

Editorial

Karoo crossroads

The green frontier and the enduring fault line



Stellenbosch University's DSTI/NRF SARChI Research Programme in the Sociology of Land, Environment and Sustainable Development exposes a fundamental contradiction in the resource-rich Karoo; global scientific, environmental, and financial development initiatives collide with local realities of inequality, dispossession, and ecological fragility. In this editorial, STEPHANIE PAULA BORCHARDT asks if the impoverished communities who live there have reason to celebrate?

Rieldans in Calvinia Photo: Stephanie Paula Borchardt

The Karoo as frontier and fault line: rethinking development through sociological and anthropological inquiry

This special issue of *New Agenda: South African Journal of Social and Economic Policy* emerges from the work of the DSTI/NRF SARCHI Research Chair¹ in the Sociology of Land, Environment and Sustainable Development at Stellenbosch University, and reflects the Chair's central focus: to interrogate the meanings and practices of sustainable development in the Karoo, a region marked by environmental vulnerability, historical marginalisation, and speculative futures. The research looks beyond policy to examine how development is experienced, imagined, and contested on the ground. Drawing on sociological and anthropological approaches, the Chair seeks to build theory that is locally grounded, attentive to power and place, and responsive to the complexities of rural transformation.

Increasingly, the Karoo is cast as a frontier of green transformation. Yet this frontier is also a fault line, where promises of sustainability meet the realities of enduring inequality. The contributions gathered here, four research articles, two commentaries, and a book review, trace these tensions across multiple sites and scales, offering grounded, interdisciplinary perspectives on development, dispossession, and possibility.

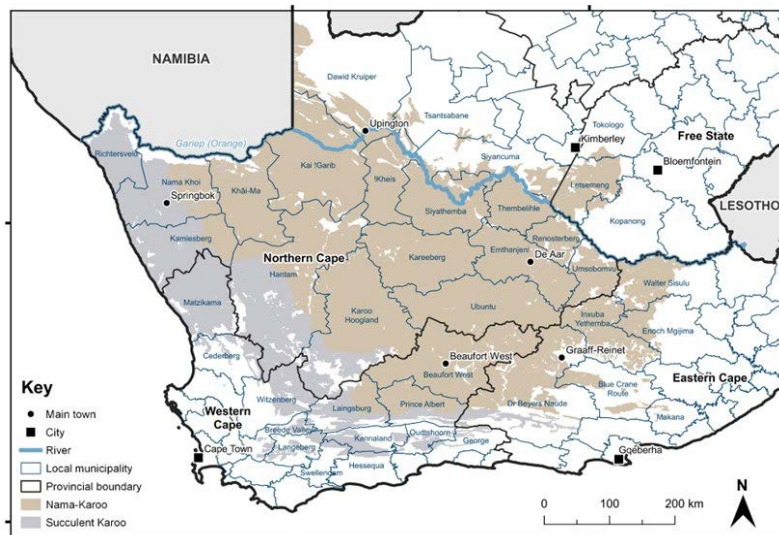
The Karoo as place, concept, and political terrain

What is the Karoo? It is simultaneously a place, a speculative promise, and an entrenched problem. This vast, semi-arid interior, stretching across the heart of South Africa, has long been framed as *empty*, *remote* and *untouched*, waiting to be filled and exploited (Morris, 2018). Yet, this rhetoric of emptiness strategically obscures its layered and traumatic histories of ecological transformation, racialised dispossession, and quiet resistance (Walker & Hoffman, 2024). Today, the region is being aggressively reimagined: it is a testing ground for environmental entrepreneurialism and a site of intense speculative futures driven by green energy, critical minerals, and abstract hope.

Geographically, the Karoo spans four provinces, the Western Cape, Eastern Cape, Northern Cape, and Free State, and is defined by two distinct biomes: the Nama Karoo and the Succulent Karoo (see Figure 1). Though the landscape is climatically extreme, these biomes host a remarkable array of endemic species and fragile ecosystems (Palmer & Hoffman, 1997). Far from being peripheral, the Karoo is central to South Africa's environmental heritage and conservation imagination. Its unique socio-ecological identity shapes cultural and economic narratives, from

pastoral livelihoods to biodiversity stewardship (Beinart, 2003; Wisborg & Rohde, 2005; Samuels, 2013).

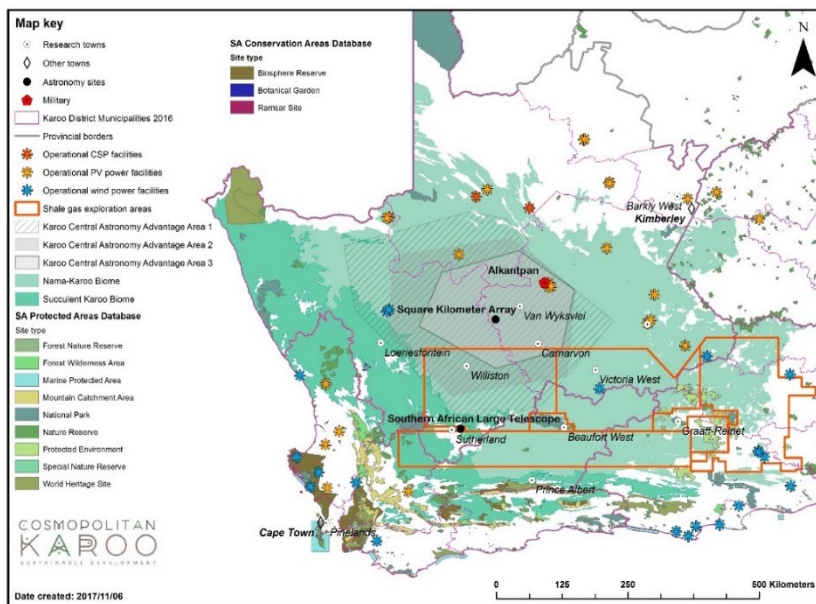
Figure 1: Geographical extent of the Karoo biomes across South African provinces



Source: Walker and Hoffman. Contested Karoo: An introduction (2024, p. 12).

Historically, the Karoo has always been a frontier: first for colonial conquest, then for agricultural expansion, and now for scientific and energy innovation. Its very soil bears the imprint of forced removals, genocides, and racialised land ownership (van Sittert, 2002; Penn, 2005; Legassick, 2016; Morris, 2018). Yet alongside these material legacies, it carries symbolic weight, romanticised as a place of timeless stillness and open horizons, often used to justify extractive or speculative interventions under the guise of progress.

Today, the Karoo hosts overlapping mega-projects: the Square Kilometre Array (SKA), wind and solar farms under the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), proposed shale gas extraction, and potentially green hydrogen infrastructure (see Figure 2). These initiatives promise national and global benefits, scientific prestige, energy security, and climate mitigation, but often bypass local needs. Development models tend to favour external actors and centralised planning, reproducing marginalisation and sidelining participatory, place-based approaches.

Figure 2: Competing land uses in the Karoo, 2017

Source: DSTI/NRF SARCHI chair in the Sociology of Land, Environment and Sustainable Development, Stellenbosch University (2017).

Beneath these grand visions lies a complex social fabric. Karoo towns – diverse, historically marginalised, and often overlooked – grapple with high unemployment, inadequate infrastructure, and deep social fragmentation. Too often, development interventions treat these communities as passive recipients or logistical hurdles, rather than political agents with histories, aspirations, and rights. In this sense, the Karoo reflects South Africa's broader struggles with rural inequality, land reform, and democratic inclusion, a place where the promises of transformation are tested, and where the politics of space, identity, and justice converge.

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The Karoo is home to nearly three million people, roughly 4% of South Africa's population (CSIR, 2019). Government services dominate, acting as the primary source of employment and income in many towns. Agriculture, mining, and manufacturing remain important, but their reach is uneven and often fragile (DALRRD, 2021). In many municipalities, economic activity is concentrated in just one or two sectors, leaving communities vulnerable to shocks such as drought, commodity price fluctuations, or policy changes. According to the CSIR's *Socio-Economic Vulnerability Index*, most Karoo towns are geographically remote and far from major transport routes and regional centres, which contributes to the elevated vulnerability levels (CSIR, 2019; 2023).

These are not just statistics; they shape everyday life in the Karoo's interior, where resilience is tested daily and the promise of transformation remains unevenly distributed.



Windpump in De Aar

Photo: Stephanie Paula Borchardt



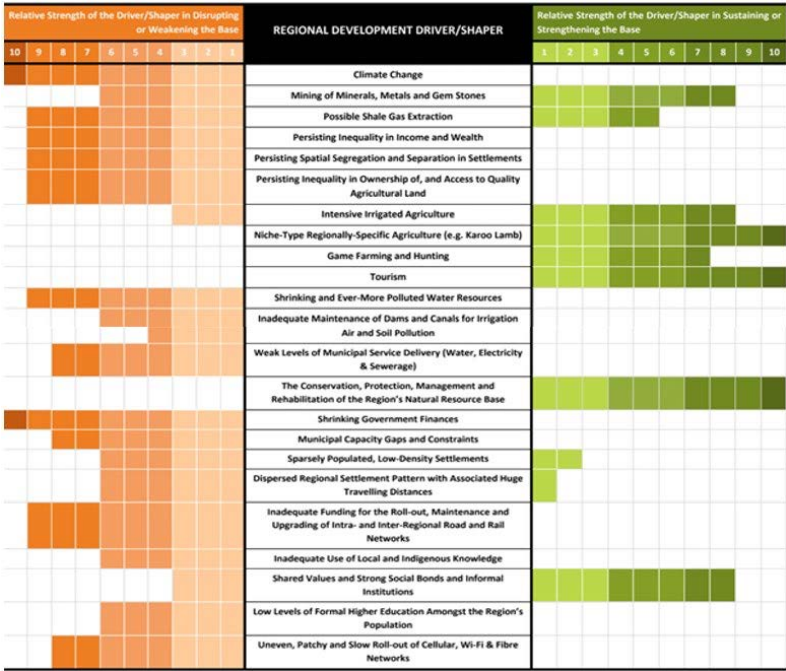
Politically and administratively, the Karoo is undergoing a process of redefinition. The *Karoo Regional Spatial Development Framework* (KRSDF)² is a landmark policy document that reflects this shift. It is the first Regional Spatial Development Framework (RSDF) to be prepared under Section 18 of the 2013 *Spatial Planning and Land Use Management Act* (SPLUMA), setting a precedent for future regional frameworks. Its legislative mandate is to serve as a strategic instrument guiding spatial planning, land development, and land use management within the newly demarcated Karoo region, an area marked by distinctive geographic and ecological features (DALRRD, 2021; 2023). In line with SPLUMA, it must align with national and provincial policies, reflect both current and aspirational land-use patterns, and, distinctively, include concrete proposals for implementation and funding.

As the first RSDF under SPLUMA, the KRSDF sets a precedent for regionally tailored planning, responding to the Karoo's geographic isolation and ecological specificity. Its emphasis on coordinated infrastructure investment, spatial transformation, and inclusive growth signals a move from fragmented municipal efforts to a more integrated, cross-boundary approach. The KRSDF is both a symbolic and practical turning point. It reflects a broader ambition to reimagine the Karoo as a region worthy of strategic investment and integrated planning. Yet, its success hinges on whether governance can overcome deep-rooted structural barriers and translate vision into action.

Despite its strategic promise, the Karoo's regional development remains hamstrung by persistent structural challenges. Communities continue to face limited local municipal capacity, deeply entrenched spatial inequalities, unequal land ownership, polluted water sources, and deteriorating infrastructure, all of which compromise service delivery and stall inclusive growth. The KRSDF spans 36 local municipalities, 13 district municipalities, and one metropolitan municipality. Figure 3 maps out the region's development drivers and shapers, revealing both strengths and vulnerabilities. These enduring disruptors cast doubt on the framework's ability to deliver on its ambitions, exposing the gap between policy vision and lived experience.



Figure 3: Relative strength of identified development drivers and shapers in the Karoo (weaker vs. stronger base), 2021



Source: DALRRD, 2021

These large-scale interventions carry the promise of national and global transformation. Yet on the ground, they often unfold amid persistent local marginalisation, raising urgent questions about justice, who benefits, and what sustainability truly means.



The South African Research Chair Initiative (SARChI) in the Sociology of Land, Environment and Sustainable Development

The South African Research Chair Initiative (SARChI) in the Sociology of Land, Environment and Sustainable Development,³ established in 2016 under Professor Cherryl Walker and now led by Professor Steven Robins, investigates the shifting dynamics of sustainable development in the Karoo. Framed as both a frontier of extraction and a fault line of inequality, the Karoo offers an exceptionally rich terrain for critical inquiry. This landscape is shaped by deep, complex histories of settlement and globally significant biodiversity, but is now subject to overwhelming pressure from mega-projects, including the SKA, speculative shale-gas and uranium exploration, and massive renewable energy and green hydrogen infrastructure.

These large-scale interventions carry the promise of national and global transformation. Yet on the ground, they often unfold amid persistent local marginalisation, raising urgent questions about justice, who benefits, and what sustainability truly means. The SARChI programme responds to this complexity by engaging the social-ecological interface through a lens of critical cosmopolitanism (see Figure 4). This framework recognises both global interconnectedness and enduring structural inequality, allowing us to approach development not as a one-size-fits-all solution, but as a dynamic, place-based process shaped by relationships, histories, and lived experience within an unequal world. It invites us to think beyond metrics and masterplans, and to centre the voices, vulnerabilities, and aspirations of those most affected.

In their opening contribution, *William Beinart* and *Steven Robins* explore the rise of environmental entrepreneurialism in the Karoo, where private conservation, wildlife economies, and renewable energy initiatives are reshaping land ownership and ecological governance. While these projects are often framed as sustainable and transformative, the authors show how they frequently reproduce long-standing patterns of exclusion, benefitting landowners while sidelining local communities. Yet the article also highlights more hopeful interventions, such as improved livestock management and efforts to restore degraded veld, which suggest alternative, grounded paths forward. Positioned as a testing ground for market-led development, the Karoo emerges as a landscape of contradiction and contested hope.

Figure 4: SARChI in the Sociology of Land, Environment and Sustainable Development logo



Source: DSTI/NRF SARChI, the Sociology of Land, Environment and Sustainable Development website: <https://cosmopolitankaroo.co.za/> (2025)

Stephanie Paula Borchardt's article critiques South Africa's renewable energy rollout through the lens of its developmental state ambitions in Sutherland. Despite the REIPPPP's promise of inclusive growth and socio-economic upliftment, its implementation tells a different story, one marked by mismatched skills and outsourced labour. Drawing on fieldwork and survey insights, the article reveals how fragmented governance and procedural participation obscure accountability, exposing a developmental state whose ambitions falter at the margins. The article challenges us to rethink what inclusive development truly means, and whether current models of the energy transition are equipped to deliver it.

Robert Nassen Smith explores the financial logics underpinning South Africa's green hydrogen strategy, revealing how risk is shifted onto communities while returns are privatised. In this framing, the Karoo becomes a speculative frontier, its futures monetised before they are lived. He reframes the state's embrace of de-risking not as a sign of capture, but as a symptom of crisis: an effort to secure development through financial abstraction. His article asks a pressing question: What forms of accountability are possible in landscapes shaped not by public deliberation, but by investment portfolios and policy instruments?

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*Wind farm outside Philipstown.
Photo: Stephanie Paula Borchardt*





Shannah Maree's article traces the resurgence of copper mining in Concordia, Namaqualand, amid rising global demand for critical minerals. Through rich ethnographic research and the voices of local residents, she reveals how green extractivism threatens traditional farming, ancestral land, and fragile ecosystems, raising urgent questions about consultation, consent, and the struggle to sustain community life. As mining returns under the banner of sustainability, Maree introduces the concept of the 'green sacrifice zone', challenging celebratory narratives of green growth and linking directly to the Karoo's own vulnerability. Her central question lingers: Will Namaqualand's communities be recognised as stakeholders, or sacrificed for the green transition?

Caitlin Rickerts' fieldwork reflection exposes the often-overlooked social and ethical costs of South Africa's energy transition, focusing on young women and marginalised households in the Karoo. Through grounded research, she reveals the emotional toll of displacement, the absence of meaningful consent, and the uneven distribution of risk. Her work challenges the technocratic language of development, reminding us that progress is not only about infrastructure, but also about voice, recognition, and the right to shape one's future in landscapes marked by inequality.

Although not affiliated with the SARCHI Research Chair, artist *Coral Anne Bijoux* offers a poignant insight in a question-and-answer conversation about the destruction of her land art installation in Richmond. Her article becomes a meditation on micropolitics, gendered labour, and the violence of silence. Bijoux's work, embedded in the earth, shaped by hand, and open to all, was flattened by a grader. Her reflection reminds us that development is not only about what is built, but what is erased. It is about who is seen, who is silenced, and what forms of care and recognition are possible in contested landscapes.

This is followed by *Karoo Diary*, a compilation of recent news briefs, many of which may not have been aired in the mainstream media, to take the pulse of the region, and keep readers up to date.

Finally, we publish a book review by *Lorato Mokwena* of *Contested Karoo: Interdisciplinary perspectives on change and continuity in South Africa's drylands*, edited by Cherryl Walker and M. Timm Hoffman (2024). This volume situates the Karoo within broader scholarly and public debates, highlighting the tensions between romanticised, extractive, and resistant narratives of place. It asks: Who gets to define the Karoo and through what lenses? Mokwena's (2025) review highlights the



critical stakes of knowledge production and calls for interdisciplinary, historically grounded scholarship that foregrounds local voices and the nuanced realities they inhabit.

... these contributions prompt deeper questions: Who defines development? Who benefits, and who bears its costs?

Conclusion: Toward a different kind of development conversation

Together, the articles in this special issue invite us to rethink development not as a linear path toward progress, but as a contested and situated process shaped by history, power, and place. They foreground the Karoo as a region where global ambitions, whether scientific, environmental, or financial, collide with local realities of inequality, dispossession, and ecological fragility. Rather than treating development as a technical fix or investment opportunity, these contributions prompt deeper questions: Who defines development? Who benefits, and who bears its costs? What forms of participation, recognition, and repair are possible in landscapes marked by silence and sacrifice? By centring lived experience, micropolitics, and the social meanings of land and nature, this special issue of *New Agenda* opens space for a more grounded, interdisciplinary and justice-oriented conversation, one that listens differently, theorises from below, and imagines futures that are not only sustainable, but shared.

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ENDNOTES

¹ The South African Department of Science and Innovation's (DSTI's) South African Research Chairs Initiative (SARChI), managed by the National Research Foundation (NRF).

² See project website at <https://www.karoorsdf.co.za/>

³ The Research Chair is anchored in the Department of Sociology and Social Anthropology at Stellenbosch University.

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BIOGRAPHY

Stephanie Paula Borchardt, the Guest Editor of this special issue, is a Postdoctoral Fellow in the DSTI/NRF South African Research Chair Initiative (SARChI) in the Sociology of Land, Environment and Sustainable Development at Stellenbosch University's Department of Sociology and Social Anthropology. Her research examines the social and political dimensions of energy transitions in South Africa, with a focus on how these shifts impact inequality, governance, and rural transformation. Through grounded fieldwork and critical analysis, she aims to advance more just and inclusive energy futures across the Global South.