From bloom to bust

Understanding Namaqualand as a potential green sacrifice zone

By Shannah Maree

With surging global demand for copper under the guise of 'sustainability,' traditional farming practices, ancestral land, fragile ecosystems, and communal livelihoods have come under growing threat. Drawing on ethnographic fieldwork and local perspectives, SHANNAH MAREE looks at the emergence of 'green sacrifice zones', using Concordia, Namaqualand, as a case study.

Tweefontein mine in Concordia. Photo: Shannah Maree

https://doi.org/10.14426/na.v99i1.3198

From bloom to bust: Understanding Namaqualand as a potential green sacrifice zone

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https://doi.org/10.14426/na.v99i1.3198

Published in *New Agenda: South African Journal of Social and Economic Policy*, issue 99, 4th Quarter, December 2025.

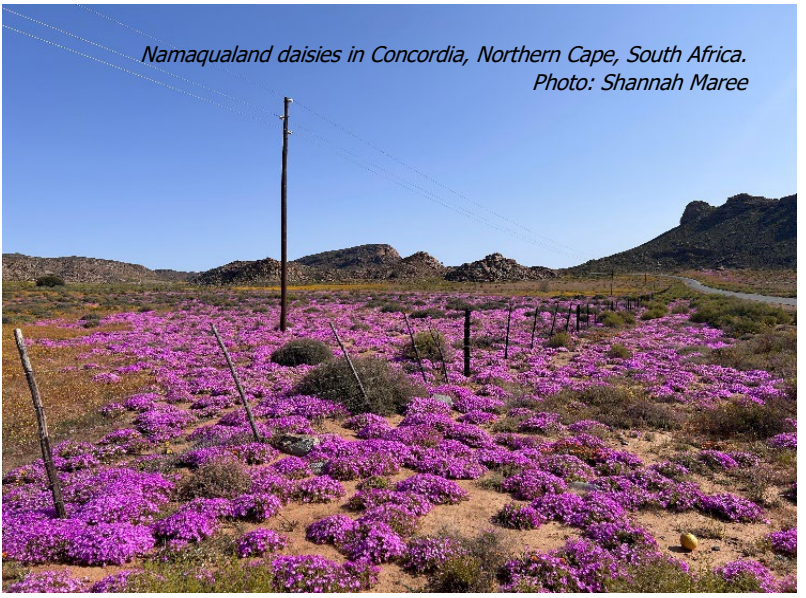
Submitted 28 June 2025; Accepted 25 November 2025.

This is a peer reviewed article, published following a double blind peer review process.

Abstract

As global demand for copper intensifies – driven by its essential role in renewable energy systems and technological advancement – previously-dormant mining regions such as Namaqualand in South Africa's Northern Cape are being reimagined as new extractive frontiers. This article examines Concordia, a quaint town in Namaqualand, as a case study to interrogate the socio-ecological implications of renewed copper extraction under the guise of the green transition. While framed as ushering in development, these renewed mining ventures risk reproducing historical patterns of capitalist extractivism, now reframed as 'green' or sustainable. Drawing on fieldwork, interviews, and historical context, this article employs the concept of 'green sacrifice zones' to analyse how residents and subsistence farmers in Concordia confront threats to land access, cultural heritage, water resources, and livelihoods. It argues that unless inclusive, participatory, and historically informed approaches are adopted, the green energy transition may deepen existing inequalities and lead to reimagined forms of socio-ecological dispossession.

Travelling through Namaqualand is a journey through a landscape that continuously changes, from rolling green hills to rugged quartzite *koppies* that seem to be lifted from a Pierneef painting, and onward to vast, flat, semi-arid plains. Yet in spring, between August and October, travellers can appreciate Namaqualand's greatest treasure: a spectacular display of vibrant orange, yellow, pink, purple, and white daisies (*Dimorphotheca sinuate*) that paint the landscape.



Namaqualand daisies in Concordia, Northern Cape, South Africa. Photo: Shannah Maree

However, as many enjoy the spectacle, we often forget the histories of trauma that are interwoven into the very structures of this landscape. Namaqualand is a unique region plagued by an unforgiving mining history, remnants of which are evident in the present crumbling mining structures, the greyish-black mine heaps, and the rural towns dispersed across the region.

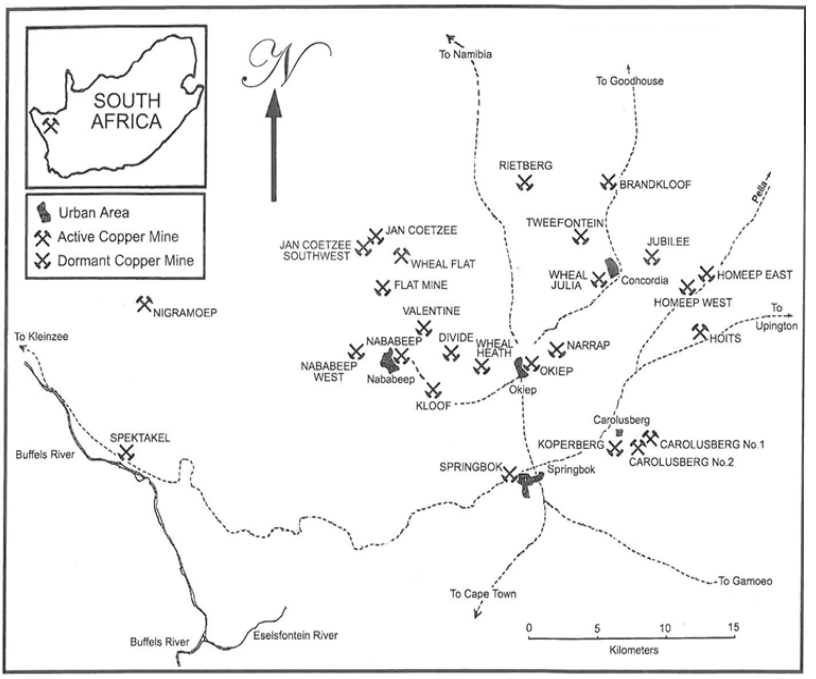
Considering these histories, Namaqualand is now confronted with a familiar problem of extractivism − this time under the guise of sustainability. As the global energy transition takes the world by storm, the region's copper reserves have once again drawn global and national interest. But the question of who and what will be sacrificed continues to hang in the foreground. With this in mind, this article draws on the voices of Concordia's community to reveal several emerging hallmarks of Namaqualand as a potential 'green sacrifice zone'.

Since the mid-1800s, large-scale copper mining has been a significant industry in Namaqualand, contributing substantially to the

region's social, economic, and infrastructural expansion. According to John Smalberger (1969, p. 81), one of the leading historians on copper mining in Namaqualand, copper was first extracted and exported on a large scale in Springbokfontein[1] in 1852. Subsequently over the years, this industry has experienced renowned waves of 'boom' and 'bust' due to several factors, including transport difficulties (before the construction of the railway line), disappointing copper reserves, questionable foreign investments, competition between mining companies in the region, and conflicts, particularly the South African war (1899-1902) and World War I (1914-1918). During these periods of conflict, copper was in high demand due to its use in bullet jackets and shell casings (Jowell & Folb, 2004, p. 71) and communication equipment such as telegraphs and telephone wires (Brooks, 1918, p. 527).

However, these processes were only successful due to the advancements in technology − such as railway locomotives and diamond drills − which spurred the extraction and exportation of larger quantities of copper ore from an area known as the O'Kiep Copper District (Smalberger, 1969), shown in Figure 1 below, which includes the towns of O'Kiep, Nababeep, Springbok, and Concordia.

Figure 1: Map of O'Kiep Copper District



Source: Cairncross (2004, p. 290)

Concordia, a quaint town with a significant influence

Concordia, a small town 15km from Springbok, was memorably described by Georgie[2] − a single mother who moved from Johannesburg about a year ago − as "perfectly preserved in time"(interview, Georgie, 4 April 2025). That said, beneath this idyllic surface lies a rich but traumatic history dating back to the early nineteenth century. Established in 1842 as a German Rhenish Missionary Station, Concordia received its name − meaning 'peace' or 'harmony' in Latin − to reflect the missionaries' hope of developing a cooperative relationship between the Nama and San communities in the area. However, this vision of peace was short-lived due to the onset of the so-called 'copper mania' in 1852, which spurred intense copper extraction lasting well into the 1980s.

Concordia was a vital part of the O'Kiep Copper District, hosting four mines that produced significant quantities of copper over the years (Smalberger, 1969). Today, remnants of this mining legacy, as well as international influence − particularly from Cornwall and Swansea − are visible in the region's distinct stone masonry, as shown in the photos below. However, after more than 150 years of production, Namaqualand's copper industry ceased in 2003 due to a decline in demand paired with unstable global copper prices (Orion Minerals, 2021, p. 7).

During the colonial and apartheid periods in South Africa, Concordia − along with six other towns in Namaqualand[3] − was designated a "Coloured Reserve" under the *Native Trust and Land Act* (No. 18 of 1936), and the *Group Areas Act* (No. 41 of 1950). This legislation sought to control, manage, and contain individuals who were classified as 'Coloured' under the racial classification system. Today, Concordia is classified as a lower-middle-income 'township' comprising predominantly Afrikaans-speaking Coloured[4] individuals. The majority of the community falls within the working-age group of 15 to 64 years, but many of them remain without work, largely due to volatile employment opportunities within the mining, quarrying, and agricultural sectors − industries that constitute the primary source of livelihood in the region.

Namaqualand is now confronted with a familiar problem of extractivism − this time under the guise of sustainability.

Cornish-built ore shoots at the Tweefontein mine in Concordia.
Photo: Shannah Maree

Green extractivism: A precursor to Namaqualand as a potential sacrifice zone

Copper is at the forefront of sustainable technological innovation due to its high recyclability and exceptional conductive properties, making it an indispensable material for wiring, cabling, and heat transfer essential for electrification. Therefore, as the world moves toward renewable energy technologies − such as wind turbines, solar PV panels, and batteries − to meet decarbonisation commitments, the demand for high-grade copper is rising at an exponential rate.

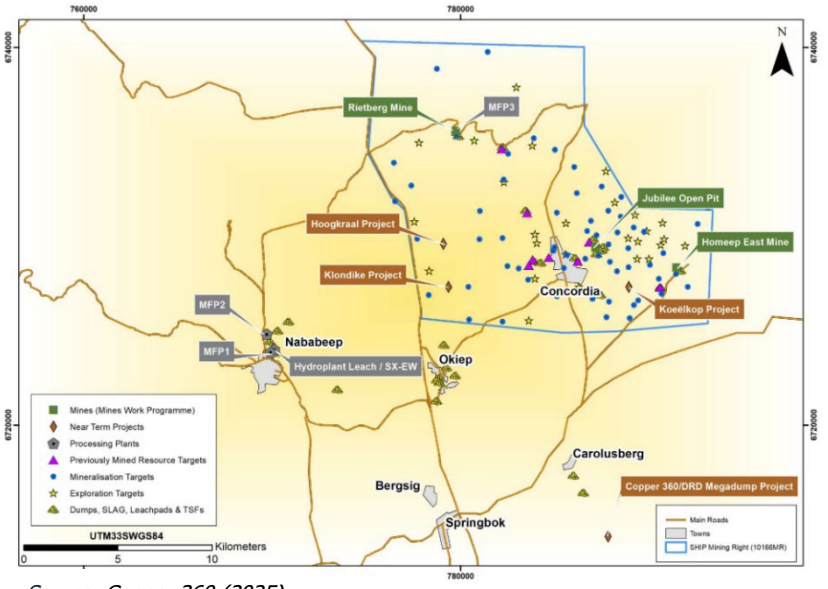
These commitments include the European Union's Green Deal, aimed at minimising emissions by at least 50% by 2030 and 55% by 2050; China's pledge to achieve zero net emissions by 2060; and South Africa's Just Transition Investment Plan (JETIP), aimed at decarbonising the country's energy sector in a socio-economically equitable way. These climate strategies are inadvertently compelling geopolitical competition between major countries, thereby creating a new era of 'copper mania'. However, researchers from S&P Global (2022, p. 9) warn that at the current rate, copper demand will quickly outgrow the rate of supply, unless new or alternative sources are discovered.

This supply-demand gap has spurred mining companies, such as Johannesburg Stock Exchange-listed Copper 360 and Australian-owned Orion Minerals, to develop innovative copper extraction projects in Namaqualand. Copper 360 and its subsidiary, SHiP Copper Company, describe their approach as a "cluster mining model". There is a central ore processing facility that draws feed stocks from a widely spread and varying cluster of resource sites. The facility first focuses on reprocessing old mine tailings (the large heaps of mine waste left over from extraction) from several historical mines in Concordia − namely Rietberg, Tweefontein, and Homeep East − that are believed to contain over 70,000 tonnes of copper (Copper 360, 2023). Secondly, it expects to obtain newly-mined ore from mines to be developed from new exploration sites across 19,000 hectare of Concordia's communal land (see Figure 2 below). This model, the developers hope, will mark the beginning of large-scale copper output on a scale the region has not seen in decades.

But what does this mean for Concordia's community which surrounds the nodes of the developing cluster of waste dumps and small mines? While the cluster mining model aims to boost the current precarious copper supply, it risks positioning Namaqualand as a site of 'green' extractivism and potentially transforming the region into a sacrifice zone by damaging the ecosystems and inevitably displacing surrounding communities. This impact reveals a vital flaw within the country's Just Energy Transition Framework that; while copper may be

'green' for consumers such as states, corporations, and even non-profit organisations (NGOs), it is not necessarily sustainable for the delicate landscape or the neighbouring communities residing in rural regions.

Figure 2: The cluster mining model from Copper 360: Ore sourced from diverse sources, for central processing



Source: Copper 360 (2025)

Acosta (2013, p. 62) defines extractivism as a practice embedded within the capitalist ideology that views nature as a commodifiable resource. This narrative allows corporations to remove and export natural resources − particularly from less-affluent, mineral-rich countries − on a large scale. Green extractivism, on the other hand, is a contemporary extension of Acosta's definition, maintaining that while large-scale mining claims to serve sustainability goals, the exploitation of natural resources continues under the guise of *sustainability* and *environmental responsibility*. Despite its emphasis on sustainability, this approach produces the same social and environmental challenges as traditional extractivism.

Green extractivism arises from what Dunlap and Brock (2021, p. 108) term "green-washing," a strategy whereby corporations label their actions as 'sustainable' to hide or distract from the fact that they continue to exploit natural resources to obtain a profit. A common example of green-washing is soft drink companies marketing their plastic bottles as 'eco-friendly' because they are made from recycled or 'organic' materials.

However, they are still largely composed of plastic and, therefore, continue to contribute to plastic pollution. Likewise, by labelling copper as a 'critical' or a 'transition' mineral, mining corporations can justify large-scale extraction at the expense of the environment and the displacement of the surrounding communities.

For Zografos and Robbins (2020, p. 543), these socio-environmental consequences are the hallmark of green sacrifice zones, which they explain in the following way:

> ***...the logic of sacrificing a certain space or ecology [which] can be expanded to include places and populations that will be affected by the sourcing, transportation, installation, and operation of solutions for powering low-carbon transitions, as well as end-of-life treatment of related material waste.***

In other words, green sacrifice zones are based on green-washed rationales that continue to drive large-scale mineral extraction for 'sustainable' causes, while surrounding communities and environments are inevitably overlooked in the process. In Namaqualand, we observe these trends, particularly in Concordia, as large-scale copper mining ventures − driven by national and international pressures − threaten traditional farming, ancestral land, fragile ecosystems, and inevitably, community livelihoods.

Indicators suggesting Namaqualand could be a potential green sacrifice zone

Across Namaqualand, scars of the traumatic past continue to haunt contemporary realities, with the failing local economies and crumbling infrastructure in rural towns. Travelling to Concordia, these scars are evident in the heaps of mine waste that protrude from the otherwise serene landscape. Although I was at first taken aback by the size of these heaps of mine waste on the side of the road, I barely acknowledged their significance until I reflected on my interviews and ethnographic observation. I now recognise that these mine tailings stand as a clear reminder of the social and environmental impacts of past extractivism, while also foreshadowing what may lie ahead.

While the cluster mining model aims to boost the current precarious copper supply, it risks...transforming the region into a sacrifice zone by damaging the ecosystems.

During my fieldwork in Concordia, I conducted interviews with 19 residents, six local subsistence farmers, and a representative from Copper 360 and from Orion Minerals. Initially, I relied on snowball sampling,[5] which included referrals from previous interlocutors, but I observed that this approach skewed my initial research as participants often referred me to others who shared their opinions, thereby limiting the diversity of perceptions. To avoid this, I opted for a more random selection method, which included approaching residents in shops and on the streets. While this method initially proved challenging to some extent − as some were wary of speaking to me because I was an *inkomer* (outsider) − after spending time in the town and speaking to different individuals, more people were willing to speak to me.

Additionally, what I had not fully considered was the expectation that would accompany my position as a university student. I vividly recall moments when my participants − particularly those who opposed the renewed mining operations − expressed gratitude, believing that I was there to "help them push back" against the mining company. Despite my repeated insistence that I was not in any position to advocate for or represent any particular side, my academic presence was nonetheless perceived as support, which made navigating these perspectives particularly challenging.

Over the course of my research, I identified four main perspectives on the renewed copper mining: (1) full support, (2) total opposition, (3) conditional support, and (4) neutrality. I initially interpreted the absence of opinion as a lack of awareness of the mining activity in the town. While this assumption held for some, I later observed that many deliberately chose to withhold their opinions, fully aware of the community tensions arising from these conflicting perspectives.

Considering these diverse perspectives, my fieldwork in Concordia illuminated three questions that residents and farmers shared regarding the renewed interest in copper mining in the region: Will the community[6] finally be recognised as key stakeholders? What will become of the communal farmland? Lastly, what will happen to the residents, the farmers, and the town as more mining companies buy into the cluster mining model approach? Drawing on the data I have accumulated during my fieldwork in September 2024 and April 2025, I delve further into these concerns.

The fight to recognise the local community as key stakeholders

As the world continues to apply the capitalist mentality of 'take all and leave nothing,' indigenous and often rural communities across the globe are repeatedly overlooked as legal landowners and viable partners within extractive processes and today Concordia faces such a challenge.

In February 2023, Concordia's Community Property Association (CPA) received the title deeds to their communal land, which was held in Trust by the Minister of Agriculture, Land Reform and Rural Development since 1998, as per the *Transformation of Certain Rural Areas Act* (No. 94 of 1998). However, during this period, several mining rights were awarded, reportedly without the community's consent.

In March 2024, communities across Namaqualand joined forced in Springbok to protest against improper community consultation.
Photo: Ashraf Hendricks, GroundUp.
The publishers thank GroundUp for making this photo freely available.

As a result, members have reported that having already been issued prospecting or mining permits, these mining companies have evaded their social responsibility to consult with the community and obtain their consent. Despite the advocacy of Concordia's CPA and local activist group, Vrywillige, Vooraf en Voortdurende Volledige Ingeligte Toestemming (VVVT),[7] Namakwaland − who consistently demand proper consultation (see photo above) − both the state and the relevant mining companies have reportedly shown little willingness to comply. For residents and local subsistence farmers, this advocacy is not only about urging the state and the mining companies to acknowledge the communities of Namaqualand as key stakeholders. It is also about ensuring that the environment and the people who rely on the land endure alongside the renewed mining activities. As Sonya, a resident in Concordia, stated during an interview, "*Waar is my regte as 'n mens?... hulle moet ons herken as inwooners van die dorp!*" (Where are my rights as a person?... they [the mining companies and the government] must acknowledge us as residents of this town!) (interview, Sonya, 12 September 2024).

Goat kids in a kraal on a family plot or 'saaiperseel' *in Concordia, Northern Cape. Photo: Shannah Maree*

Adequate consultation is not merely about the benefits that this renewed mining activity can provide to residents and local subsistence farmers, but how the community, along with the surrounding environment, can withstand both the current mining operations and the long-term impacts once mining operations cease. Nadia, a prominent CPA member in Concordia, explained that proper consultation with the mining companies would ensure that "the town survives, our people survive, [and] our *farmers* survive…" (Nadia, interview, 10 September 2024).

Threat to traditional farming methods: Land, livelihoods and heritage in danger

Another pressing fear that residents and local subsistence farmers in Concordia expressed is the potential impact that the copper mining expansion could have on their complex farming practices. Farming is not only essential for survival, but it is also a source of pride and kinship. During our discussion, Nadia explained that these traditional farming methods are passed down and honoured for generations and that this inherited knowledge is vital in the context of Namaqualand's rough terrain and semi-arid desert climate, where farmers are not afforded a range of cultivation options. She explained that farmers in Concordia have "learnt how to farm in rhythm with nature"

(Nadia, interview, 10 September 2024), which is especially true on the *saaipersele*, which are often family-owned plots that have been passed down for more than five generations.

Subsequently, subsistence farming is described as "*die agterdeur*" (the backdoor) because it was a way to preserve the community's survival through tough financial periods, especially when the mines closed in the past. Today, it offers similar reassurance given the scarce employment opportunities. However, with large-scale proposals, such as the cluster mining model, community members raised concerns about this expansion's impact on traditional farming methods, such as pastoralism.[8] Finnley, a local subsistence farmer, explained that if the mining company moves forward with these extractive models:

> ***... that's going to be barren land... and that is our grazing land. We are farmers and farming is our way of income ... if the mines are going to take over, where will I get the land to do that? ... We cannot eat copper dust!***
> (Finnley, interview, September 2024).

For farmers, the risk lies in the invasive mining techniques − such as blasting and digging − that threaten to disrupt the surrounding biodiversity and compromise both cultivation and grazing, which reportedly will undermine their ability to sustain themselves and the community.

In addition to these concerns, Nadia explained that Concordia "is not a rich community. It's a community that *has to* survive on what's available to them," and this includes depending on the environment and the people around them (Nadia, interview, 10 September 2024).

Cindy, a resident of Concordia, illustrated the link between farming and kinship, explaining that growing vegetables − such as tomatoes, mielies, or cabbage − is not just for her family, but for the benefit of others in the town who may be in need. She emphasised that during challenging periods, members of Concordia's community are forced to rely on one another. Cindy explained that when she could not provide for her family, she turned to her neighbours for support, and in turn she did the same for them (Cindy, interview, 11 September 2024). Consequently, farming has been a critical resource in Concordia that has both economic and symbolic value for the residents and farmers, which in turn shapes individual arguments that oppose the expansion of the copper industry.

Concordia: a town at risk

As proposals for large-scale copper extraction projects develop in Concordia, many residents and subsistence farmers expressed their concerns about the possibility that either the land will become uninhabitable or the community will be forcefully displaced. I witnessed this anxiety firsthand during an emotional but revealing interview with Sonya, whose family has lived in Concordia for more than three generations. When I asked her about the reason for her anxieties about the future renewed mining activity, Sonya explained:

> ***…dit gaan oor my kinders se toekoms. Gaan daar 'n dorp vir my kinders wees? Gaan daar 'n huisie wees waarnatoe my kinders kan terugkeer?... Ek is nie bereid om vir Concordia op te gee nie. Ek het 'n ma verloor, ek het 'n pa verloor… almal rus in Concordia se stof. As ek moet toelaat dat die mynbou-aktiviteit vir my verdryf uit my dorp uit, waarheen gaan ek terug?... Ek is nie bereid om geld te vat om iewers anders 'n lewe te skep nie.*** (… it is about my children's futures. Will there be a town for my children? Will there be a house that my children can return to?... I am not prepared to give up Concordia. I lost a mother, I lost a father … everyone rests in Concordia's dust. If I have to allow the mining activity to push me out of my town, where will I go?... I am not prepared to take money [from the mining companies] to create a life somewhere else (Sonya, interview, 12 September 2024).

For her, mining is not only a threat to her children's futures but also risks displacing her family from their ancestral land, thereby threatening their heritage. In September 2024, I caught a glimpse of Concordia's heritage when my key informant, Urwin, and I visited the town's oldest graveyard (see photo below), which had tombstones dating back to the early 1900s, including that of his great-great-grandfather. This risk emerged as a major driver behind the current opposition and ambivalence because of South African laws − such as *The Land Expropriation Act* − that allow the state to seize land without compensating owners.

Concordia's oldest graveyard. *Source: Shannah Maree*

Sonya also voiced her concern about the town's ability to withstand the impact of invasive mining activities, particularly the historical underground tunnels from the Wheal Julia and Hester Maria mines that run beneath the town. During our discussion, she recalled moments from her childhood when her mother woke the family up in a panic during an earthquake that caused their home to shake, which was believed to have been a result of the collapse of one of these tunnels:

> ***... [E]k het nooit verstaan hoekom my ma in die nag ons wakker gemaak – "ons moet uitgaan, die myn val!" Dan kom ons uit en kyk ek mos reg op die myn, dan vra ek myself: "is my ma nou mal? Die myn staan! Nou hoekom maak sy vir ons wakker?" Maar nou is ek groot en besef dat die myn het nie* daar *geval, die myn het onder mamma se huis geval. In daai area ... [b]aie mense het by ons gekla dat 'n sekere tyd in die nag hoor hulle hoe klippe val onder hulle se huise. Dit beteken dat daai hele area staan op 'n spelon ...*** (I never understood why my mother woke us up one night: "We need to leave, the mine is collapsing!". Then we go outside and I am looking directly at the mine, and I'm asking myself: "Is my mother now crazy? The mine is still standing! Why did she wake us up?". But now that I am older, I realise that the mine did not collapse *there* [points in the direction of the Hester Maria mine], the mine

> collapsed under my mother's house [points to the ground]. In that area … Many people have complained to us that at a particular time in the night, they can hear stones falling under their houses. That means that that entire area is above an underground tunnel … (Sonya, interview, 12 September 2024).

I observed that for Sonya, losing her home would not only mean losing a future for her children. It would also mean severing ties to her ancestral homeland. I argue that this concern reveals that place is a landscape that embodies memories and a sense of belonging, thereby connecting individual identities to the land, the community, and to the trauma of past injustices at the hands of mining companies.

Natural resources under pressure

As part of the Succulent Karoo biome, Namaqualand's environment is described as a biodiversity hotspot (Davis et al., 2016, p. 10), with unique animal and plant species. However, climate change is an increasing concern in Namaqualand. With increasing surface temperature, stronger winds, and changing weather patterns, this region is becoming increasingly vulnerable to processes such as desertification and land degradation. For communities in Namaqualand that depend on this land for survival, climate change threatens water availability, grazing pastures, and agriculture. I noted a recurring fear that invasive mining practices could further strain the region's already limited natural resources, with aquifers[9] (*'boorgate'* in Afrikaans) emerging as a central point of concern. Neil, a young farmer who recently inherited his family's plot or *saaiperseel*, expressed this fear, stating that:

> ***We don't depend on just rainfall in order to wet our fields and provide water to our livestock. We have underground waters, aquifers…So, [by] blasting and doing what [the mining companies] are currently doing, it's disrupting our lives in more than just one way***. (Neil, interview, 5 April 2025).

For him, invasive mining techniques would not only threaten the surface but could also disrupt and pollute these underground water reserves, which are crucial for livestock and crop cultivation, particularly during periods of low rainfall. In Concordia there is limited access to water pumps because these are costly and installation requires technical skills. Therefore, threatening the quality of the aquifers would also mean threatening the land's long-term water supply and the community's overall food security.

Concluding remarks

Concordia, which is representative of the broader region, is a telling case that illustrates potential hallmarks of green sacrifice zones. As the global movement towards sustainable energy increases, mineral-rich regions like Namaqualand confront familiar challenges of extractivism reframed under the guise of 'sustainability' or 'green development'. While proposed mining models aim at tackling the copper supply-demand gap, it is important to recognise this movement's potential long-term implications. From this perspective, towns such as Concordia reveal the emerging hallmarks of 'green' sacrifice zones, where the pressures of renewed extraction threaten local communities.

Within this shifting landscape, collective communal action − although fragmented due to contrasting opinions − critically frames responses to the threat of renewed expansion as part of green extractivism in Namaqualand. These collective actions are shaped by social networks within the community, through stories passed down from generations, and by contemporary experiences. While members of Concordia's community have a common history, each person navigates this history differently, depending on their personal experiences. While some may have positive memories of benefits that copper expansion provided, such as employment and local development, others may share a collective memory of trauma embodied through dispossession, environmental degradation, and labour exploitation, thereby shaping perspectives of opposition and ambivalence.

... there is more local collective action to oppose these copper ventures − driven by CPA members and other prominent actors within the community − thereby challenging celebratory narratives that portray this copper expansion as inherently 'sustainable'.

Mine tailings as a reminder of the past and a foreshadowing of the future, O'Kiep, Northern Cape. *Photo: Shannah Maree*

In Concordia, resistance and ambivalence towards the renewed copper interests are far more overt than perspectives that advocate for it, as people are more verbal about their anxieties or fears than they are about their support. Consequently, there is more local collective action to oppose these copper ventures − driven by CPA members and other prominent actors within the community − thereby challenging celebratory narratives that portray this copper expansion as inherently 'sustainable'. Despite these contrasting perspectives, a shared theme emerges: a desire for change; change in the current socio-economic realities through opportunities that promise growth; change in the landscape and the imagined future of the town; and change in how mining on communal land is negotiated and governed. As the first site targeted within the broader cluster mining model in Namaqualand, Concordia represents a critical moment for rethinking extractive futures. If copper expansion in Namaqualand is to contribute meaningfully to a sustainable future, it must reimagine mining in a manner that avoids reproducing extractive landscapes and rather aim to cultivate futures that are socially just, environmentally responsible, and genuinely sustainable to all.

An indication of acid mine drainage from Hester Maria, an abandoned mine on the periphery of Concordia. Photo: Shannah Maree

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View on top of Homeep West mine in Concordia with Apollis Cottage in the foreground *Photo: Shannah Maree*

INTERVIEWS

All interviewees have been assigned pseudonyms.

Georgie – New resident in Concordia (April 2025).
Sonya – Resident in Concordia (September 2024).
Nadia – Resident in Concordia (September 2024).
Cindy – Resident in Concordia (September 2024).
Finnley – Local subsistence farmer (September 2024).
Urwin – Resident in Concordia (September 2024).
Neil – Young subsistence farmer (April 2025).

ENDNOTES

[1] Today, Springbokfontein is known as Springbok, and is the largest town in Namaqualand.

[2] All participants have been assigned pseudonyms

[3] The other five areas are Leliefontein, Pella, Komaggas, Steinkopf, and Richtersveld.

[4] This classification has become an official category to describe people of 'mixed' ancestry. However, many of the individuals I interviewed during my fieldwork prefer identities such as "Nama" or "Namaqualander," which they noted were more reflective of their cultural and regional heritage.

[5] According to Ungvarsky (2025), snowball sampling is "a research recruitment method that relies on existing participants to refer new subjects, allowing researchers to build a larger sample over time".

[6] I use the term community to collectively refer to the residents in the town and the local subsistence farmers who live on Concordia's commonage land.

[7] VVVT or "Vrywillige, Vooraf en Voortdurende Volledige Ingeligte Toestemming" in English translates to Free, Prior and Informed Consent.

[8] According to Samuels (2013, p. 1), pastoralism is a system based on livestock mobility that enables herders to adapt to resources, access clean water and grazing areas, avoid diseases, and encourage socio-economic benefits.

[9] Aquifers are underground water reserves found in bodies of rock or sediment. In Namaqualand, farmers use these aquifers as additional water reserves to feed their livestock and water their crops.

ACKNOWLEDGEMENTS

The National Research Foundation's (NRF's) financial assistance towards this research is hereby acknowledged (Grant no: 98765). Opinions expressed and conclusions arrived at are those of the author and are not necessarily to be attributed to the NRF.

Throughout this article, grammar and spelling were reviewed and refined using Grammarly.

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