and health, and reduce inequality while tackling diverse ecological challenges. The phrase "sustainable development" quickly became a public catchphrase but saw little public or private action. It was quickly adopted by international organisations and governments. Although sustainable development may have contributed to making the notion essentially irrelevant in terms of real implementations, its all-encompassing nature allowed for lively and productive discussions about future visions, desirable societal goals, and intergenerational justice (Jordan, 2008). However, even though the normative goals essential to sustainable development have a universal appeal and inspire formal accords, declarations, and charters; it is the translation of these concepts into action that is fraught with controversy. In any case, governance is playing a central role in discussions about making sustainable development an actionable concept (Loorbach, 2007).

After decades of overdue implementation, experts are concluding that sustainable development may have simply been a strategy for putting society and nature under the thumb of economic growth (Redclift & Woodgate, 2013). Furthermore, new terms like "green economy" or "green growth" have emerged as alternatives that provide less ambitious but more cogent goals (Urhammer & Røpke, 2013). These issues are now regarded as systemic risks to even just economic sustainability. As a result, the idea of sustainable development itself seems to be in crisis; made worse by the disappointing results of the so-called Rio+20 "landmark" conference. Practitioners are beginning to reexamine the concept's true meaning in the post-Rio+20 world and to develop fresh, more compelling narratives to call for more dramatic changes in global environmental governance (Halle, Najam & Beaton, 2013; Akinola & Amin, 2021).

The concept of "sustainability" is gaining popularity as a principle that can entrench changes in the ways that businesses, educational institutions, and other organisations currently operate, even *though it may be at a crossroads for sustainable development and the government institutions associated with it (Nidumolu, Prahalad & Rangaswami, 2009; Anwuluorah, 2019). Sustainability governance in this sense refers to meta-governance for sustainable development, which is the process of guiding businesses and other organisations toward changes that could tip the system into more significant societal shifts (In't Veld, 2011).

To what extent non-governmental institutions will be interested in, have the capacity for, and may ultimately prove to be more effective in addressing equity, social justice, and human-environment relations is an important question associated with the emergence of "sustainability," which could arguably be seen as an alternative to failed sustainable development global governance institutions. These are reasonable worries given the widely held criticism that the sustainable development discussion has been heavily influenced (if not hijacked) by neoliberal forces during the 1990s. This is demonstrated, for instance, by attempts to transform environmental choices into market preferences (Redclift, 2005). Considering this, should we not consider current "sustainability" agendas to be the result of this process of cooption if "sustainable development" evolved from being an environmental and social movement addressing fundamental needs and rights of people and the environment to becoming a conversation on how to increase the role of markets and the private sector?

Sustainable development and sustainability differ fundamentally in that they emerged within different global governance frameworks. The term "sustainability" first appeared more recently, in a setting marked by the consensus on climate change, the systemic financial and economic crises that have affected practically every country on earth, the acceleration of socio-economic change, and the prevalence of neoliberal rhetoric worldwide (Swyngedouw, 2010; Anwuluorah, 2019). When considering whether sustainability is more likely to achieve social and environmental goals and whether sustainability governance, as previously stated, is more likely to produce positive results, it is important to acknowledge this specific contextual circumstance.

This paper explores these issues and makes the case that the primary benefit of sustainability governance is its focus on planned social changes. This positively departs from the previous paradigm of sustainable development, which stressed the need to balance the interests of the social, economic, and environmental spheres. This transformative orientation does not ensure that radically novel alternatives will be developed and successfully implemented (Redclift, 2005; Adekoya, 2021). However, this article contends that it offers a chance to combine the two prominent governance paradigms that have shaped the sustainability discussion.

This paper offers insights into how a better 'balancing out' of these two perspectives might result in more efficient and functional governance systems for sustainability.

Understanding Sustainability and Governance

Because both concepts are based on the balancing of their constituent dimensions: private sector, government, and civil society in the case of governance, and environmental, social, and economic spheres in the case of sustainable development; the idea of governance was a natural fit to the debate over sustainable development. The fact that governance and sustainable development are related conceptual constructs made it easier to incorporate governance into research on sustainable development and vice versa. The result was the concept of "governance for sustainable development," which was initially conceptualised as a goal-oriented activity involving the purposeful modification of governance processes to support sustainable outcomes (Meadowcroft, 1997; Adekoya, 2021).

The gradual re-signification of this conceptual fusion as the dynamic process of changing the structures that govern socio-ecological interactions has been impacted by the realisation that sustainable development is not an end state but a social process (Redclift, 2002; Meadowcroft, Farrell & Spangenberg, 2005). Instead of simply being a new method of "development," the emphasis on process is crucial in emerging understandings of sustainability as a design principle for socio-ecological transformation (Leach, Scoones & Stirling, 2010). The terms "sustainability governance," "trans-governance," "sustainability transitions," and "pathways for sustainability" are now frequently used to emphasise socio-ecological change while highlighting the anticipatory, reflexive, and political components of sustainability. Sustainability governance leads to a new method of governance that goes beyond disciplinary scientific research, towards more trans-disciplinarity; beyond boundaries created by states and other institutions, towards trans-border approaches; beyond traditional means of measuring progress, towards new and more interactive measuring methods; beyond linear forms of innovation, towards open innovation; beyond cultural integration or assimilation, towards looking for compatibility (In't Veld, 2011).

This paper examines the conceptual underpinnings and historical development of sustainability governance as well as the relatively recent field of sustainability science, which can be broadly defined as an emerging design principle for managing socio-ecological transitions in the context of our increasingly globalised world. In the literature, this paper finds two major perspectives on governance that combine to form the idea of "governance for sustainability." These two perspectives have developed independently from governance applications in the social sciences and socio-ecological research.

Exploring the Governance Perspectives

According to Meadowcroft (2007), the ability to affect results, clear goals, and a solid understanding of pertinent causal links are all necessary for effective governance. Each of these three conditions seems difficult from the perspective of sustainability. Goals are hazy and contentious, uncertainties abound, and power is shared by many individuals and subsystems. Because power is distributed within complex social systems that are constantly changing and interconnected, policymakers are powerless to effect change (Meadowcroft, 2007). In light of this evaluation, it is imperative to provide an answer to the issue of how researchers in sustainable development and sustainability science have approached these governance challenges. While some authors believe that these challenges have plagued governance in any realm and are not new to sustainability, only more politically contested; others contend that the globalised world we live in is a complex, interconnected system and that managing a complex system calls for a governance revolution. To address governance for sustainability, several disciplines have both defined these difficulties differently and built on various views.

Distributed power and authority is the third difficulty that is principally addressed by the first perspective, which we refer to as social-political. According to one definition, globalisation is the process of reorganising power structures that have questioned the legitimacy of governments and added new players to innovative

governance frameworks. This corpus of work begins with a study of power and governance before moving on to analyse the implications of this redistribution of power for sustainability governance. In this discussion, sustainability is seen as both a new agenda and a novel set of principles for inclusive governance (Adekoya, 2021).

Deep thinking and resilience scholars frequently employ the second perspective, which is referred to as socio-ecological, and it has significantly changed over the past three decades. The need for complex systems approach to governance is becoming increasingly pressing as we veer perilously close to running out of natural resources, crossing tipping points, and breaching planetary boundaries. From attempting to comprehend system dynamics and identify causal relationships, this social-ecological perspective has progressed to suggesting governance solutions for local social-ecological systems (SESs) that are characterised by uncertainty. Scholars also seek to understand the characteristics that are desirable in a governance structure, or the functions that governance must perform to govern for sustainability in bounded systems characterised by uncertainty, incomplete information and inevitable surprises (Young, et al., 2006; Underdal, 2010; Young, 2010). The role of globalisation is limited in this perspective to its impacts on local system dynamics while the social, political, and economic ramifications of globalisation are conspicuously absent. These two perspectives are discussed in further detail in the next sections. Their synthesis is proposed as a platform to advance sustainability governance ideas and practices.

The Socio-Political Perspective

The globalisation that characterises our era has surely influenced the environmental and governance issues that face our generation (Young, 2010). The key question that arose in the wake of globalisation was whether the state is no longer the primary mechanism of governance because of the transfer of power from the state to non-state actors (Rosenau, 2003). Young argues that the rise of new global centres and the downward movement of power to specialised agents of global governance are the results of globalisation (Young, 2010). Fragmentation and integration, globalism and localism, and a breakdown of authority have all been brought on by globalisation (Rosenau, 2005). Others claim that while there have been new players on the governance stage, governments have been and will continue to be the main source of governance (Pierre & Peters, 2004; Meadowcroft, 2007). Scholars also contend that the new "rationality" by which the government organises governance is the growing influence of non-state actors and civil society. According to this governmentality perspective, governments would be able to coordinate non-state actors' behaviour to further their goals (Sending & Neumann, 2006; Nwabueze, 2019).

The socio-political perspective worries about the government's role, especially its potential decline and the resulting power vacuum, have been considered in terms of sustainability governance as both a threat and an opportunity. On the one hand, the lack of a single authoritative figure suggests a gloomy future for sustainability governance when it comes to the conception of governance as the exercise of authority (Rosenau, 2007). On the other hand, the decline of centralised authority is accompanied by an increase in optimism in the potential of hybrid forms of collaboration and governance networks to accomplish sustainability goals (Lemos & Agrawal, 2006). Decentralisation and polycentricity are thus perceived as either a threat or an opportunity from the social-political perspective, which includes two opposing views on the implications of power distribution for sustainability governance.

As posited by Young, et al. (2006), Underdal (2010) and Nwabueze (2019), the difficulties of dispersed authority and dispersed power outweigh any possibility of agreement, teamwork, or the creation of coordinated institutional steering mechanisms. Typically, the deterioration of the state is linked to this breakdown of power. To examine this fragmentation, Rosenau (2007) develops a brand-new analytical unit dubbed "Spheres of Authority." Every rule system gain and uniquely uses authority, according to the fundamental tenet. The indicator of a Sphere of Authority's existence is compliance.

Therefore, governance is the capacity to assert authority and promote compliance. Other actors and rule systems may gain legitimacy via established norms, informal agreements, discussions, and other governance

methods, whereas governments produce conformity through constitutional legitimacy (Rosenau, 2005; Anwuluorah, 2019).

Other scholars contend that dispersed authority creates an opportunity for alternate types of ordered rule and group action (Stoker, 1998). According to this perspective, the political and economic demise of the state presents an opportunity to develop sustainability governance. In the framework of resilience thinking and complex systems theory, this idea has been investigated from a variety of disciplinary perspectives, including political science, political ecology, geography, and even ecology. The shifting patterns of power relations have given rise to new fields of study and ways of thinking about how to effectively combine governance and sustainability.

The Social-Ecological Perspective

The social-ecological system (SES) is the fundamental analytical unit in the second broad perspective on sustainability governance to study the mechanisms governing the interconnection of human and natural components (Walker, Holling, Carpenter & Kinzig, 2004). The social and ecological elements of an issue are intimately intertwined and necessitate holistic approaches to problem-solving, which have been widely acknowledged because of the conceptualisations of the SES by Gallopin, Gutman & Maletta (1989) and Berkes & Folke (1998). Beginning with the dynamics of the SES, adaptation, vulnerability, and resilience were described as characteristics that were susceptible to governance research (Lebel, Anderies, Campbell, Folke, Hatfi eld-Dodds, Hughes & Wilson, 2006). The development of institutional structures and the elements that support their stability have attracted the attention of resilience academics. It became increasingly evident that social and natural systems are interconnected, making it impossible to study the resilience of natural systems in isolation (Brown & Westaway, 2011). In conclusion, resilience thinking has changed from seeing social pressures as external dangers to natural systems to seeing social factors as essential parts of coevolving human-environment systems (Manuel-Navarrete, 2013).

SES governance was first envisioned as a cutting-edge method of controlling ecosystems (Manuel-Navarrete, Kay & Dolderman, 2004). The governance-sustainability conundrum in complex systems is characterised by uncertainty, insufficient knowledge, and a lack of comprehension of complex system dynamics. It was soon realised that the management of these systems would have to shift from trying to control change to learning to deal with changes in these systems since tipping points and non-linear changes further compound the conundrum (Walker, Holling, Carpenter & Kinzig, 2004). With an emphasis on managing complexity inside the SES, adaptive governance was developed. This resulted in the social elements of SESs being described as complex systems in and of themselves. The development of adaptive governance incorporated the importance of leadership, social capital, networks, and learning through experimentation (Folke, Hahn, Olsson & Norberg, 2005).

To comprehend complex and unpredictable coupled systems, one must look beyond the traditional concepts of risk, stability, and control and instead focus on the dynamics of resilience, vulnerability, and adaptation (Young, Berkhout, Gallopin, Janssen, Ostrom & van der Leeuw, 2006). According to these authors, the transition from managing SESs as static entities for maximum benefits to managing them as dynamically developing systems needing adaptive solutions to issues, shocks, and surprises is best accomplished through sustainability governance. It has also been acknowledged that managing these systems is a complex, dynamic process (Young, 2010). As a result, the difficulties in governing sustainability go beyond simple ignorance of the intricate systems that sustainability issues arise from and take shape in. They also entail difficulties with the dynamics of governing systems.

Resilience researchers have come under fire for analysing social (and governmental) systems using analogies from ecological dynamics without giving politics, power, justice, and ethics due consideration (Davidson, 2010). There are basic contrasts between governance systems and natural systems that originally seem to have gone unnoticed. But it is becoming more widely understood that the social and governing system is made up of "individuals who can reflect on their circumstances and acts, who are endowed with intrinsic moral rights, and who hold normative convictions" (Duit, Galaz, Eckerberg & Ebbesson, 2010).

Furthermore, societies could produce and distribute things for the common good, to direct society toward achieving desirable goals, and cooperate cooperatively to translate such normative convictions into collective action. Resilience thinking naturally lacks the strong normative aspect of social systems that is essential to governance and sustainability, and its incorporation is very difficult (Folke, 2006; Rockström, et al., 2009).

By advancing the notion that socio-ecological systems are best managed in the face of unforeseen occurrences and surprises, adaptive management assists in the redefining of governance in the field of natural resource management (Folke, et al., 2005; Folke, 2006; Armitage, et al., 2009). This seeks a kind of governance that is dynamic in and of itself and permits systemic change. Other approaches aim to prevent policy failure, but adaptive management anticipates that policy failures will occur and that they will contribute significantly to learning. Avoiding failures could serve to maintain the status quo and prevent possibilities for active learning (Olsson, Gunderson, Carpenter, Ryan, Lebel, Folke & Holling, 2006). Instead of focusing on the actual institutions of governance as outlined by the social-political approach, the emphasis is on desirable characteristics in a governance system.

Bringing Together the Socio-Political and Socio-Ecological Perspectives

Different structural arrangements of how government should be constituted are discussed from both socio-political and socio-ecological perspectives. However, both perspectives frequently characterise the governance system's complexity and dynamism as a multi-level and multi-scale challenge (Gibson, Ostrom & Ahn 2000). The dispersion of central governmental authority "both vertically to actors positioned at various territorial levels, and horizontally to non-state actors" is how Bach and Flinders (2004) define multi-level governance. The fact that governance is multi-level may become a fulcrum for the socio-political and socio-ecological perspectives. The use of Spheres of Authority by Rosenau (2005), which in his opinion make up the Möbius strip or web of global governance, was covered in the section before this one. From a sociopolitical perspective, excessive power fragmentation could result in an "organisational explosion" that would overwhelm the governance stage and prevent efficient governing (Rosenau, 2007). As the state loses control over growing flows of resources, money, people, pollution, and ideologies, new international realms of authority emerge to regulate social and ecological processes. As described by multi-level governance, polycentric governance, network governance, hybrid collaborations, and sustainability governance, these spheres of authority take on various forms.

In addition to comparable socio-political framings, the socio-ecological approach offers an analytical perspective on multi-scale and multilevel governance. For instance, Type I and Type II multi-level governance are distinguished by Marks and Hooghe (2004). Type I multi-level governance comprises general-purpose jurisdictions at a limited number of levels with non-overlapping membership and is a descendant of federalism. A common example of Type I multi-level governance is the European Union. Intersecting memberships and task-specific jurisdictions are characteristics of Type II multi-level governance (Davies & Afris, 2020). The frequency of overlapping jurisdictions is quite similar to the polity or "collective consumption units" that Ostrom, Tiebout & Warren (1961) defined in the context of American metropolitan areas.

The idea of Functional, Overlapping and Competing Jurisdictions (FOCJ) also serves as an illustration of the flexibility in jurisdictional units. A FOCJ is adaptable because it is 'the institutional mechanism to adjust the scale of public jurisdiction to avoid spillovers,' and it may be established or withdrawn as needed (Frey & Eichenberger, 1999). Each of these building components, such as jurisdictions, polities, or FOCJs, represents a long tradition of several disciplines working to create a framework for the "new" kind of government that the globe is currently experiencing. The idea of "multilevel governance for sustainability" can be viewed as offering a framework or setting where these fundamental components can be articulated and coherent understandings of governance across disciplines and methodologies are provided. NGOs, transnational environmental networks, and epistemic communities; defined as networks of knowledge-based expertise, all have a role to play in this new arena of global sustainability governance (Lemos & Agrawal, 2006).

Intergovernmental panels discussing the governance of the global commons, multilateral organisations working with the private sector to facilitate the adoption of sustainability solutions, public-private partnerships, and hybrid governance arrangements of all kinds guiding development at various scales on alternative development trajectories, and more have all grown in popularity over the past two decades (IPCC, IFC, CGIAR). To weave developing structures for sustainability governance, these creative collaborations, boundary organisations that bridge the traditional science-policy split, and emerging polycentric structures have all been crucial.

Sustainability Governance: Lessons from Socio-Political and Socio-Ecological Perspectives

It might be necessary to rethink our approach to governance fundamentally if we want to avoid past errors and disappointments of the sustainable development agenda. There are many new hybrid conceptualisations of governance, and empirical data will be required to evaluate them (Lemos & Agrawal, 2006). We examine the idea of sustainable governance in this part as one potential hybridisation that blends socio-political and socio-ecological perspectives to promote a sustainability agenda based on governance changes.

The International Council for Science, The International Geosphere-Biosphere Programme, The International Human Dimensions Programme on Global Environmental Change, and the World Climate Research Programme supported the emergence of sustainability science as a solution-driven research agenda in the 2000s at the World Congress "Challenges of a Changing Earth 2001" in Amsterdam. Sustainability science originated as a field that is "characterised by the challenges it solves rather than by the disciplines it employs." By building a dynamic link between knowledge and action, sustainability science meets the need to advance both (Clark & Dickson, 2003).

The socio-political and socio-ecological perspectives on governance have been important influences on sustainability science ever since it was founded. Systems thinking, foreseeing future scenarios, and problem-solving for the present and the future is essential to sustainability science (Wiek, Withycombe & Redman, 2011). Since problem-solving requires a governance process, sustainability science places a strong emphasis on the investigation of governance systems that support sustainable trajectories (Kates, et al., 2001; Komiyama and Takeuchi, 2006). One of the central questions posed in a seminal article on sustainability science is: "What systems of incentive structures, such as markets, rules, norms, and scientific information, can most effectively improve scientific capacity to direct interactions between nature and society toward a more sustainable trajectory?" (Kates, et al., 2001).

While the emphasis on nature-society interactions arises from socioecological perspectives, these systems of incentives, laws, and norms have long been studied by authors from sociopolitical perspectives. Another way to explain the governance and governing practices used by both perspectives is the normative objective of directing interactions along a more sustainable trajectory.

The cornerstone of sustainability science and governance for sustainability is the emphasis on using issues and solutions to build research agendas. Perhaps because issues and solutions frequently occurred at the nexus of various realms, sustainability governance has evolved beyond the earlier sustainable development paradigm of first separating the environmental, social, and economic facets of a problem before attempting to balance them (Robinson, 2004). In this section, we provide two instances of current initiatives to solve sustainability issues by integrating both governance perspectives.

The Dutch government's use of hybrid forms of governance to guide the energy transition in the 2000s is the first illustration. Participation from the bottom up and top down were both necessary for this process. The knowledge community created because of system innovations and transitions can better comprehend, recognise, and have an impact on transitions. They have engaged in several programmes and research activities to support a transition to a sustainable society by generating both basic knowledge and practical information that facilitates changes (Davies & Afris, 2020).

The initiative on Earth System Governance is an additional pertinent illustration. A research network on governance and environmental change is called the Earth System Governance project. The network

investigates "new, more efficient governance systems and political solutions to deal with the current transitions in the biogeochemical systems of our planet." Researchers that take this tack see issues with political legitimacy and social fairness as well as governance efficacy when they examine earth system governance. The socio-ecological approach remained mostly silent on the topic of social justice, and the Earth System Governance initiative aims to fill that gap. They consider design, agency, adaptability, accountability, allocation, and access while emphasizing power, knowledge, norms, and scale as unifying themes throughout the study of earth systems like food, water, climate, and economic systems (Biermann, 2007). It may be argued that the selection of these standards and parameters reflects their efforts to combine sociopolitical and socioecological perspectives.

These two instances highlight the potential of governance for sustainability research that integrates socio-political and socio-ecological perspectives. However, they address splintered authority very differently. While the Dutch government's transition management policy combines top-down assistance with bottom-up engagement by bringing together many actors to form a transition arena, the issue of fragmented authority is seen as a problem by researchers working on the Earth System Governance project. This may be because both strategies have been applied on a large scale. Transition management has primarily been used at regional scales, whereas earth system governance tries to inform intergovernmental panels in an era of diminishing government power. Thus, while questions of legitimacy and accountability are emphasised more in the Earth Systems Governance project, transition management emphasises multi-stakeholder dynamics.

The use of tele-coupling as a heuristic to identify the sustainability concerns facing our generation within the last ten years has provided some intriguing ideas on how to integrate sociopolitical and socioecological viewpoints. Tele coupling has been utilised to investigate the influence that two or more SESs exert on each other as a continuation of research on coupled SESs (Liu, et al., 2013). It brings about new opportunities to think about bridging sociopolitical and socio-ecological perspectives to jointly explore the sustainability governance-globalisation *trilemma*. Tele coupled systems show that a "governance vacuum" that comes to light when remote interactions take place, causing "unanticipated consequences," "shocks," and surprises in systems that were previously thought to be unconnected, goes hand in hand with the overwhelming multiplicity of organisations involved in governance. Therefore, these sustainability issues are seen as symptoms of a governance gap (Eakin, et al., 2014).

In response to greater global connection and interactions, the emphasis has shifted from studying interactions among SESs to studying a single socio-ecological system. Long used in climate and atmospheric science, the term "teleconnections" initially referred to air circulation and processes in one region having an impact on the climate in distant locations (Trenberth & Hurrell, 1994). When this idea of "acting at a distance" is applied to SES, it demonstrates how remote interactions can have an impact on global concerns. The current issues facing this generation are being shaped by these remote encounters. A few examples include water scarcity, public health issues, biodiversity loss, changes in land use, and climate change (Liu, et al., 2013). Further, these heuristic challenges the way we conceptualise our world, bounded in discrete geographic units and urges us to draw on integrated socio-political and socio-ecological perspectives that provide new units of analysis to rethink governance.

Conclusion

Since technocratic attempts to balance the social, economic, and environmental sides of an issue demand governance mechanisms that we are still lacking, this paper argues that sustainable development does not live up to the expectations of the international community. Here, the idea of sustainability governance has been put up to make the transition to a time when such systems flourish. This paper demonstrates how socio-political and socio-ecological perspectives on governance must be incorporated into sustainability governance.

The socio-ecological perspective views governance as a dynamic process, in contrast to the socio-political perspective, which emphasises agency, power, authority, legitimacy, and responsibility as important ideas for transformational social change. It also helps the development of a new vocabulary for discussing change that

is grounded in system dynamics, complexity, and tipping points that are related to surprises, rapid changes, and uncertainty. An important realisation from this perspective is that governance must be adaptive since the systems we control for sustainability are inherently unpredictable. The value of resilience thinking in governance systems and the necessity of a complex systems perspective are no longer debatable issues. Resilience thinking can expand the scope of the larger agenda for governance study, as is commonly accepted. Studying multi-level governance systems specifically exhorts us to take into account fundamental issues of change and stability, adaptation and design, hierarchy and self-organisation. A resilience perspective on governance would also consider issues of human-environmental interactions, vulnerability brought on by maladaptations, and innovation capacity as integral parts of evaluating a particular governance system; facets that are crucial when governing for sustainability. Traditional benchmarks used to assess public governance include efficacy, accountability, and equity. Better integrating resilience and complexity insights with cultural and political facets of governance remain a problem, though. The importance of culture, local knowledge, and traditional practices are frequently disregarded in governance for sustainability framework. Despite the growing emphasis on the need to research power, few studies have addressed how power may be studied in social-ecological systems, and even fewer have taken on this problem. Thus, discussions of authority and power continue to be a topic primarily covered from the social-political perspective.

A long-term goal for sustainable development seems to be growing more and more insufficient as global environmental change gathers steam and we become more aware of our constrained "safe operating space. The need for immediate answers to problems is now evident, and "concerns for future generations are quickly losing their urgency in favour of a focus on solution-driven strategies under the banner of sustainability. As the term "sustainability" gains popularity among businesses, academic institutions, and NGOs, the objective for sustainable development is being reframed. As a response to the pressing issues that define our globalised society and the inadequacy of conventional research to solve the normative quandaries of sustainability, new sustainability science is being suggested inside academia.

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