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Our Struggles With Resilience: Using Political Ecology to Strengthen the Concept of Resilience in Empirical Field Research and Critical Policy Analysis

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Abstract

The concept of resilience is omnipresent in scholarship and policymaking on climate change. Yet, resilience has major shortcomings that leave us—a human geographer primarily relying on empirical field research and a political scientist working with critical policy analysis—conflicted about the concept. On the one hand, it is part of our disciplines' lingua franca, while on the other hand, the conceptual critiques are both common and persuasive. In this article, we share our perspective on resilience, guided by the following question: What challenges do we face in applying the concept of resilience in empirical field research and critical policy analysis, and how can we address them? We answer this question based on climate impacts in, and policy perspectives on, Kenya. We do not resolve all the challenges of working with resilience in social sciences research, but building upon the existing literature identifying the strengths and shortcomings of resilience and our own experiences with the concept, we put forward one potential path that uses political ecology to overcome some of resilience's shortcomings while maintaining its utility for our research. These insights are likely to be relevant and useful for other researchers, policymakers, and practitioners.

Keywords resilience, empirical research, policy, political ecology, Kenya

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1. Introduction

"Resilient societies" (United Nations Sustainable Development Group [UNSDG], 2021, p. 6), "Resilient cities" (Organisation for Economic Co-operation and Development [OECD], n.d.), "resilient infrastructure" (United Nations Office for Disaster Risk Reduction [UNDRR], n.d., para. 1), "resilient supply chains" (OECD, 2024, p. 1), "a resilient world" (Walker & Salt, 2012, p. 25): These days, everything is (expected to be) resilient. Resilience is everywhere. Particularly in the development and climate sector, resilience has become a prominent, if not the most prominent, concept (for instance, Schipper & Langston, 2015; United Nations Framework Convention on Climate Change [UNFCCC], 2021). The scholarly literature is exhaustive—so much so that some claim that they are "Exhausted by Resilience" (Evans & Reid, 2015, p. 154). Countless definitions have been authored, critiqued, compared, and compiled into meta-analyses (see, for instance, Brambilla et al., 2017; Clement et al., 2024; Ossewaarde et al., 2021; Rafael et al., 2015). It is even possible to read meta-analyses of these meta-analyses that are twice removed from the original underlying papers (Moser et al., 2019). Among the multiplicity of resilience definitions and approaches, certain central chasms have been identified: Instrumentalist versus more critical approaches, normative versus positivist approaches, understandings of resilience that are system, process, or outcome oriented, and subtle disciplinary differences reassert the dichotomies between natural and social sciences (Moser et al., 2019; Olsson et al., 2015; Rogers et al., 2020). The concept of resilience has also been widely used (as a normative horizon) in policy documents. For instance, the United Nations' (UN) *Race to Resilience* campaign aims "to put people and nature first in pursuit of a resilient world where we do not just survive climate shocks and stresses, but thrive in spite of them" (UNFCCC, 2022, p. 44). For the Intergovernmental Panel on Climate Change (IPCC, 2022) as the key global body synthesizing scientific knowledge on climate change for policymakers, resilience is a key concept.

In our own empirical research as a geographer working in the Global South, and as a political scientist focusing on international climate policy stakeholders, we engage with the concept of resilience on a regular basis, acknowledging, on the one hand, its potential for inter- and transdisciplinary dialogue while, on the other hand, finding that its use can be problematic. In this article, we reflect on our experiences with resilience, bringing our field-based and critical policy perspectives into conversation with each other and articulate how we are navigating our work with this thorny concept. We do so guided by the following question: What challenges do we face in applying the concept of resilience in empirical field research and critical policy analysis, and how can we address them?

We answer this question and illustrate our *struggles* with resilience based on climate impacts in Kenya because the country has often been referred to as a *climate change hotspot* which has received significant attention by policymakers and resilience scholars alike (Gabrielsson, 2016; Gebrechorkos et al., 2023; Gutierrez Zapata et al., 2024; Marchant, 2021; Qiao et al., 2024; Straight et al., 2025; Tadeo, 2024; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022). Further, one of this paper's authors (Schilling) has more than 14 years of empirical field research experience in Kenya, and another one of us (Haider-Nash) has been working on international climate change policy for over 10 years.

We do not claim to ultimately solve the challenges of working with the concept of resilience in social sciences research. However, building upon the existing literature identifying the strengths and shortcomings of resilience and our own experiences with the concept, we put forward one potential path that uses political ecology to overcome some of resilience's shortcomings while maintaining its utility for our research. The novelty of this contribution lies in the combination of our perspectives and the exemplary application of our approach to a specific case study. As such, we explore demonstrations of research interpretation and specific guiding questions that go beyond existing attempts (e.g., Beckwith, 2022; Ingalls & Stedman, 2016) to refine resilience with political ecology. This is likely to be relevant and useful to both policymakers and researchers who are simultaneously convinced of both the utility and the limitations of the resilience concept.

In the following sections, we first conceptualize resilience, including a brief overview of the current theoretical debates, definitions, and general strengths and shortcomings of resilience already identified in the literature. In Section 3, we then illustrate the challenges we face and the (potentially) problematic aspects of applying resilience in our areas of research expertise. Based on a simulated perspective on climate impacts and pastoralism in northern Kenya, we first show how

a narrow application of resilience to interpret empirical research can lead to simplified and misleading conclusions. Here, we draw on our own extensive empirical field research, supplemented by a literature review. Second, we analyze the use of resilience in policy documents on climate change impacts in Kenya and reflect on the challenges of maintaining a critical perspective on resilience while sustaining policy relevance and open communication with policy stakeholders. With these challenges in mind, we develop a perspective that combines resilience with political ecology in Section 4. For this purpose, we briefly conceptualize political ecology and show its strengths that are able to mitigate some of the flaws of resilience. In Section 5, we apply the combined perspective to our cases from Section 3 to demonstrate the added value and reflect on how it allows us to use resilience in our respective work. We end with a conclusion section summarizing the key points, showing avenues for further development and application of our perspective, as well as identifying some persistent points of contention.

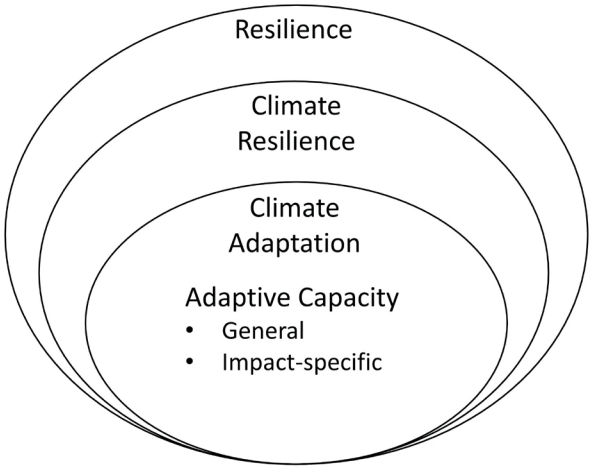
2. Conceptualizing Resilience

2.1 Understandings

There are countless definitions of resilience, and indeed, most of the theoretical or conceptual academic literature on resilience commences by recognizing the difficulty posed by multiple and conflicting understandings (for instance, Mentges et al., 2023). Fundamentally, resilience can be "commonly understood to be the characteristics of a system that allow it to recover or bounce back in terms of system performance or functionality following one or more adverse events" (Grafton et al., 2019, p. 909). Recent attempts to further develop the concept of resilience have moved from simply bouncing back or recovering from a disturbance to the idea of bouncing forward or of transformative resilience (Allen et al., 2019; Clement et al., 2024). Resilience can be used as a process, as a system trait or property, or as a rate or outcome (Allen et al., 2019; Moser et al., 2019).

There are hardly any articulations of the (climate) resilience concept that do not also utilize the concept of (climate) adaptation. Indeed, it has been described as a "fundamental component of" and "conceptual bridge with" the concept of resilience (Graveline & Germain, 2022, p. 337) that has "complementary goals that must be achieved in order to reduce vulnerability and ensure that communities are able to withstand the impacts of disasters and recover quickly" (Lama et al., 2017, p. 193). In relation to climate change, adaptation generally refers to actions undertaken as a planned response to a specific climate hazard. A core aspect of adaptation is that vulnerability to climate hazards should be reduced (IPCC, 2023). Recognizing that this is not always achieved, the concept of maladaptation is increasingly being used to highlight that actions may actually increase vulnerability to climate impacts (Fisichelli et al., 2016). Nevertheless, similarly to resilience, adaptation is frequently used in a normative, value-laden way (Lama et al., 2017) and has been conceptualized both as a process and an outcome (Smit & Wandel, 2006). While the two concepts are usually used hand-in-hand, it is possible for adaptation to actually undermine resilience and vice versa (Graveline & Germain, 2022). Adaptive capacity is generally used to articulate the ability to adapt—composed of resources, knowledge, and skills that a group could use to adapt to a hazard (Gabrielsson, 2016), leading to adaptations being identified as "manifestations of adaptive capacity" (Smit & Wandel, 2006, p. 286). The adaptive capacity can be further divided into (a) generic or general adaptive capacity, which groups have to withstand a range of hazards, and (b) impact-specific adaptive capacity, meaning the resources, knowledge, and skills that help groups to adapt to a specific hazard (Figure 1, see also Schilling et al., 2012). For example, the ability to build dams is impact-specific to the hazard of floods, while high financial resources would contribute to a higher general adaptive capacity as they can be used to adapt to several climate-related hazards (including floods).

Figure 1 Resilience and Adaptation



Note. Source: The authors.

2.2 Strengths and Shortcomings

The key strengths of resilience are (1) its simplicity and wide applicability, and (2) its positive connotation and bridging function. The "concept of resilience has both an attractive simplicity and a rich underlying complexity" (Allen et al., 2019, p. 898) that contribute to its continued popularity. Resilience is used in many disciplines, from psychology to business management to climate studies, where focuses of inquiry and dominant methodological and theoretical approaches lead to very different understandings of resilience. The concepts can also be applied at different scales, from the individual to large-scale complex systems (Salehi et al., 2019; Sharifi & Yamagata, 2015). Moreover, the concept has been identified as helpful for comparing different and diverse cases across various aspects (Nüchter et al., 2021; Schipper & Langston, 2015).

Furthermore, resilience generally has a positive connotation in climate change research, and it is a key concept used by the IPCC and natural scientists due to its numerous benefits in addressing diverse climate change scenarios (IPCC, 2023). In a very interdisciplinary field of research such as climate change, resilience can act as a bridge to other disciplines (see, for example, Meerow et al., 2016; Serfilippi & Ramnath, 2018).

The key shortcomings of resilience are its (1) normative component, (2) depoliticization effect, (3) neglect of power dynamics, (4) strong focus on local communities and their responsibility, (5) emphasis on techno-managerial solutions and measurability, and (6) vagueness and lack of clarity.

Studies that see resilience as a process tend to focus on "actions and interventions" (Moser et al., 2019, p. 26) and, in its frequent use in disaster response or international development, actions to build or enhance the resilience of a particular aspect of a socio-ecological system are emphasized (Allen et al., 2019). This understanding of resilience has a very strong normative component which has been identified as problematic, as resilience is not inherently a positive trait. For example, poverty or dictatorships may also be resilient (Allen et al., 2019). In its normative iteration, resilience therefore often neglects power dynamics and social dimensions (Ingalls & Stedman, 2016; Schilling et al., 2017). A frequent critique of resilience thinking is therefore that it can lead to a depoliticization of climate adaptation and neglect of questions such as who does and does not benefit from resilience (for instance, Ford et al., 2010; Schilling et al., 2017). This negligence can also result in *power blindness* (see Ingalls & Stedman, 2016) and a shift of responsibility for more resilience or the blame of too little resilience on local communities (Joseph, 2013; Methmann & Oels, 2015; Schilling et al., 2017). This is connected to another important shortcoming of the concept, which is that it is too focused on the local level without seeing the bigger picture of the regional, national, or global levels (Ford et al., 2010; Schilling et al., 2017; Termeer et al., 2016). When resilience is used as a system trait or property, the focus is frequently on disturbance thresholds at which point a system fundamentally changes, and is most common in the disciplines of ecology and engineering (Allen et al., 2019; Moser et al., 2019). In this interpretation, a critique has been levied at resilience that it focuses excessively on techno-managerial solutions and is not able to adequately account for social phenomena, therefore overseeing much complexity (McEvoy et al., 2013; Serfilippi & Ramnath, 2018). Further, the focus is often on "measurable outcomes [that] are viewed entirely neutrally" (Moser et al., 2019, p. 26) and is often concerned with measuring how long recovery takes (Allen et al., 2019). Finally, it is often noted that "competing frameworks [of resilience] contribute to a loss of clarity about the original concept and theory of resilience" (Allen et al., 2019, p. 898) and that the absence of a universal definition is a major shortcoming (for instance, Bahadur & Pichon, 2016; Jones & d'Errico, 2019). As such, "intense debates over the meaning, characteristics, and usefulness" (Moser et al., 2019, p. 22) are ever-present in the academic literature.

3. Challenges of Using Resilience

3.1 In Empirical Field Research

The previously identified shortcomings of resilience make the application of the concept challenging in empirical field research. In this section, we illustrate why, based on a simulated case study on pastoralism in northern Kenya. The key developments unfolding there include the exploration of large oil reserves, the completion of the largest wind park in Africa, increasing privatization of land through wildlife conservancies, devolution of political power and financial resources, and environmental changes related to global climate change (see Schilling & Werland, 2023, for an overview). The most direct and detrimental factor un-

dermining the well-being of the communities is violent conflict between ethnic groups, including Turkana, Pokot, Samburu, and Rendille, who compete for land, pasture, water, and livestock (Schilling & Werland, 2023). The conflicts mostly manifest in violent livestock thefts, called raids (Akall, 2021; Mathew, 2022). Compared to the county average, the level of formal development in northern Kenya in terms of infrastructure, health, formal job opportunities, and education is very low (Akall, 2021). The main livelihood is pastoralism based on cows, sheep, goats, and camels. The climate in northern Kenya is an arid to semi-arid climate with a bi-modal rainfall pattern (Kogo et al., 2021). In regular years, the long rains last from about March to May and the short rains from about October to December. Particularly during longer droughts, the region suffers from food insecurity, and large parts of the population depend on food relief (Office for the Coordination of Humanitarian Affairs [OCHA], 2023).

Analyzing the case of pastoralism in northern Kenya through a *climate resilience-only* perspective is problematic because it can lead to a narrow focus on the specific hazards currently faced by the population, the actions they are taking to cope with these hazards, and what impacts this has had on their lives and livelihoods. The main climate hazard that the pastoral communities are facing is the increasingly variable and unreliable rainfall patterns, which makes it increasingly difficult for the communities to know when and where pasture is available (Kimutai et al., 2025). In addition, the length and frequency of droughts have increased over the past decades, leading to scarcity of water and pasture (OCHA, 2024). The impact-specific adaptive capacity of the pastoralists can be considered high because they are highly familiar with the region and know where watering points and pasture are available, even in times of drought. Further, mobility is a key feature of pastoralism, which enables them to cover long distances in search of water and pasture. Adjusting herd composition and size is another key element of the impact-specific adaptive capacity (Ndiritu & Muricho, 2021). In contrast, the general adaptive capacity of the pastoral groups is low because the majority of pastoralists are formally poor and hence lack the financial resources to buffer livestock losses (Akall, 2021). Looking through a climate resilience lens at the destitution, suffering, and food insecurity that the pastoral communities regularly experience in northern Kenya could therefore lead to a narrow focus on the local level when searching for the causes of the situation. This, in turn, could result in the conclusion that the pastoralists are not climate resilient, and it is their own fault that they become *climate victims* because they have not sufficiently prepared for or adapted to the changing climate conditions. The identification of the local communities as the main group being responsible for the situation is also relevant for the question of who should act or should have acted. For instance, the pastoralists should have realized a long time ago that their lifestyle is one of the past and not feasible anymore. Searching for formal employment would have been the better option than sticking to an outdated livelihood. This is exaggerated, but it shows how the shortcomings of resilience, and particularly its power-blindness, depoliticization of climate and environmental hazards, and focus on the local level could result in very simplified conclusions that do little justice to the complex realities.

3.2 In Critical Policy Analysis

Resilience is perhaps the central buzzword in policy interventions on climate change impacts in Kenya. Hence there is no avoiding it, either in document analysis, interactions with policymakers and stakeholders, or observation of political negotiations. There is also no escape from the overwhelming normativity of resilience when used in policy contexts. Indeed, in policy documents and discussions, the usage of resilience is almost exclusively normative (as opposed to being used analytically, as is commonplace in empirical field research as sketched in the previous section) and coded positively. For example, in the documents analyzed here, (climate) resilience is something to *build* (United Nations Kenya, 2024, p. 50), or that we should work *towards building* (HORN International Institute for Strategic Studies & Konrad Adenauer Stiftung, 2023, p. 1), with "progress on building climate resilience" and "efforts to improve resilience to climate change" (African Climate Foundation [ACF], International Food Policy Research Institute [IFPRI], Consultative Group on International Agricultural Research [CGIAR], 2023, p. 17) being put under the microscope and needing improvement. Resilience in itself becomes the goal that policy initiatives should strive for.

At the same time, the normative goal of achieving or improving resilience is articulated very vaguely. What is actually meant by resilience and what should be built to achieve it is often left unsaid. It is, for example, striking that none of the policy documents in the sam-

ple define resilience. In the best case, for instance, in Kenya's National Adaptation Plan, a vision for climate resilience is included, which indicates what climate resilience would include:

> … strong economic growth, resilient ecosystems, and sustainable livelihoods for Kenyans. It will also result in climate-induced loss and damage, mainstreamed disaster risk reduction approaches in various sectors, reduced costs of humanitarian aid, and improved knowledge and learning for future adaptation and the future protection of the country. (Ministry of Environment and Natural Resources, 2016, p. 3)

In other documents, resilience resembles a buzzword, with "climate resilient development" (Pegasys Institute, 2016, p. 1), "climate adaptation and resilience response" (Power Shift Africa & Bosch Stiftung, 2022, p. 4), "building resilience, promoting sustainable development, and addressing the challenges posed by climate change in the region," and a "low carbon and climate resilient development pathway" (Government of Kenya, 2020, p. 1) all called for without further precision. This makes it extremely difficult to deconstruct what is meant by resilience and to find shared language beyond the resilience concept—what is meant by becoming more resilient? For whom? And who is responsible for making the necessary changes?

This poses two linked challenges for critical policy analysis. On the one hand, there is the analytical challenge of disentangling the layers of meaning behind the resilience concept and often having to move methodologically beyond document analysis to do so. On the other hand, the normative (as opposed to analytical) usage of resilience leaves relatively little space for discussions surrounding the value of the concept or critique of its implications. Opposing the terminology of resilience, or in my experience at times even not actively embracing it, can be interpreted as opposition to the broader humanitarian impulse that is behind it (for example, securing better conditions for people affected by climate change).

Aside from frustration, this has two very clear practical implications for critical policy analysis. First, it makes the personal interactions vital for research empirics more challenging, specifically trust-building with policymakers and stakeholders, and finding a common language in interactions, including interviews. Second, how one engages with the concept of resilience becomes a core part of the decision-making process on how policy-relevant the research is intended to be. Particularly in critical policy analysis, there is an argument to be made for being policy *ir*-relevant (Bakewell, 2008). Nevertheless, policy relevance and reaching policy communities continues to be a valued research metric, made more difficult to achieve from a resilience-critical perspective.

4. Combined Resilience-Political Ecology Perspective

Several attempts have been made to use political ecology to address the previously identified challenges associated with the use of resilience and related concepts with similar reach, including vulnerability and human security. For instance, Ingalls and Stedman (2016) combined resilience and political ecology with a focus on the issue of power. Turner (2014, p. 620) argued that resilience would benefit from political ecology's *normative commitments* and identifies land-use ecology as a promising common ground for the two concepts. Beckwith (2022) showed how lessons from political ecology can add value to resilience based on a case study of community-based adaptation in Cambodia. Ohdedar (2022) drew on political ecology to examine climate vulnerability in a case study of India. Marks et al. (2023, p. 259) used political ecology to analyze how socio-environmental dynamics on the local level are affected by "multi-scalar and extra-local practices, policies, and discourses" in Thailand. Similarly, Schilling et al. (2021) utilized the multi-scalar orientation of political ecology for an analysis of human security in Kenya, Bolivia, and Peru. Before we show how political ecology can be combined with resilience to overcome some of its shortcomings, we first briefly conceptualize political ecology, including its understanding, strands, as well as its own strengths and shortcomings.

Similarly to resilience, a universally accepted definition of political ecology does not exist. There is even little agreement on whether political ecology is a theory, concept, field, approach, lens, or perspective (e.g., Abrahams & Carr, 2017). As Peluso and Watts (2001, p. 25) pointed out a while ago: "there is 'no overarching' theory of political ecology that can be used to explore some set of universal or reductionist truths about the politics of human–environmental relationships." Being fuzzy and hence challenging to measure and apply is the key shortcoming of political ecology.

However, this does not mean it is unimportant or even useless. On the contrary, "now political ecology is everywhere, and it's hard to think without it" (Robbins as cited in Malik, 2024, p. 3). It is a strongly growing field, and its key elements and messages are increasingly used in studies on human-environment interactions (Benjaminsen & Svarstad, 2019; Robbins, 2020). Most scholars would likely agree that political ecology focuses on human-environment relations, power imbalances, unequal distribution of benefits and costs, inequality, historical context, and multiple scales (e.g., Loftus, 2019; Marshman, 2019; Robbins, 2003). For instance, Robins (as cited in Malik, 2024, p. 2) notes: "In the dance of capitalism, inequality becomes a necessary partner, and political ecology unveils its choreography." Further, political ecology "focuses on the political economy of resources, considering economic transactions in their broader social and political context and linking local dimensions with the global commercial economy" (Trombetta, 2012, p. 156). Hence, political ecology reminds us that the *local* is rarely *local* but rather a result and driver of processes connected to *supra-local levels*, meaning those taking place at the national, regional, international, and global scale (Neumann, 2009; Schilling et al., 2018a). With this, political ecology helps us to analyze human-environment interplay and its underlying and associated power dynamics, inequalities, and interactions of actors across scales (Neumann, 2015; Rangan & Kull, 2009).

Within the wide field of political ecology, different strands can be distinguished, including but not limited to feminist political ecology (Harcourt et al., 2023; Vigil, 2024), Marxist political ecology (Gareau, 2005; Napoletano et al., 2018), post-colonial political ecology (Malik & Ford, 2025; Schulz, 2017), rural political ecology (Pattanaik & Sen, 2022), and climate political ecology (e.g., Malik & Ford, 2025). Each strand emphasizes different aspects. For instance, feminist political ecology focuses on the interconnections between gender, politics, power differentials, and the environment (Simon & Kay, 2024; Vigil, 2024). Embodied practices, emotion, meaning, and affect are commonly used in feminist political ecology (Sultana, 2021). Marxist political ecology examines how capitalism's drive for profit and perpetual accumulation leads to overexploitation of natural resources and environmental degradation (Gareau, 2005; Napoletano et al., 2018). Studies in post-colonial political ecology analyze how historical processes of colonization, imperialism, and neocolonialism continue to shape environmental and resource policies, practices, and outcomes (Bashizi et al., 2024). Rural political ecology has a geographic focus on rural, often agrarian, case studies (Pattanaik & Sen, 2022). Climate political ecology analyzes the power dynamics and injustices of the political, economic, social, and physical dimensions of climate change (Malik & Ford, 2025). Drawing on the concept of climate justice, it, for instance, emphasizes that more developed countries in the Global North have contributed most to climate change and enjoy the benefits of fossil fuel-based economic growth, while less developed countries in the Global South have much lower accumulated greenhouse gas emissions and are impacted more strongly by the effects of climate change (Friedlingstein et al., 2022; IPCC, 2022).

Listing the key shortcomings of resilience identified in Section 2.2 vis-à-vis the key strengths of political ecology, the usefulness of combining resilience with political ecology becomes apparent (see Table 1).

Table 2 shows guiding questions on how to strengthen climate resilience through political ecology. In the following section, we illustrate what the application of this combined perspective looks like.

Table 1 Addressing Shortcomings of Resilience Through Political Ecology

Use of resilience could lead to…	Political Ecology can address these through…
power-blindness	focusing on power dynamics
depoliticization of climate and environmental hazards	paying particular attention to political issues
narrow focus on local level	applying a multi-scalar approach
focus on *techno-managerial solutions*	emphasizing the social dimension, unity, and interconnectedness of humans and the environment
strong focus on current state while neglecting historical context	stressing the importance of the historical legacy

Note. Source: The authors.

Table 2 Guiding Questions to Combine Resilience and Political Ecology

Category	Guiding Questions
Main hazards	What are the main hazards? Who has caused them recently, and from a historical perspective?
Main causes of the hazard	What are the main causes of the hazard? On which scale (local, regional, international, and global) does the hazard originate?
Main actors responsible for causing the hazard	Considering all levels: Which actors are responsible for causing the hazard?
Main actors affected by the hazard	Considering all levels: Who is mostly affected by the hazard?
Adaptive capacity of the affected population	What level of adaptive capacity does the affected population have? What and who strengthens or undermines the adaptive capacity?
Power relations	What are the power relations between the affected population and other key actors?
Main actor responsible to respond to and mitigate the hazard	Given the historical context and power relations identified, who is responsible to respond to and mitigate the hazard?

Note. Source: The authors.

5. Application of the Resilience-Political Ecology Perspective

5.1 In Empirical Field Research

Combining resilience with a political ecology perspective on climate impacts in Kenya necessitates asking *why* communities in parts of Kenya are less resilient to climate impacts compared with the rest of the country. Table 3 compares the *climate resilience only* perspective described in Section 3.1 with the combined perspective. This would show that northern Kenya has a comparatively low level of formal development and identify the long history of political and economic marginalization under British colonial rule and since the country's independence in 1963 by the central government of Kenya as a main cause for the region's current level of development (Schilling & Werland, 2023). Because of the low tax base in northern Kenya, the central government has invested little in the infrastructure, economy, and provision of basic services, including health, education, and security (Schilling & Werland, 2023). Particularly, the latter is crucial as the government has been unable to end the violent intercommunal conflicts that are so detrimental to communities' wellbeing and adaptive capacity. The violence not only hurts the communities directly through loss of lives and livestock, but the raids also create insecurity, which in turn leads to inefficient use of pasture, limits the mobility of pastorals, and prevents investments in the region (Schilling et al., 2012). With many resilience-focused studies seeking solutions in the ways in which pastoralists can supplement their income to cope with climate impacts rather than how their pastoral livelihoods can be supported (see also Semplici & Campbell, 2023), empirical research can become guilty of reinforcing putting blame on pastoral communities for their weak climate resilience and overlooking failures of central government to acknowledge and support pastoralism as a livelihood.

While the process of devolution has passed on more financial resources and responsibilities from the central level to the counties, strong power imbalances between the central government and the local communities still exist (Schilling & Werland, 2023). This can, for instance, be seen when resources such as oil and wind are exploited. While the benefits in form of revenues and electricity are concentrated at the national and regional level, the communities living near the wind park and oil extraction sites gain little and are instead exposed to the externalities, including water and soil pollution as well as loss of access to land (Schilling et al., 2018b). Paying attention to scale, as a key element of political ecology, also implies identifying global climate change and thereby the countries emitting most greenhouse gases as major drivers of the hazard experienced by the pastoral communities. They are not helpless climate victims but rather active agents who face the effects of the globally-driven phenomenon and who are disadvantaged by national policies that undermine their, otherwise well-adapted and adaptable, livelihoods.

Table 3 Comparison of Climate Resilience Only and Combined Climate Resilience Political Ecology Perspectives in Empirical Research on Pastoralism in Northern Kenya

	Climate Resilience Only Perspective	**Combined Climate Resilience – Political Ecology Perspective**
Main hazard	Changing rainfall patterns and droughts	Political and economic marginalization and violent intercommunal conflict Changing rainfall patterns and droughts
Main focus	Local/community level	Multi-level
Reason for weak adaptive capacity	Lack of formal income/employment	Political and economic marginalization and violent intercommunal conflict
Main actor responsible for the situation the pastoral communities are in	Pastoral communities	On a global scale, the countries with (historically) high greenhouse gas emissions. On a national scale, the government of Kenya. On a local scale, the pastoral communities but to a very limited degree.
Main actor responsible for changing the situation	Pastoral communities	The national government of Kenya and other actors that can address the structural disadvantages the pastoral communities are facing. Main emitters of greenhouse gases. Pastoral communities as active agents rather than helpless climate victims.
Main conclusions	Pastoral communities are victims of climate change, and it is mainly their fault that their resilience is so weak	Long-term and historically-rooted political and economic marginalization in combination with violent conflict have undermined communities' resilience
Main group who needs to act and how	The pastoral communities need to supplement their livelihoods as pastoralism is no longer feasible	The government of Kenya needs to acknowledge pastoralism as a well-adapted and suitable livelihood which needs to be supported rather than undermined by national policies. Countries with high emissions need to quickly and strongly reduce their greenhouse gas emissions.

Note. Source: The authors.

5.2 In Critical Policy Analysis

Critical policy analysis eschews an instrumental approach to policymaking, problematizing often simplified perspectives on policy that assume a straightforward translation into policy measures of logically identified policy necessities. Indeed, policymaking is itself a social process, in which actions and institutions are shaped by the meanings given to concepts (Bevir & Rhodes, 2016), and are embedded in complex power relations and situated against an institutional, social, political, economical, environmental, and historical context. Political ecology, therefore, provides a useful lens through which to analyze policymaking and can be used to both understand the meanings being attached to resilience, as well as the emergence of particular policy proposals.

In the policy documents on climate resilience in Kenya, a political ecology perspective can help make three dynamics visible. First, it highlights the temporality utilized in policy-directed interventions as one of an already unfolding chronic emergency or crisis set against an uncertain future. This is important, as it places climate impacts as self-explanatory and naturally existing in the world. Climate impacts, therefore, become an inevitable framework condition and external uncertainty to be overcome, naturalizing climate impacts and obscuring the historical, social, and political drivers behind them in the first place. For example, policy briefs are set "in the context of the existing climate emergency" (Power Shift Africa & Bosch Stiftung, 2022, p. 3) acknowledging "climate change and the risks it poses to the country's continued progress and growth" (Chaudhury et al., 2020, p. 7).

Second, the multi-scalar approach of political ecology also links the geographical focus on climate impacts being felt in Kenya, often at the local level, to other geographical and geopolitical scales. Policy-directed interventions are often targeted very specifically to be relevant for a particular political legislature, which can at the same time make the analysis removed from considerations of global inequalities or entangle-

ments. For example, when considering how climate impacts are experienced by local populations, this can also lead to an interrogation of how climate impacts are experienced disproportionately by populations in the Global South with historically low greenhouse gas emissions. This can also bring into focus structural constraints that impact people's ability to react to climate impacts, for example, land tenure and land rights, gender norms, fiscal challenges, which are predominantly set out in an ahistorical manner that thus divorces them from their root causes, such as colonialism and neoliberal market relations.

Finally, a political ecology lens can also help to bring a focus to power dynamics and imbalances that lie behind climate change impacts and how they are unevenly felt across populations. These often become obscured due to a focus on individual strategies to cope with (ongoing, inevitable) climate impacts. Furthermore, whilst the agency of individuals and communities to respond to climate impacts is present in the resilience narrative, this is seldom empowering. Calls for participation by affected people are also combined with the identification of particular knowledge or ways of thinking that need to be imparted, or even a "need for enlightening of the community" (Power Shift Africa & Bosch Stiftung, 2022, p. 8) therefore minimizing the sincerity with which this call is being made.

6. Conclusion

Despite the widely recognized critiques, resilience remains pervasive in both research and policy, and there is no indication that this interest will decrease any time soon. In other words, resilience is here to stay. For us, this raises the question of how to interact with the concept as researchers or policymakers—given the myriad critiques of resilience, can it still be useful for understanding climate change impacts? Equally, given its popularity, can one afford to disregard it? This article is our reflection on our struggles with this delicate conceptual balancing act and our attempt to productively sketch a way forward through this dilemma. To do so, we structured our reflections according to the following question: What challenges do we face in applying the concept of resilience in empirical field research and critical policy analysis, and how can we address them?

We cautiously argue that there is important work still to be done in interrogating and improving how the resilience concept is used, including through calling out (potentially) problematic applications of it. In particular, drawing on the case of climate impacts in and policy documents on Kenya, we identified several challenges in applying a *climate resilience only* perspective. Specifically, we find a vague and superficial use of the concept resilience can lead to simplified conclusions that overlook the social-historical context and the complex power and justice dynamics across scales. Furthermore, its overwhelmingly normative character creates difficult conditions for critical engagement with the concept.

Our approach to overcoming these critiques is through developing a combined resilience-political ecology perspective. This perspective can help researchers, policymakers, and practitioners alike to pay attention to the blind spots of (climate) resilience and strengthen its application. Further, it opens up possibilities to continue using the concept in research, policy, and practice at the same time as working to overcome some of the central challenges associated with resilience-thinking. Nevertheless, one persistent point of contention exists in the vagueness of political ecology, whether viewed as a theory, concept, field, approach, lens, or perspective. Similarly to resilience, the risk therefore exists that it can become an empty buzzword that can be filled with different interpretations and be insufficiently defined. The other side of this coin is the opportunity to use the breadth of political ecology to reimagine resilience in policy and practice through the continued possibility to develop not only the resilience concept but also political ecology. Further research in this direction is hence promising.

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