Analysis of the Residential Space in the Informal Settlement of South Africa in the Post-apartheid Era: A Case Study of the Capricorn District in Muizenberg Town

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Abstract: The issue of apartheid in South Africa has always been a focal point in regional studies. Since the social transformation in 1994, the South African government has made significant progress in de-isolating living spaces. However, at the micro level, disparities in residential areas still exist. Informal settlements suffer from poor conditions and low coverage of public services, exacerbating social issues such as violent crime. Racial exclusion has deepened mutual distrust between different groups, making it difficult to achieve true spatial justice. In the post-apartheid era, the government needs to reassess resource allocation mechanisms, further upgrade and transform slums, and reconstruct spatial order to promote sustainable social development and racial reconciliation.

1. Introduction

The issue of housing inequality in South Africa is deeply rooted in its history of apartheid. Since the Dutch arrived in South Africa on April 6, 1652, the churches of Dutch South African whites (Africaner) have supported apartheid through the fabrication of religious philosophies. The Cape Church Conference explicitly stated in 1792 that racial inequality was justified in the Bible and that captured African slaves would be enslaved for life. From 1795 to 1803, Britain occupied the Cape and began enforcing the abolition of the slave trade with its second occupation in 1806. In November 1809, Lord Goolchand issued an announcement marking the establishment of the pass law, which required nonwhites in South Africa to carry documents authorizing their presence in restricted areas, or face arrest and imprisonment or penal servitude for violating the law. This system effectively immobilized Africans. Between 1903 and 1963, the Cape government enacted a series of policies and laws that deprived blacks of land ownership and voting rights, relegated people of color to the lowest rungs of society, and imprisoned African political activists[1-2].

After the National Party(NP) came to power in 1948, it not only failed to address the suffering of South Africans, instead, they introduced a comprehensive and systematic "Apartheid," which stripped the major rights of non-white. Since the implementation of the Group Areas Act (Group Areas Act) in 1950, the apartheid policy has systematically reshaped the urban spatial structure of South Africa. The act aimed to divide residential areas based on race, forcing different racial groups to live separately, ensuring the segregation of whites and non-whites (blacks, Indians, and other people of color). This law divided cities and rural areas into different racial residential zones, with whites

occupying prime locations and non-whites being relocated to remote or poorer areas. "Township" is a distinctive word in South Africa, used to describe living areas that are neither "towns" nor "villages". The similarities to be found in the townships relate to the fact that they are typically on flat, sandy ground, where plants struggle to take root, and that they are primarily made up of very small, box-like houses, spread around evenly to the point of monotony. This act deprived non-whites of their original property and job opportunities, worsening their living conditions and further exacerbating racial inequality. Although it was abolished in 1991, according to the 2024 Integrated Household Survey report released by Statistics South Africa (Stats SA), 12.2% of households still live in informal housing, and by 2018, only 13.8% of households benefited from government housing subsidies, with 13% of users unable to access piped or tap water [3]. See Figure 1. These settlements are generally characterized by lack of infrastructure and poor housing conditions, which seriously restrict the quality of life and social development of residents.
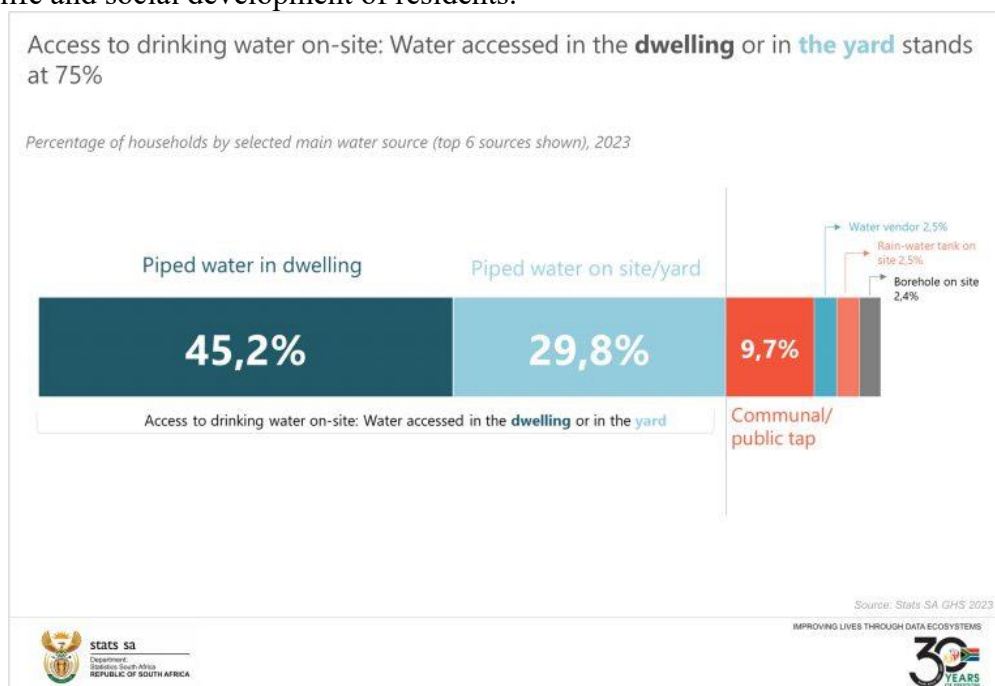

Figure 1. Access to domestic drinking water in South Africa 2023, Statistics South Africa

Cape Town, as the second largest city in South Africa, is particularly marked by its segregation of residential areas. According to the Western Cape Provincial Government's 2023 Housing Report, about 23% of the population in the Cape Town area lives in informal settlements, with Black people making up as high as 89%, and approximately 1.66 million people relying on welfare benefits to survive[4]. These settlements are mostly located at the city's periphery, lacking basic infrastructure and services. Taking the Capricorn district of Muizenberg town, which is the subject of this study, as an example, it is situated about 20 kilometers south of Cape Town's city center near Muizenberg town. As one of the earliest temporary shantytowns in the Western Cape Province and a direct result of forced relocation under apartheid policies, its formation can be traced back to the 1950s. Initially established by Trek fishermen who built shack houses near the beach for easier labor, the area now has roughly half of its population being colored people, mostly speaking Afrikaans and English, while the other half is Black, speaking Xhosa. The local Council assessed that there are around 8000 people, though it is likely that the figure is much higher.[5].

After South Africa achieved democratic transformation in 1994, the wealth gap between blacks and whites remained stark, with 16% of whites owning 70% of the country's property. To address this, the government launched the "Reconstruction and Development Program" (RDP), which

included land redistribution, the construction of one million housing units, the installation of water wells to ensure safe drinking water, and the provision of sanitation facilities and waste management services. Despite these efforts, housing issues and living conditions in South Africa persists dire. According to a 2023 study by the South African Human Sciences Research Council (HSRC), there is still a housing shortage of 2.4 million units nationwide, with an additional demand of about 180,000 units added each year[6]. This ongoing housing crisis has spread into social life, leading to serious issues such as gang-related crime and high rates of infectious diseases. In 2022, Cape Town had a murder rate of 77 per 100,000 people, significantly higher than the national average. Due to insufficient police presence, crime rates in informal settlements are particularly high, leaving residents without adequate security. Meanwhile, according to data from the South African Department of Health, tuberculosis incidence in Cape Town's informal settlements is more than twice the national mean [7].

The survey selects Area Capricorn as the subject of investigation, primarily because it reflects the deep-seated social contradictions in urban space division under post-apartheid era. From an urban sociology perspective, this area exhibits distinct slum characteristics. The hastily constructed residences using simple materials present irregular and crowded spatial forms, with severe infrastructure shortages and almost non-existent sanitation facilities, forming a vivid example of shack living conditions. Additionally, from the perspective of spatial justice theory, different racial groups in Area Capricorn still exhibit significant segregation in residential spaces. The urban landscape reflects stark disparities: white communities, leveraging historical resource advantages, occupy high-quality urban spaces, enjoying comprehensive infrastructure and high-quality living environments; whereas the racially diverse Area Capricorn has aging infrastructure, cramped living spaces, and poor environmental quality. Through field investigations, we aim to collect realistic living environments, exploring social issues and future development in South Africa from the perspective of residential space and its relationship with apartheid, providing a basis for formulating more targeted improvement measures.

2. Research status at home and abroad

2.1 Domestic research: spatial reconstruction and class struggle

Domestic research focuses on the reconstruction of black residential spaces in South Africa after the post-apartheid era, during land reform and urbanization processes, as well as the social exclusion issues faced. For instance, scholars Liu Min and Bao Zhiming wrote "Residential Segregation of South Africa in Post-apartheid Era Based on an Ethnographic Study of Bay Town Slum in Cape Town of South Africa" where they point out that segregation in urban living spaces is not a new issue but has historical continuity. After the abolition of apartheid, significant divisions still exist between different races in micro-environments . Whites collectively established segregated communities, maintaining a defensive stance, while informal settlements in slums are densely packed from the foot to the top of hills. [8]

From the perspective of Marxism, scholar Zhang Dan advocates for the separate investigation and analysis of class struggle and racism. During the apartheid era, the white government implemented a system of occupational segregation, which gave whites an advantage in the workplace, allowing them to enjoy generous salaries and housing benefits. However, non-whites were excluded from these jobs and had no possibility of engaging in technical or managerial roles. After the abolition of the apartheid system, the wealth disparity between blacks and whites remained extremely wide. Moreover, the newly emerging black bourgeoisie and middle class were not willing to help their black compatriots; instead, they shared the same class prejudice and contempt for the working-class black population as whites.[9]

2.2 Foreign research: policy reflection and cultural memory

Foreign research has explored the issue of black South African living spaces from environmental and socio-cultural perspectives, focusing on the impact of policies on living spaces and the role of historical memory in spatial identity. Nancy J. Jacobs (Nancy J. Jacobs) provides a detailed account of South Africa's apartheid history in her book *Environment, Power, and Injustice: A South African History*, proposing an analysis of the transformation of black living spaces from an environmental history perspective. In terms of spatial distribution, whites occupy the best land resources, while blacks, who make up 71% of South Africa's population, receive only 12.7% of the land, mostly in arid, barren semi-desert areas, which contrasts sharply with the intensive farming practices of white farms. Additionally, blacks were prohibited from using natural resources in white areas, and whites deprive the agricultural conditions of blacks through monopolizing water sources. Government policies, such as the ranch improvement program, continuously led to economic collapse in black areas. These white privileges became historical legacies after the abolition of apartheid, resulting in persistent spatial solidification and environmental debt. [10]

In terms of sociocultural aspects, research based on oral interviews in communities like Windermere has found that the forced relocation policies during the apartheid era, due to the disruption of original living environments and the destruction of traditional lifestyles, inflicted both physical and psychological trauma on black residents who were forcibly evicted, making it difficult for them to establish a unified sense of identity. Therefore, memory reconstruction has become an important avenue for black communities to seek spatial justice. By reclaiming suppressed memories, community members can rebuild their sense of identity and belonging to their living spaces while enhancing community cohesion and resistance capabilities[11].

From the perspective of urban spatial layout, in the peri-urban areas of African cities, urban expansion and relocation activities are frequent, with development projects characterized by uncertainty and multi-functionality. As the pandemic era passes, these areas have become new focal zones, blurring traditional boundaries between urban and rural, core and hinterland. The core urban areas continue to evolve, while their role in urban development is becoming increasingly significant. [12]

3. Objective of survey

This survey aims to comprehensively understand the current living conditions in Area Capricorn (Vryground) of Muizenberg Town in Cape Town, with a focus on evaluating the actual living environment and revealing the gaps to basic living needs. First, the historical evolution and changes of the area will be investigated from perspectives such as geographical location and regional layout, exploring the impact of apartheid policies on black people's living spaces. Second, the infrastructure supporting facilities in the area will be surveyed, including the coverage and stability of basic living facilities, the accessibility and quality of public services, especially the operation and hygiene conditions of educational institutions like kindergartens and primary schools. Based on the survey results, a comprehensive analysis of the implementation of government policies and support measures will be conducted to identify shortcomings in execution. Combining international experience with local realities, the analysis will propose practical and feasible improvement suggestions to provide data support and factual evidence for forming targeted intervention measures by the government and non-governmental organizations. It is hoped that this will offer scientific basis for improving the quality of life in Area Capricorn, promoting social equity, and sustainable development.

4. The subjects and methods of the survey

This survey employs both literature analysis and field investigation methods to comprehensively understand the current living conditions in Area Capricorn. The survey collected various statistical data from the Western Cape Provincial Government and the City of Cape Town on housing, education, health, and other fields, such as the "Integrated Household Survey" (2023) released by Stats SA, the Housing Report of the Western Cape Provincial Government (2023), the official website introduction of Cape Town, and the research on housing shortages conducted by the Human Sciences Research Council of South Africa (HSRC) (2023). These sources provide background information at the macro level regarding the historical evolution and development trends of Area Capricorn. Additionally, a two-week field observation was conducted in Area Capricorn, documenting residents' daily lives, infrastructure usage, and social issues. Furthermore, the research launched semi-structured interviews with local kindergarten teachers and NGO staff to gather multi-perspective views. Through these methods, a large amount of primary and secondary data is aimed at providing specific perspectives on the interpretation and reflection of structural social issues such as crime and racial relations in post-apartheid South Africa.

5. What to investigate

5.1 Capricorn Historical evolution of living space

Capricorn District first formed in the 1950s and 1960s, a period when South Africa's apartheid policy (Apartheid) was being fully implemented. According to the 1950 Group Areas Act, non-white populations in Cape Town were forcibly relocated to areas far from the city center, forcing many families to leave their long-standing communities. Located in southern Cape Town, near False Bay, Capricorn District became a settlement for people of color and some blacks due to its remote location. In its early stages, the infrastructure in Capricorn District was very rudimentary. Since these areas were often seen as "temporary settlements," the government-provided housing was mostly makeshift, with severely inadequate public services. However, many residents have lived there for extended periods. [5]

After the abolition of apartheid in 1994, the development planning and approval for Capricorn Section 3 in the Western Cape Province were put on the agenda in 1997 and received approval from the Western Cape Provincial Government in 1999. The plan was supported by the South Peninsula Municipality (SPM) and the Vrygrond Community Development Trust (VCDT). A total of 247 plots of land belong to Section 3, with 209 already developed into housing units, and 38 plots reserved as land with existing facilities, aiming to upgrade existing informal settlements into formal low-cost housing areas. Additionally, the government established the National Housing Subsidy Scheme and the South African Housing Subsidy Fund. This project allocates funds to the provincial government, which then applies for development plans and funding approvals from local governments. Applicants must be South Africans, have dependents, be at least 21 years old, haven't received subsidies before, and not be landowners to qualify for subsidies. Through further negotiations, the sponsor indicated that those who did not qualify would be eligible for 38 plots of land with existing facilities (fully equipped). However, as of February 28,2003, out of the 209 completed housing units, 104 had been allocated and legal beneficiaries had moved in. Of the remaining 105 units, 91 had been allocated but beneficiaries could not move in, leaving 14 units and 38 plots with facilities yet to be allocated. For those not on the 1998 list and for those who do not meet the criteria but occupy houses or plots, the court has set a deadline for removal. If they do not move out, the sheriff will use police force to carry out eviction when necessary, but implementation is difficult. Currently, only less than 40% of the population in this area are legal residents.[8]

5.2 The daily form of living space

   The housing conditions in Area Capricorn are extremely poor, with about 85% of residents living in informal shacks. These shacks are typically constructed from wooden planks, tin sheets, and plastic tarps, with roofs secured by discarded tires or stones. The average size of each shack is 40-45 square meters, housing 3-4 families, with an average living space of less than 10 square meters per person, far below the national standard of 12 square meters per person in South Africa. The interior structure usually consists of one room and one living area, with the chamber accommodating only one bed, while the rest of the space serves as a kitchen and activity area, posing significant fire hazards. See Figure 2. According to the 2022 Comprehensive Household Survey by Statistics South Africa (Stats SA), the housing density in Area Capricorn is 120 households per hectare, significantly higher than the average of 45 households per hectare. This high-density living has greatly increased the risk of fires; on December 22,2024, a large fire destroyed 100 shacks, leaving over 300 people homeless. In 2024, Area Capricorn experienced 42 fire incidents, resulting in 3 deaths and 15 injuries. Additionally, the poor construction of shacks makes them highly vulnerable to theft, with about 60% of residents reporting past experiences of burglary, the rate of which is 2.5 times higher than the national average. [13][14]

Figure 2. Exterior of shanty houses in Area Capricorn

   In recent years, although the government has deployed several water infrastructure projects in the region, access to a reliable water supply remains a persistent challenge. Approximately 30% of residents report experiencing at least one disruption weekly. Only 65% of the population has regular access to piped water, while less than half of the supplied water meets quality standards. Shortage become particularly acute during summer peak demand periods. The area also lacks a formalized wastewater management system. Sewage from informal settlements frequently overflows, with annual discharges exceeding 1 million cubic meters-yet less than 30% undergoes effective treatment. [16] Especially during the rainy season, low-lying areas suffer severe flooding, becoming breeding grounds for diseases. [15] In residential areas, about 90% of garbage is discarded on open grounds, where stray dogs gather to feed. Irregular garbage burning leads to severe air pollution, with smoke often spreading up to one kilometer away, and PM2.5 concentrations consistently exceeding three times the World Health Organization standard. [16] See Figure 3-4.

Figure 3. Garbage can be seen everywhere on the streets of Capricorn District

Figure 4 Capricorn Unfixed incineration of garbage in Area Capricorn

Each courtyard in the shantytown has a public toilet for 15-20 people, but the government only cleans it once a week. According to surveys, such shanties rent for about 1500 rand (approximately 600 RMB) per month, with electricity costing 500 rand (approximately 200 RMB) per household per month. In Area Capricorn, the average household income is only 40% of the national average, and over 60% of families rely on government assistance. [6] The high rent places a heavy burden on families with an average monthly income of less than 3000 rand.

The area has two private kindergartens, with monthly tuition fees of 500 rand, and parents are required to provide 4 rolls of toilet paper and a pack of wet wipes per month. Each class has 2-3 teachers and about 40 children, resulting in a teacher-to-student ratio as high as 1:20. The hygiene conditions at the kindergarten are concerning, with flies breeding and children seldom washing their hands before and after meals, with utensils left directly on the floor. Approximately 85% of parents default on tuition payments, leading to a shortage of supplies and severe arrears in teachers' salaries. The entire kindergarten has four public restrooms for about 250 students, equipped with running water and flush toilets. Additionally, there is an elementary school with an annual tuition fee of 1000 rand (approximately 400 RMB), but it suffers from a severe lack of teaching resources and facilities. The average number of books per student is only 0.5, far below the national average of 3.2 books. [17]

The classrooms at the school is also severely insufficient, each one holding an average of 50 students. The school has only five public restrooms for its 500 students, and the hygiene conditions are extremely poor. See Figure 5-6.

Figure 5 Capricorn Interior of kindergarten

Figure 6 Capricorn Food in kindergarten

Due to the lack of hospitals, residents have to travel 5 kilometers to the town area for medical care when they fall ill. According to data from the South African Department of Health, the tuberculosis incidence in this area is more than twice the national average, and over 30% of residents do not have access to basic healthcare services. [7] There is a large supermarket in Area where prices are relatively low, but most residents still rely on street vendors for essential goods. Vegetables and fruits are considered luxuries, with about 70% of households primarily depending on cheap foods like instant noodles, and food insecurity rate roars as high as 65%.

The crime rate here remains high, with widespread gang activities and drug issues. Alcoholism and domestic violence are severe problems, with about 35% of female residents reporting past experiences of domestic violence. Prostitution is common, leading many children to end up on the streets. The persistently high unemployment rate further fuels crime and social issues, creating a

vicious cycle. Additionally, the HIV/AIDS infection rate is nearly 20%, which further exacerbates the social burden.

5.3 The evolution of black living space in the post-apartheid era

After the abolition of apartheid policies, the South African government placed great emphasis on improving living conditions in shantytowns. Through the "Integrated Urban Development Framework" and the "Municipal Infrastructure Grant," funds were allocated to the Capricorn region to improve infrastructure such as roads, water supply, electricity, and sanitation facilities. The coverage of tap water increased from 78% in 2011 to 89% in 2021, and electricity supply coverage rose from 65% to 82%. In terms of housing security, the government established the "Reconstruction and Development Program" to provide subsidized housing for low-income families, striving to address the housing inequality issues left over from the apartheid era. Since 1994, more than 50,000 RDP houses have been built in the Capricorn region, significantly improving living conditions for some low-income families. On the education front, the "Basic Education Action Plan" and the "National Health Insurance Plan" have provided resources to the Capricorn region, enhancing school and medical facilities. This has successfully increased the primary school enrollment rate in the Capricorn region from 85% in 2005 to 95% in 2021. The government also provides cash assistance to impoverished families, including child support, pensions, and disability benefits. Approximately 60% of households in Capricorn benefited from the program, contributing to a reduction in the region's poverty rate from 45% in 2006 to 35% in 2021.

It is important to note that the economic benefits have largely benefited a few elites, with limited improvements in the economic conditions of ordinary people, and poverty remains a serious issue; housing demand remains high, with about 15% of households still living in informal settlements as of 2021; [3][4] infrastructure construction in some remote areas, particularly the improvement of sanitation facilities and sewage systems, still warrants attention; educational quality needs improvement, with only a 68% high school graduation pass rate in the region in 2021; the distribution of medical resources is uneven, with shortages of doctors and medicines still prevalent in remote areas. [16]

6. Conclusion

The living environment issues in Area Capricorn reflect the still severe spatial segregation in the post-racial era. In this context, the rights of non-white ethnic groups need to be genuinely protected. Based on the survey results, it is necessary to reassess the resource allocation mechanism and enhance its fairness; Authorities must further expand housing security policy coverage, lower assistance thresholds, and provide diverse housing solutions to benefit more low-income families. Concurrently, they should improve drainage systems, waste management, and public sanitation facilities to guarantee basic hygiene and environmental standards. Educational investments need boosting to meet national benchmarks for per-student resources, classroom capacity, and hygiene while implementing nutrition programs to enhance learning quality and student wellbeing. Healthcare accessibility requires expansion through additional primary clinics in impoverished areas, coupled with strengthened prevention and control of infectious diseases like tuberculosis and AIDS to curb transmission. Multifaceted poverty alleviation should be delivered through the Social Assistance Fund Program, with rigorous oversight ensuring funds directly improve living conditions.

However, the implementation of these policies has faced numerous obstacles. First, the issue of racial segregation is deeply rooted, with racial discrimination firmly entrenched among many people, especially whites. Even though the policy has been abolished, the spatial divide between different races continues to widen. In white neighborhoods, housing is often separated by barbed wire and

walls, with guard dogs, [8] making it difficult to eliminate the barriers between different ethnic groups in a short time. Second, local gangs are rampant, and the police have limited enforcement capabilities, leaving the government unable to play a decisive role in addressing some issues. Additionally, South Africa's financial resources are limited and prioritize areas with faster economic growth or greater political influence, leading to insufficient funding for impoverished regions like Capricorn. Corruption and poor financial management further exacerbate the waste and inefficient use of resources.

There is still a long way to go to improve the living conditions in Capricorn. Only when the historical problems of apartheid are gradually solved can the quality of life of residents be significantly improved, and provide replicable experience for the renovation of other informal settlements in South Africa, so as to promote sustainable social development and racial reconciliation.

References

[1] Fan Xiaoli. A Brief Analysis of South Africa's Racial segregation System [J]. Theory, 2016, (01): 143-144.

[2] Karu, E. U., & Ning Sao. (1984). On the origins of apartheid in South Africa. Ethnic Translations, 4, 1-7.

[3] Stats SA. (2022). General Household Survey 2022. Retrieved from https://www.statssa.gov.za/?p=17283

[4] Western Cape Provincial Government. (2023). Housing Report. Western Cape Provincial Government.

[5] Living Hope. (n.d.). Capricorn. Retrieved from https://www.livinghope.co.za/about/communities/capricorn/

[6] Human Sciences Research Council (HSRC). (2023). Research on South Africa's housing shortage. Human Sciences Research Council.

[7] South African Department of Health. (2023). Health statistics for Capricorn district. South African Department of Health.

[8] Liu Min, Bao Zhiming. From Segregation to Sharing: Living Spaces in the Post-Racial Era-Ethnographic Study of the Slum in Geyza Town, Cape Town, South Africa [J]. Journal of Minzu University of China (Philosophy and Social Sciences Edition), 2016,43 (01):59-71.

[9] Zhang Dan. Racism and Class Struggle in South Africa after the Post-Racial Era from the Perspective of Marxism [D]. Zhejiang Normal University, 2020.DOI:10.27464/d.cnki.gzsfu.2020.000066.

[10] Jacobs, N. J. (2003). Environment, power, and injustice: a South African history. Cambridge University Press.

[11] Simone, A. (2023). Periphery everywhere. In H. Haarstad, J. Grandin, K. Kjærås, & E. Johnson (Eds.), Haste: The slow politics of climate urgency(pp. 191 - 199). UCL Press. https://www.jstor.org/stable/j.ctv2rh2cgx.25

[12] City of Cape Town v. The Persons Who Are Presently Unlawfully Occupying Erf 1800, Capricorn: Vrygrond Development, Case No. 9617/02 (High Court of South Africa, Cape of Good Hope Provincial Division, May 20, 2003).

[13] South African Fire Service. (2024). Statistics on fire accidents in Capricorn district in 2024. South African Fire Service.

[14] Daily Voice. (2024, November 22). Fire leaves 300 homeless. Daily Voice. https://www.dailyvoice.co.za/western-cape/fire-leaves-300-homeless-8c67a218-9b5f-42de-82d0-09bc4cb8f25a

[15] Stats SA. (2023). General Household Survey 2023. Retrieved from https://www.statssa.gov.za/?p=17283

[16] City of Cape Town Environmental Department. (n.d.). Monitoring data on PM2.5 concentration in Capricorn district. City of Cape Town Environmental Department.

[17] Western Cape Department of Education. (2024). Data on primary school resources in Capricorn district. Western Cape Department of Education.