

LIVING IN MEDUPI'S SHADOW

STORIES FROM LEPHALALE

FairFinance
Southern Africa

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Medupi Power Station as seen at night.

Front cover: On Nelson Mandela Drive, one of the main roads in Lephalale, a woman uses twigs, plastic and polystyrene cups to start a fire. She'll use this to cook shisa nyama (braai meat) which she sells to the passing traffic as a small business that she and her husband started after he lost his job. Photographs by Daylin Paul

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ABOUT THIS REPORT

ABOUT THE FAIR FINANCE COALITION OF SOUTHERN AFRICA

The Fair Finance Coalition Southern Africa is a civil society coalition working towards ensuring that Public Finance Institutions invest in a socially and environmentally responsible manner in South Africa and Africa. The Coalition focuses on issues of climate change and transparency & accountability as they relate to financial institutions operating within the region.

The Coalition currently consists of the following seven organisations: 350Africa.org,¹ Centre for Environmental Rights,² African Climate Reality Project,³ Centre for Applied Legal Studies,⁴ Oxfam South Africa,⁵ Justica Ambiental⁶ and Earthlife Africa.⁷

ABOUT THIS REPORT

This report is a case study detailing the lived experience of the communities around Lephalale, Limpopo Province, South Africa, concerning the impacts of the international development financing towards the Medupi coal-fired power station.

¹ <https://350africa.org/>.

² <https://cer.org.za/>.

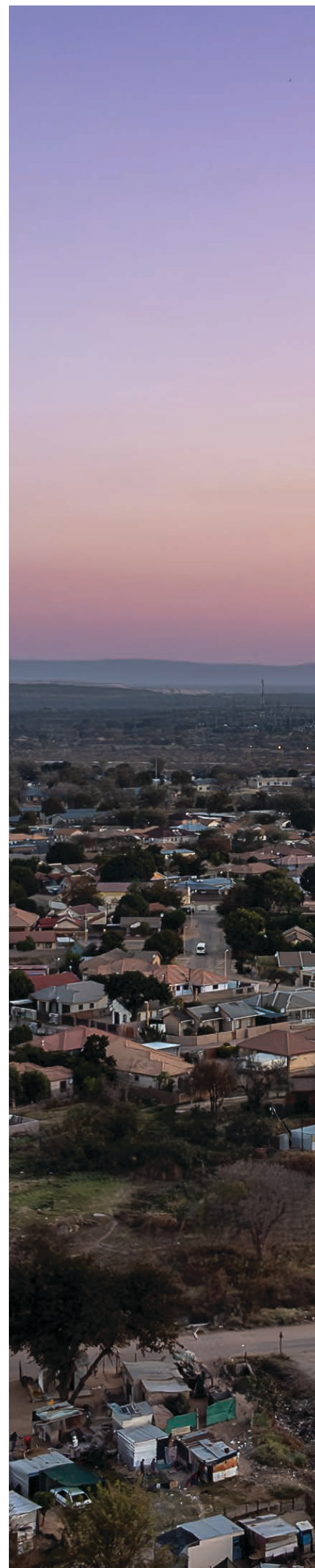
³ <https://climatereality.africa/>.

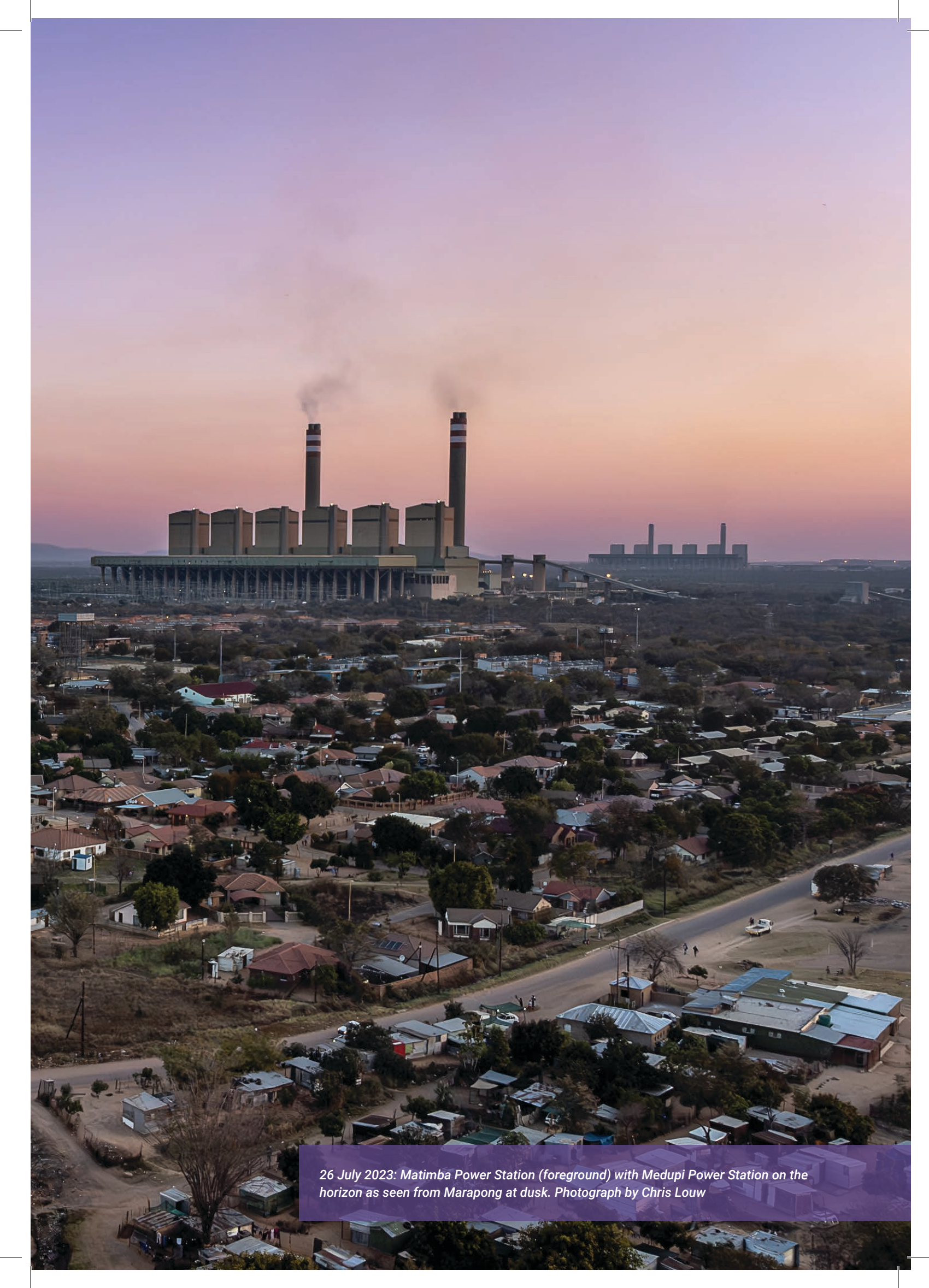
⁴ <https://www.wits.ac.za/cals/>.

⁵ <https://www.oxfamorg.za/>.

⁶ <https://ja4change.org/>.

⁷ <https://earthlife.org.za/>.



An aerial photograph taken at dusk, showing a large residential area in the foreground with numerous houses and trees. In the background, the Matimba Power Station is visible with its two tall smokestacks emitting plumes of smoke. Further in the distance, the Medupi Power Station is visible on the horizon. The sky is a mix of purple, pink, and orange hues.

26 July 2023: Matimba Power Station (foreground) with Medupi Power Station on the horizon as seen from Marapong at dusk. Photograph by Chris Louw

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CITATION

Scher, A, Choshane, M, Gabaphethe, T and Tlale, S, 'Living in Medupi's Shadow: Stories from Lephalale' (2023) The Fair Finance Coalition Southern Africa.

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This report has been financed by the Swedish international development agency, Sida. Responsibility for the content lies entirely with the creator. Sida does not necessarily share expressed views and interpretations.

ABBREVIATIONS

AfDB	African Development Bank Group
DBSA	Development Bank of Southern Africa
DFI	Development Finance Institution
ESIA	Environmental and Social Impact Assessment
Escom	Electricity Supply Commission
Eskom	Eskom Holdings SOC Ltd
FFCSA	Fair Finance Coalition Southern Africa
FGD	Flue-gas desulfurization
FPIC	Free, Prior, and Informed Consent
IFI	International Finance Institution
IRM	Independent Recourse Mechanism
IRP	Integrated Resource Plan
JETP	Just Energy Transition Partnership
JET IP	Just Energy Transition Investment Plan
MES	Minimum Emission Standards
Medupi	Medupi coal-fired power plant located in Lephalale Local Municipality, Limpopo Province, South Africa
NAQO	National Air Quality Officer
NDB	New Development Bank
PFI	Public Finance Institution
SDGs	Sustainable Development Goals
WEPs	Women's Empowerment Principles



Pedestrians, including schoolchildren, make their way to work and school in the early morning. Infrastructure in the area is poor and basic services are not provided to many residents. Unemployment, especially amongst women, and other gender-based social issues are prevalent in the communities surrounding Lephalale. Photograph by Daylin Paul

EXECUTIVE SUMMARY

“This is a place of kudos, of impalas, of huge trees, of birds, of people trusting each other, and it is being destroyed. For what? So that our country can live in loadshedding? So that people cannot afford electricity? Those few that have it. For what? For nothing.”

This report is a case study of the impact of the Medupi coal-fired power station on the surrounding communities of Lephalale, Limpopo Province, South Africa. The report serves to uncover, through interviews reflecting on the personal experiences of members of those communities, their experiences of how life has changed since the advent of Medupi.

The report details those communities’ experiences in the shadow of Medupi across a range of themes, including a lack of meaningful consultation and access to information on Medupi’s foreseeable impacts; local infrastructure and service delivery under pressure; environmental and health impacts; gendered social consequences; and the unequal distribution of opportunities.

The report acknowledges the powerful role of development finance institutions in the development and construction of Medupi, and the long history of allegations of environmental and broader human rights violations associated with the megaprojects that they have financed across the Global South.

The report thus sheds light on the lived realities of communities living near Medupi, telling their story of how their lives have been impacted by the international financing that led to the development of Medupi.

1. INTRODUCTION

1.1 BACKGROUND TO THE CASE STUDY: DEVELOPMENT FINANCE IN SOUTHERN AFRICA

Large infrastructure projects which are financed by development finance institutions (DFIs), international finance institutions (IFIs) and public finance institutions (PFIs) are a preferred mechanism for socio-economic development in the Global South. This is increasingly important with the worsening climate crisis and the advent of Just Energy Transition Partnerships (JETP), with South Africa emerging as a leader in this field, spearheading efforts to achieve a just energy transition. The JETP seeks to catalyse the decarbonization of its economy and chart a path towards a sustainable future.⁸

The decision-making processes surrounding development finance are largely inaccessible and often intentionally complicated. These processes tend to exclude the public and civil society from giving meaningful input and are kept separate from affected communities, who are only told that they will benefit from these developments but are never consulted on the nature, and full extent, of the development, nor educated about the negative consequences thereof.

A case study of the lived impacts of such an internationally-financed infrastructure project on the surrounding communities can assist the FFCSA to assess any claims of benefit to those communities, and serve to demonstrate the true impacts of such infrastructure projects, particularly where the surrounding communities were apparently excluded from the planning process. Such understanding is increasingly important as we shape our energy transitions and seek to establish a better world order in which vulnerable persons, affected communities and workers are truly able to benefit from the extensive development finance and large infrastructure projects which take place in their communities.

Such a study has particular merit when it reflects the lived experience of the affected communities, as told in their own words. It can serve as a record of that experience to be shared with other communities, some of which may be experiencing similar issues, and future generations, with both a story-telling and educational function. The study might also serve to underscore the power and agency of affected individuals and communities in circumstances in which the experience being recounted might otherwise have left them feeling disempowered.

A well-researched case study is thus an opportunity to gather and share knowledge on community experiences of development finance, as well as shape our collective demands as affected communities and civil society, independent of existing climate finance processes that we have largely been excluded from.

⁸ See The Presidency, Republic of South Africa 'South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023–2027' (November 2022) available at [file:///C:/Users/a0064471/Downloads/South%20Africa's%20Just%20Energy%20Transition%20Investment%20Plan%20\(JET%20IP\)%202023-2027%20FINAL.pdf](file:///C:/Users/a0064471/Downloads/South%20Africa's%20Just%20Energy%20Transition%20Investment%20Plan%20(JET%20IP)%202023-2027%20FINAL.pdf) (accessed on 29 July 2023).

1.2 FOCUS OF THIS CASE STUDY

The FFCSA elected to focus its first case study (for the years 2022-2023) on a megaproject financed by various DFIs and IFIs, namely the construction, development and operation of the Medupi coal-fired power plant, located in Lephalale, Limpopo Province, South Africa, since around 2007. The development and ongoing operation of Medupi is financed *inter alia* by the World Bank, the African Development Bank and the New Development Bank, and undertaken and managed by Eskom Holdings SOC Ltd (Eskom), South Africa's public energy utility.

Through prior work by the organisations which comprise the FFCSA and their partners, it was clear that the communities surrounding Lephalale have largely felt excluded from the processes of the megaproject. Despite this, they were undoubtedly directly affected by the choice of location for the world's eighth largest coal-fired power plant.⁹

This report examines the nature and impact of the international financing for Medupi on the surrounding communities of Lephalale, telling the story of how, from those communities' perspective, those impacts are extensive and ongoing even fifteen years after the advent of the project.

1.3 RESEARCH PARTICIPANTS

The Coalition members of FFCSA have wide networks of community-based partners across Southern Africa. Due to much of their work being focused on climate justice, many of those partners are located in the Limpopo Province and near Medupi.

The researchers were thus able to invite interested members of many communities surrounding Lephalale to participate as volunteers in the case study, whether by attending the initial mass meeting, sitting for in-depth interviews, or both.

The volunteers who ultimately sat for in-depth interviews represented a wide spectrum of the various identities, locations¹⁰ and interest groups that exist within the affected communities. The interviewees had all lived in the area surrounding Medupi for varying amounts of time; from being born there to having moved there in an attempt to benefit from the economic opportunities which were promised alongside the development of Medupi.

The volunteers are all adults, and all participants (whether in Phase I or Phase II) operated on the basis of informed consent which included reading participants a detailed consent script and engaging with them on the contents thereof, as well as protecting their anonymity throughout the case study and report.

⁹ See generally D Hallows & V Munnik 'Boom and Bust in the Waterberg: A history of coal mega projects' (2018) *groundwork*, available at <https://groundwork.org.za/wp-content/uploads/2022/07/boom-and-bust.pdf> (accessed 15 February 2023).

¹⁰ The interviewees currently live in the following areas: Lephalale, Marapong, Onverwacht, Ga Seleka, Shongoane and Steenbokpan.

1.4 METHODOLOGY

This case study was developed in informal partnership with the communities surrounding Medupi. In doing so, the researchers sought to be led by the interests and needs of those affected communities, in order to tell their story in their own words. That story details the lived experiences of individuals and communities surrounding Medupi and impacted by the financing thereof by IFIs and DFIs.

A preliminary meeting was held in April 2022 with representatives of the various communities surrounding Lephalale, at which FFCSA members introduced themselves and the Coalition, explained the rationale behind the intended case study and assessed whether there was community buy-in and interest.

Having determined that there was such interest, the researchers conducted the research in two separate phases. Phase I encompassed a community 'mass meeting' held in Lephalale in July 2022 at which FFCSA presented our preliminary understanding of the various impacts of Medupi on the surrounding communities, followed by focus group discussions to further explore the various impacts and interrogate this understanding.

In Phase II, volunteers identified at the 'mass meeting' sat for in-depth interviews with the researchers. These in-depth interviews were held in-person between February and May 2023. Each interview was loosely structured on the basis of the various themes of impacts identified during the 'mass meeting' and focus discussions, but the interviewer allowed the interviewee to speak freely to ensure that their lived experience was properly captured.

The interviews were conducted in English, Sepedi and Setswana, as per each interviewee's preference.

This research was then assessed to identify the common themes and issues raised, and only those impacts which the researchers determined to be wide-spread and thus representative of the prevailing views of the affected communities are recorded herein. These were assessed alongside a review of relevant documents mentioned by community members during the two phases, as well as a review of other historical documents relevant to the entire development process (financing, construction and operation) of Medupi.

All costs occasioned by this case study and report were covered by the Coalition and its members.

1.5 LIMITATIONS OF THE RESEARCH AND THIS REPORT

The aim of this case study is to provide the communities located around Medupi with a consolidated record of their lived experience, as told in their own words, in response and in relation to the construction and operation of Medupi. The study is limited to the Lephalale Local Municipality in the Limpopo Province of South Africa where Medupi is located.

Although this study details multiple claims of the detrimental impact of Medupi on the environment and health of the surrounding communities, the researchers did not conduct any studies to determine any causal link between those impacts and Medupi. Consequently, this report does not make any scientific findings, nor could it do so.

No *causal conclusions* are made in this report regarding the impacts of the financing towards the construction, operation and overall development of Medupi. Rather, the report gives a voice to the lived experiences of communities living in proximity to Medupi by detailing their understanding of the ways in which their lives have changed since the advent of Medupi.

Finally, the report also does not make any legal findings, being as it is, a record of the affected communities' lived experience, assessed only as against an assessment of the broader community's experience in order to identify common narratives and concerns in relation to the impacts experienced. The researchers did not set out to assess that experience as against any legal standards, and do not conduct any such legal analysis herein.

As no legal findings are made in the report, the researchers did not enter into correspondence with any of the IFIs, DFIs, Eskom or the South African government on the recommendations reached herein.

While the scope of the research did not allow for definitive causal conclusions – whether legal or scientific – on the various impacts of Medupi on surrounding communities to be drawn, the researchers believe strongly that the experiences recorded herein merit further investigation. While not drawing any findings from this research, the researchers nevertheless make *recommendations* to the relevant role-players, which we believe to be appropriate and relevant in the circumstances.

It is now solely within the prerogative of the affected communities to determine what – if anything – to do with this report.

2. BACKGROUND

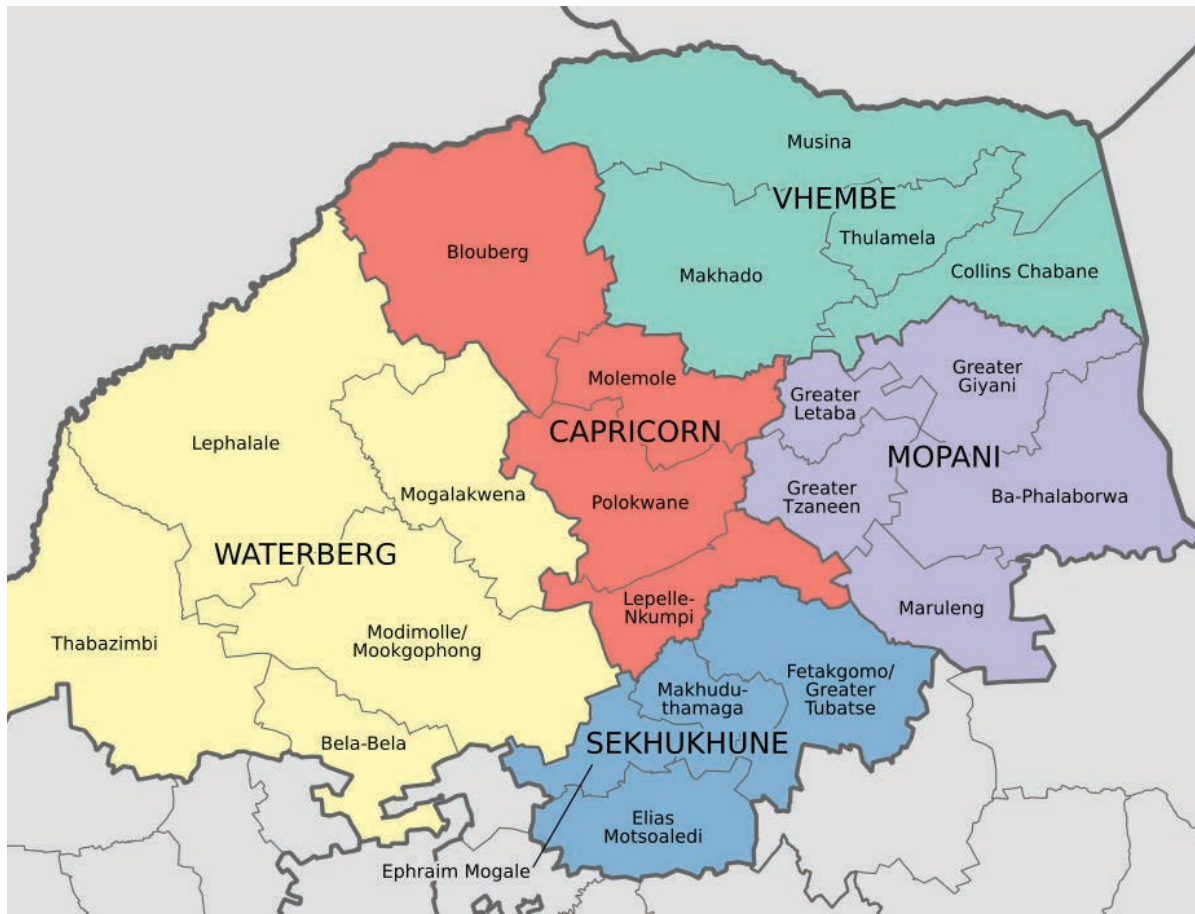


Figure 1: Map of municipalities in Limpopo Province¹¹

2.1 SOCIO-ECONOMIC PROFILE OF LEPHALALE LOCAL MUNICIPALITY

Lephalale is the capital of Lephalale Local Municipality located in the Limpopo Province, under the Waterberg District Municipality, with the biggest municipal area in the province covering 14 000km². It is located 40km from Botswana and is one of the gateways to other Southern African countries.¹²

¹¹ Obtained from https://en.wikipedia.org/wiki/List_of_municipalities_in_Limpopo (accessed on 26 July 2023).

¹² Lephalale Local Municipality 'Integrated Development Plan 2014–2016' (2014) available at <http://www.lephalale.gov.za/Documents/Final%20%20IDP%202014%20-%202016.pdf> (accessed on 18 June 2023).

Lephalale, known as Ellisras prior to 2002, was established in December 1960. The name ‘Lephalale’ has its roots in Setswana, meaning “to flow”.¹³

Economic expansion in the area in the 1980s gave rise to the creation of the significantly larger town, with its largely white area of Onverwacht and largely black area of Marapong.¹⁴

Black communities then living in the area were forcibly relocated to Mokerong 1, an outlier of the Lebowa “homeland”,¹⁵ situated along the Lephalala River, and Steilloop, over 100 kilometres away, to allow for the expansion of mines and power stations nearby.

Today Lephalale has three main sub-sections, namely Lephalale (the central town), Onverwacht and Marapong, along with 34 surrounding villages.



Figure 2: Map of Lephalale Local Municipality¹

¹³ Tunatazama ‘Brief background of the Community of Lephalale’ (2016) available at <https://communitymonitors.net/2016/10/brief-background-of-the-community-of-lephalale/> (accessed on 21 June 2023).

¹⁴ Tunatazama ‘Brief background of the Community of Lephalale’ (2016) available at <https://communitymonitors.net/2016/10/brief-background-of-the-community-of-lephalale/> (accessed on 21 June 2023).

¹⁵ Apartheid policy was to allocate small, remote and largely infertile parcels of land to different ethnic groups within South Africa, in an attempt to entrench racial and ethnic segregation.

2.2 HISTORICAL CONTEXT OF COAL MINING IN THE AREA

The discovery of minerals in the nineteenth century spurred electrification in South Africa. By the early 1900s, electricity was available in most major cities across the country. The demand for coal – a crucial resource for electricity generation – was primarily concentrated around gold mining, with power stations being strategically located near gold mines.¹⁶ The minerals rush spurred urbanization and early industrial development, and in 1910 the Transvaal Colony (in which Johannesburg and the gold-rich Witwatersrand reef were located) passed the Power Act. The Act defined electricity as a public service, and stipulated that the government would own and operate the electricity generation utility, thereby centralising control of the electricity supply.¹⁷

In 1922 and after the Union of South Africa had been established, the Electricity Act 42 of 1922 laid the foundation for the establishment of a state-run electricity supply industry in South Africa. While its stated primary objective was to ensure the provision of affordable and abundant electricity wherever needed, the Act served to entrench racial segregation within networks – by granting local authorities exclusive control over electricity distribution within their jurisdictions. These authorities perpetuated the marginalization of black communities by excluding them from the census and service delivery, and consequently, the demand for electricity.¹⁸

The Electricity Supply Commission (Escom) was established in 1923¹⁹ and tasked with the provision of affordable electricity in the broader public interest. Escom played a pivotal role in facilitating the growth of the South African capitalist economy, enabling the mining, transportation, and manufacturing sectors to access inexpensive power. The benefits of this low-cost electricity also extended to white communities, who enjoyed reliable and reasonably priced electricity services in residential areas.²⁰

With its expansion over time, Escom progressively assumed control over privately-owned independent power stations. By 1948, it had transformed into a vertically integrated state utility, encompassing generation, transmission, and distribution of electricity (although local government retained a significant role in distribution).²¹ Escom changed to be known as 'Eskom' in 1987.

16 South African History Online 'A Short History of ESKOM, Part 1 (1923-2001)' (2023) available at <https://www.sahistory.org.za/article/short-history-eskom-part-1-1923-2001> (accessed on 16 June 2023).

17 B Siyobi '100 Years of Eskom: How did we get here?' (2022) available at <https://gga.org/100-years-of-eskom-how-did-we-get-here/> (accessed on 18 June 2023).

18 Ibid.

19 S van Niekerk 'A Brief History of Eskom – 1923-2015' in Alternative Information & Development Centre *Why Eskom Is In a Mess And What To Do About It: A Companion to Eskom Transformed* (2020) available at <https://aidc.org.za/a-brief-history-of-eskom-1923-2015/> (accessed on 18 June 2023).

20 Ibid.

21 Ibid.

The development of the Waterberg coalfield commenced in the early 1970s due to growing concerns that the international community would impose sanctions on apartheid South Africa, including on the import of coal.²² Alongside the development of a national electricity grid in 1973, this triggered a series of developments that profoundly transformed the region, and the town of Ellisras, through two cycles of boom and bust, primarily driven by megaprojects.

It resulted in the establishment of the Grootegeluk colliery, South Africa's largest open-pit coal mine initially developed by Iscor (the State-owned steel company) and now owned by Exxaro, and then the nearby Matimba (meaning "power" in Tsonga) power station was built in the early 1990s with a generation capacity of 4,000 MW of electricity.²³ The coal reserves at Grootegeluk are significant enough to ensure the operational longevity of Matimba for a minimum of 35 years.²⁴

To service these megaprojects, a dam and series of pipelines was constructed on the Mokolo River, the largest in the area.²⁵

Ellisras and the Waterberg area were thus clearly marked out as a hub for rich coalfields and electricity generation, with more to come once democracy dawned. In 2012 the government recognised this by establishing the Waterberg-Bojanala Priority Area (WPA), on the basis that "ambient air quality within the Waterberg District Municipality ... may exceed ambient air quality standards in the near future".²⁶

22 D Hallows & V Munnik 'Boom and Bust in the Waterberg: A history of coal mega projects' (2018) groundwork, available at <https://groundwork.org.za/wp-content/uploads/2022/07/boom-and-bust.pdf> (accessed 15 February 2023) p 36.

23 Hexagon PPM case study: 'Eskom, Matimba power plant, South Africa' (2018) available at https://bynder.hexagon.com/m/5e16f779a6d35c93/original/Hexagon_PPM_Eskom_Matimba_Plant_Case_Study_US_2018.pdf (accessed on 7 July 2023).

24 Hexagon PPM case study: 'Eskom, Matimba power plant, South Africa' (2018) available at https://bynder.hexagon.com/m/5e16f779a6d35c93/original/Hexagon_PPM_Eskom_Matimba_Plant_Case_Study_US_2018.pdf (accessed on 7 July 2023).

25 EFW Buermann 'The Establishment of Infrastructure for the Grootegeluk Coal Mine' *Journal of the South African Institute of Mining and Metallurgy* (1982, 82:12) 353.

26 Declaration of the Waterberg National Priority Area, Government Gazette No. 35435, Government Notice 495 of 15 June 2012.





26 July 2023: Medupi Power Station as seen from a nearby road. Photograph by Chris Louw

3. THE MEDUPI COAL-FIRED POWER STATION

3.1 BACKGROUND

With the advent of South Africa's democracy in 1994, the government sought to provide universal access to electricity as a basic need, and as a way to undo decades of racially-segregated provision of services under apartheid. In the almost three decades since then, however, the management of Eskom as the national power utility has been inconsistent at best, with failing infrastructure due to poor maintenance of existing power plants and slow development of new projects. In 2006 this led to the government's decision to assign to Eskom the responsibility to construct two additional coal-fired power stations, identified as Kusile in Mpumalanga Province, and Medupi in Limpopo Province.

For the Lephalale Local Municipality in Limpopo Province, the megaproject represented an opportunity for wide-scale economic growth as the first new South African city in the democratic era. The Municipality was ambitious in its plans to establish Lephalale as an energy hub for Africa,²⁷ recognising this opportunity to address the fragmented spatial layout inherited from apartheid-era planning.

3.2 DEVELOPMENT

Initially, Eskom planned to extend the existing Matimba power station rather than building an entirely new power station. However, as the realisation of demand projections and supply challenges became apparent, Eskom in 2007 unveiled its new plan: the construction of a massive six-unit power station in Lephalale, starting from scratch.²⁸

The megaproject was named 'Medupi', which in Sepedi translates to "rain that soaks parched lands, giving economic relief".²⁹

The initial estimated cost of the Medupi megaproject was R52 billion, with the commissioning of the first unit scheduled for 2011. However, this quickly escalated, and had risen to R78.6 billion within a few short months.³⁰ By 2021 Medupi was estimated to cost Eskom ZAR 135 billion by its completion.³¹

²⁷ Lephalale Local Municipality 'Lephalale Service Delivery and Budget Implementation Plan 2013-2014' (2013).

²⁸ JB Stylian Blackout: The Eskom Crisis (2015) p 134.

²⁹ Eskom 'Medupi Projects' available at <https://www.eskom.co.za/eskom-divisions/gx/coal-fired-power-stations/medupi-projects/#~:text=Medupi%20is%20the%20first%20base,lands%2C%20giving%20economic%20relief%E2%80%9D> (accessed on 29 June 2023).

³⁰ A Eberhard 'The folly of big coal, big nuclear, and big networks' *Leader* (2013) available at <https://www.leader.co.za/article.aspx?s=6&f=1&a=4982> (accessed on 29 June 2023).

³¹ Cape Talk 'Medupi Power Station finally complete after 14 years at a cost of R135 billion' (2 August 2021) available at <https://www.capetalk.co.za/articles/423545/medupi-power-station-finally-complete-after-14-years-at-a-cost-of-r135-billion> (accessed on 8 August 2023).

In addition to these cost overruns, the project saw significant implementation delays which ultimately negatively impacted its financial viability. Despite this, Eskom and the relevant financiers believed that the project had the ability to retain its contribution and value to the South African economy, as it enhances South Africa's energy generation capacity.

3.3 FINANCING

Even at initial projections, South Africa could not finance Medupi alone, and the government thus turned to IFIs and DFIs to assist.

The development and ongoing operation of Medupi is financed as follows.

The World Bank loaned Eskom US\$ 3.75 billion (about ZAR71 billion) in 2010 towards the Eskom Power Investment Support Project, which included the construction of Medupi.³² The loan agreement required that Eskom install flue-gas desulfurization (FGD) technology at Medupi by 2025 to curb emissions of sulphur dioxide and thereby make Medupi compliant with South Africa's environmental and air pollution standards. In July 2021 (and thus one month after the effective close of the Project), the World Bank approved the extension of the FGD implementation deadline from 30 June 2025 to 30 June 2027.

The African Development Bank (AfDB) loaned Eskom US\$1.2 billion (about ZAR22 billion) towards the construction of Medupi in 2009, comprising two financing instruments - a loan of ZAR10,63 billion and a loan of EUR930 million (about ZAR19 billion).³³ This amount was for the supply and installation of six boilers and turbo-generators in the project. This is the biggest project that the AfDB has financed in South Africa, and also the biggest loan ever approved by the AfDB. The loan is co-financed by the World Bank. In 2016, the AfDB granted Eskom a further almost US\$1 billion (about ZAR18 billion) loan boost to finance its expansion programme, which included the Medupi and Kusile new build programme.³⁴

In 2019 the New Development Bank loaned Eskom US\$480 million (about ZAR9 billion) to finance the design and construction of the FGD technology in the form of six FGD units. This is referred to as the 'Environmental Protection Project for Medupi Thermal Power Plant',³⁵ and sought to "support South Africa's commitment to reducing environmental pollution in the energy sector".³⁶

The monies from those loans have already been paid over to Eskom.³⁷

³² See <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/279061468165265746/south-africa-eskom-power-investment-support-project>.

³³ See <https://www.afdb.org/fr/news-and-events/afdb-helps-south-africa-tackle-energy-crisis-approves-eur1-86-billion-loan-for-medupi-power-project-5421#:~:text=Medupi%20Power%20Project-,AfDB%20Helps%20South%20Africa%20Tackle%20Energy%20Crisis%2DApproves%20%E2%82%AC1.86,Loan%20for%20Medupi%20Power%20Project>.

³⁴ See <https://www.afdb.org/ar/documents/document/project-brief-south-africa-eskom-corporate-loan-86772> (accessed on 31 July 2023).

³⁵ See <https://www.ndb.int/news/ndb-ramps-operations-south-africa-supporting-sustainable-infrastructure-development/>.

³⁶ See <https://www.ndb.int/project/environmental-protection-project-medupi-thermal-power-plant/> (accessed on 31 July 2023).

³⁷ Correspondence between the FFCSA and the three Banks between 2022-2023.

3.4 CONSTRUCTION

Medupi is the first non-peaking power station to be built by Eskom in two decades.

The construction of Medupi was met with discontent from a variety of stakeholders, including contract workers, civil society, government, and financiers, with many complaints focusing on the megaproject's high cost, which far exceeded its original budget.³⁸

3.5 OPERATION

Medupi started coming online from 2015 and was fully commercially operational by mid-2021, becoming the largest dry-cooled power station and fourth-largest coal-fired power plant in the world, built to serve for the next six decades. It has a generation capacity of 4.8 gigawatts.³⁹

THE OUTSTANDING FGD TECHNOLOGY

Medupi has now been in operation for several years. Nevertheless, the full project is not complete, inter alia because the flue-gas desulfurization equipment which is required in order to make Medupi compliant with South Africa's environmental and air pollution standards, has not yet been developed, despite the finance for such already having been transferred to Eskom from the NDB. This equipment would reduce Medupi's sulphur dioxide emissions,⁴⁰ and the delay in fitting it thus directly impacts the air pollution and consequent health impacts experienced by the communities surrounding Medupi. A July 2022 presentation by Eskom's then-Group Chief Executive anticipated that the installation of FGD will only start in 2025 and be completed in 2029.⁴¹

ESKOM'S BATTLE OVER MINIMUM EMISSION STANDARDS

Moreover, Eskom has consistently delayed its compliance with the Minimum Emission Standards (MES) under South Africa's air quality legislation⁴² since these standards were first published in 2010. These standards exist to control and reduce the emission of harmful pollutants which may have a significant detrimental impact on the environment, including health, social, and economic conditions, among other impacts. However, in October 2021 the National Air Quality Officer (NAQO) rejected Eskom's applications for further postponement of the compliance timeframes in relation to the MES for five of its coal-fired power stations, including Medupi.

38 See generally D Hallows & V Munnik 'Boom and Bust in the Waterberg: A history of coal mega projects' (2018) *groundwork*, available at <https://groundwork.org.za/wp-content/uploads/2022/07/boom-and-bust.pdf> (accessed 15 February 2023) pp 67-69; 79-80.

39 T Taylor & N Bertrams 'The story of SA's biggest power plant, and its little town' *Mail and Guardian* (2020) available at <https://mg.co.za/article/2020-04-29-the-story-of-sas-biggest-power%E2%80%89plant-and-its-little-town/> (accessed on 29 June 2023).

40 ML Masamba & M Buenaventure-Goldman 'Why the need for an independent accountability mechanism at the New Development Bank?' *Transparency and Accountability Series: Discussion paper 2* (2022) available at <https://www.oxfam.org.za/wp-content/uploads/2022/06/oxfam-ndb-accountability-discussion-paper-2-web.pdf> (accessed on 29 July 2023).

41 A de Ruyter 'The MES and Eskom's 2035 JET Strategy', *Powerpoint Presentation* (July 2022).

42 *National Environmental Management: Air Quality Act 39 of 2004*.

Instead, the NAQO directed Medupi to comply with the existing plant SO₂ emission limit stipulated in its atmospheric emission licence until 31 March 2025. Eskom has appealed that decision, and the outcome thereof is outstanding.⁴³

Based on a study from the Centre for Research on Energy and Clean Air at the University of Helsinki, Finland, which assumes that Medupi Power Plant runs at full capacity without the FGD, it is estimated that this would cause approximately 90 deaths per year.⁴⁴ This would equate to an estimated 270 deaths to March 2025.

COAL-FIRED POWER PLANTS GOING FORWARD

The AfDB has indicated that, since the time of its approval of the loan to finance Medupi, international consensus around the climate crisis and attendant developments in the energy sector (including the comparatively cheap availability of wind and solar power) have undermined the financial and economic viability of coal-fired power plants. The AfDB has thus elected not to finance any new coal operations since 2009, and will not finance such going forward. It will nevertheless –

“support Regional Member Countries dependent on coal for energy production, in developing just energy transition plans, and in financing operations that mitigate subsisting environmental and social obligations in operating projects to which the Bank is/was a lender. The Bank will therefore consider financing the Medupi Project FGD retrofit in the future.”⁴⁵

In South Africa’s Just Energy Transition Investment Plan (JET IP),⁴⁶ the first JET IP of any emerging economy to be completed, Medupi is not listed among the coal-fired power plants which are scheduled to be retired. Instead,

“By the end of 2050, only the two youngest coal plants (Medupi and Kusile), and one unit of the older Majuba plant, will remain operational as currently envisaged.”⁴⁷

43 The decision on Eskom’s appeal is held in abeyance as the Minister has set up a National Environmental Consultative and Advisory Forum in terms of section 3A of the National Environmental Management Act 107 of 1998, to advise on matters arising from applications for the suspension/postponement of compliance with the MES and consult with stakeholders, and thereafter report to the Minister on the outcome. The Forum is expected to make its recommendation by February 2024.

44 See S Evans ‘Medupi’s killer fumes: The story of a power station’s missing air scrubbers’ News24 (3 March 2020) available at <https://www.news24.com/News24/medupis-killer-fumes-the-story-of-a-power-stations-missing-air-scrubbers-20200303> (accessed on 31 July 2023).

45 ‘Annexure: Q&A’ attached to Letter from AfDB to FFCSA dated 10 February 2023.

46 See The Presidency, Republic of South Africa ‘South Africa’s Just Energy Transition Investment Plan (JET IP) for the initial period 2023–2027’ (November 2022) available at [file:///C:/Users/a0064471/Downloads/South%20Africa's%20Just%20Energy%20Transition%20Investment%20Plan%20\(JET%20IP\)%202023-2027%20FINAL.pdf](file:///C:/Users/a0064471/Downloads/South%20Africa's%20Just%20Energy%20Transition%20Investment%20Plan%20(JET%20IP)%202023-2027%20FINAL.pdf) (accessed on 29 July 2023).

47 The Presidency, Republic of South Africa ‘South Africa’s Just Energy Transition Investment Plan (JET IP) for the initial period 2023–2027’ (November 2022) available at [file:///C:/Users/a0064471/Downloads/South%20Africa's%20Just%20Energy%20Transition%20Investment%20Plan%20\(JET%20IP\)%202023-2027%20FINAL.pdf](file:///C:/Users/a0064471/Downloads/South%20Africa's%20Just%20Energy%20Transition%20Investment%20Plan%20(JET%20IP)%202023-2027%20FINAL.pdf) (accessed on 29 July 2023) p 43.

3.6 THE MEDUPI COMPLAINTS PROCESS

On 28 September 2010, an anonymous complaint relating to the Medupi Power Project was submitted to the AFDB's internal recourse mechanism (IRM), the Compliance Review and Mediation Unit. The complaint detailed various concerns with the development and construction of Medupi, including that social and environmental impact studies had been inadequate; that consultation with affected communities had been inadequate; and that the construction had led to the desecration of communal gravesites and thus a violation of cultural rights.⁴⁸

In 2011 the AFDB's IRM recommended that Medupi be subjected to a compliance review, which was undertaken between 2011 and 2012. It was held that Medupi was, in several instances, non-compliant with AFDB policies.

In summary, those findings were as follows:

- The AFDB had failed to take steps to ensure that the financing to Medupi was compliant with all of its policies;
- The AFDB needed to ensure the installation of the flue-gas desulfurization equipment at Medupi;
- Medupi did not comply with the AFDB's policies relating to water management
- The AFDB had failed to comply with its policies in relation to stakeholder consultation; and
- The AFDB had failed to sufficiently assess the existence of communal gravesites before construction of Medupi commenced.

In order to remedy these instances of non-compliance, the IRM prepared an Action Plan with 14 action items, and undertook to conduct annual monitoring on the status of its implementation, with monitoring reports to be submitted to the AFDB's Board. This occurred between 2015 and 2020.

⁴⁸ See generally Independent Recourse Mechanism 'Fifth monitoring report on the status of implementation of the updated management action plan for the Medupi Power Project in South Africa' African Development Bank (September 2021).

In its Fifth Monitoring Report in September 2021,⁴⁹ the IRM concluded that, even though two instances of non-compliance remain unresolved, the agreement between the AfDB and Eskom concluded in June 2021 and thus that –

“the Bank no longer has a contractual relationship with the entity (Eskom), it would be both prudent and practical to functionally ‘suspend’ the case at this stage and not continue with the monitoring of the two pending action items until 2026. The IRM has been monitoring this Project for more than 7 years now, and the two pending actions will be implemented in the next 5 years . . . In addition, the Project has already been closed and therefore, there is little leverage on the part the Bank to influence the borrower to implement the pending actions. These facts have led the IRM to make the decision to suspend the annual monitoring until at least 2026.”⁵⁰

In an article published on 22 June 2022,⁵¹ it is noted that the AfDB anticipates that Medupi may close early due to climate change concerns, and that the project will not show a financial benefit over its lifetime. Importantly, the AfDB concludes that the –

“Choice of megaprojects with such long lives needs very careful consideration to avoid the challenges now faced by this project in terms of cost and time overruns as well as climate change related environmental concerns.”

49 Independent Recourse Mechanism 'Fifth monitoring report on the status of implementation of the updated management action plan for the Medupi Power Project in South Africa' African Development Bank (September 2021).

50 Independent Recourse Mechanism 'Fifth monitoring report on the status of implementation of the updated management action plan for the Medupi Power Project in South Africa' African Development Bank (September 2021) pp 6-7.

51 A Squazzin 'Funder Says Eskom's \$8.7 Billion Power Plant Won't Make Money' Bloomberg (2 June 2022) available at <https://www.bloomberg.com/news/articles/2022-06-02/funder-says-eskom-s-8-7-billion-power-plant-won-t-make-money#xj4y7vzkg> (accessed on 31 July 2023).



Child running through the streets of Steenbokpan, a community on the outskirts of Medupi Power Station. Photograph by Daylin Paul



4. THE IMPACTS OF THE FINANCING TO MEDUPI ON THE SURROUNDING COMMUNITIES

The overall picture painted by interviewees sheds light on the complex and multi-faceted impact of Medupi. It reveals a spectrum of challenges including a range of negative environmental, social and economic outcomes, significant gendered socio-economic impacts which compounded existing inequalities, a lack of adequate consultation and engagement between the IFIs/DFIs and the affected communities, and an overall failure to plan for the extensive repercussions on local infrastructure of locating the Medupi megaproject in Lephalale.

What follows is an amalgamation of the reflections and experiences shared with the researchers by the interviewees, anonymised and grouped together under appropriate categories. These categories are: consultations and engagements; impacts on infrastructure and basic service delivery; environmental and health impacts; gendered socio-economic impacts; and impacts on traditional community life and livelihoods.

4.1 CONTEXT FOR THE IMPACTS: CONSULTATIONS AND ENGAGEMENT WITH THE COMMUNITIES

Consultation and engagement with communities are essential for responsible and sustainable project development. By involving the community in the decision-making process, financiers and developers can address concerns, ensure that the community feels heard and included, build trust, and ensure that the project aligns with the needs and aspirations of the people it will impact, leading to more successful and mutually beneficial outcomes for all stakeholders.

In the interviews, some community members shared their experiences of consultations and engagements with representatives of the developing authorities of Medupi, including the Local Municipality, Eskom and the World Bank. While each interviewee's account was unique, a collective narrative of dissatisfaction and concern emerged.

For the interviewees, their approach to how Medupi has impacted their community is always framed by this question of engagement at all stages of the development, construction and operation of Medupi; whether they were consulted prior to the development; if so, to what extent they were provided with all relevant information; and whether they have been able to engage directly with the role-players once Medupi became operational. Such consultation and engagement is thus crucial to an understanding of the full range of impacts, and is particularly why so many interviewees feel so disempowered by their failure to attract any attention to the scale of those impacts or, in fact, resolve them adequately.

CONSULTATION PRIOR TO THE DEVELOPMENT OF MEDUPI

Throughout the interviews, the sentiment of feeling unheard and excluded from decision-making processes was consistently voiced by the community members. One resident expressed her disappointment with what she perceived as tokenistic consultations, when consultation did take place. She was of the opinion that these sessions appeared to be orchestrated to give the illusion of community involvement, but in reality, the attendees were handpicked, leading to a lack of genuine representation of the broader community: “consultation was like only politicians coming. . . they’ll choose from the people they want”. This sentiment was echoed by other residents in their own interviews.

The interviewees reflected that any community engagements which were conducted prior to the development of Medupi were limited in scope and information and were accordingly inadequate. While there is an acknowledgement that some community members did engage the IFIs/DFIs and Eskom in the first phases of the project, those who participated in those engagements felt that this was a “tick box exercise” rather than any meaningful attempt to engage with the communities; the community members were not sufficiently informed of the scope of the project, but merely assured that it would change Lephalale for the better and that “Lephalale would be the new Cape Town”.⁵² Their experience was that information which was distributed at these consultations focused on the positive potential benefits of Medupi to the surrounding communities, with an emphasis on job creation, tourism and development.

Another sentiment from the interviews was a sense of being deceived, as the community felt that there were no warnings or disclosure of the potential shortcomings and harmful impacts that Medupi could bring to their communities.

Other interviewees confirmed that the only consultations they were aware of had been held at the monthly Traditional Council meetings, from which women are excluded.

Ultimately, the interviewees felt that any consultations which had occurred had left the communities ill-prepared and under-resourced to deal with the ultimate changes which Medupi brought to their lives.

The apparent absence of meaningful engagement left the community members feeling that they were without a voice in decisions that significantly impacted their lives, and feeling silenced, with no avenue to express their concerns and aspirations. Their enduring feeling is one of disempowerment and disenfranchisement.

⁵² This was understood by the interviewee to mean that Lephalale would be developed to match the urbanisation, infrastructure and attraction to tourists that Cape Town exhibits, painting a picture of a burgeoning economy from which all community members could benefit.

ACCESS TO MEDUPI DURING CONSTRUCTION AND EARLY OPERATION

The interviewees noted that the advent of Medupi brought hopes of job opportunities. Once construction at Medupi began, 'community information centres' in the form of containers and purportedly operated by Eskom were placed at different communities surrounding Lephalale. In practice, these information centres served only as a collection point for community members to drop their *curricula vitae*, in the hopes of securing employment opportunities at Medupi.

However, many locals struggled to secure employment, even when applying with qualifications. The interviewees shared their frustration at what they perceived to be a pattern of hiring people through political connections, often overlooking qualified applicants. This, they reflected, appeared to them to have entrenched the amount of corruption and nepotism in their communities, to the detriment of those who are not politically connected.

"[T]he people who are working [at Medupi] are not even from here, and even those who are from here got in through connections. No matter how much you are going to school, no matter what you do, you still won't get the job if you are not connected."

"Medupi is offering some opportunities. It can be job opportunities, training opportunities. But what I can tell you is that, in Lephalale, everything must be passed by the Municipality. Remember Municipal things [are] being [run] by politicians . . . so when Eskom, Medupi comes with opportunities . . . the politicians take those opportunities and run with them to the community to say 'we as the ANC or we as the DA or we as the PAC have these opportunities for you'. . . they are campaigning using Eskom, Medupi opportunities."

In 2019 however, it appears that the recruitment for Medupi was centralised at the Local Municipality's offices.

THE STATUS QUO

With the centralisation of the recruitment for Medupi to the Local Municipality, the 'information centres' in each community were closed. This presented its own set of challenges and exacerbated the inaccessibility of authority figures to the community, as the Municipality offices are located only in Lephalale town.

Interviewees reflected that this has also caused increased confusion around how to engage with Eskom and the managers of Medupi; there is practically no contact point or formal forum for the affected communities to consult with those operating Medupi and affecting their lives.

“The biggest problem is how to get Medupi to recognise us . . . as we fall under their ward. Without them knowing what we need, I don’t think there is any help that we can get.” – interviewee living in Steenbokpan

This left one of the interviewees feeling despondent and disengaged, and they reflected that they have no hope of ever being employed at Medupi. This lack of access to employment opportunities at Medupi permeates all of the interviewees’ disappointment with the megaproject; they feel that the significant disadvantages it has brought to their communities would be ameliorated if it could simultaneously offer some economic relief and opportunity to the affected communities.

“We have children that matriculated . . . and all of them are now sitting at home. There are no jobs, there is nowhere to take them. We can’t talk to Medupi, maybe they would give us bursaries, but because there is no way to talk to them, that is the problem.”

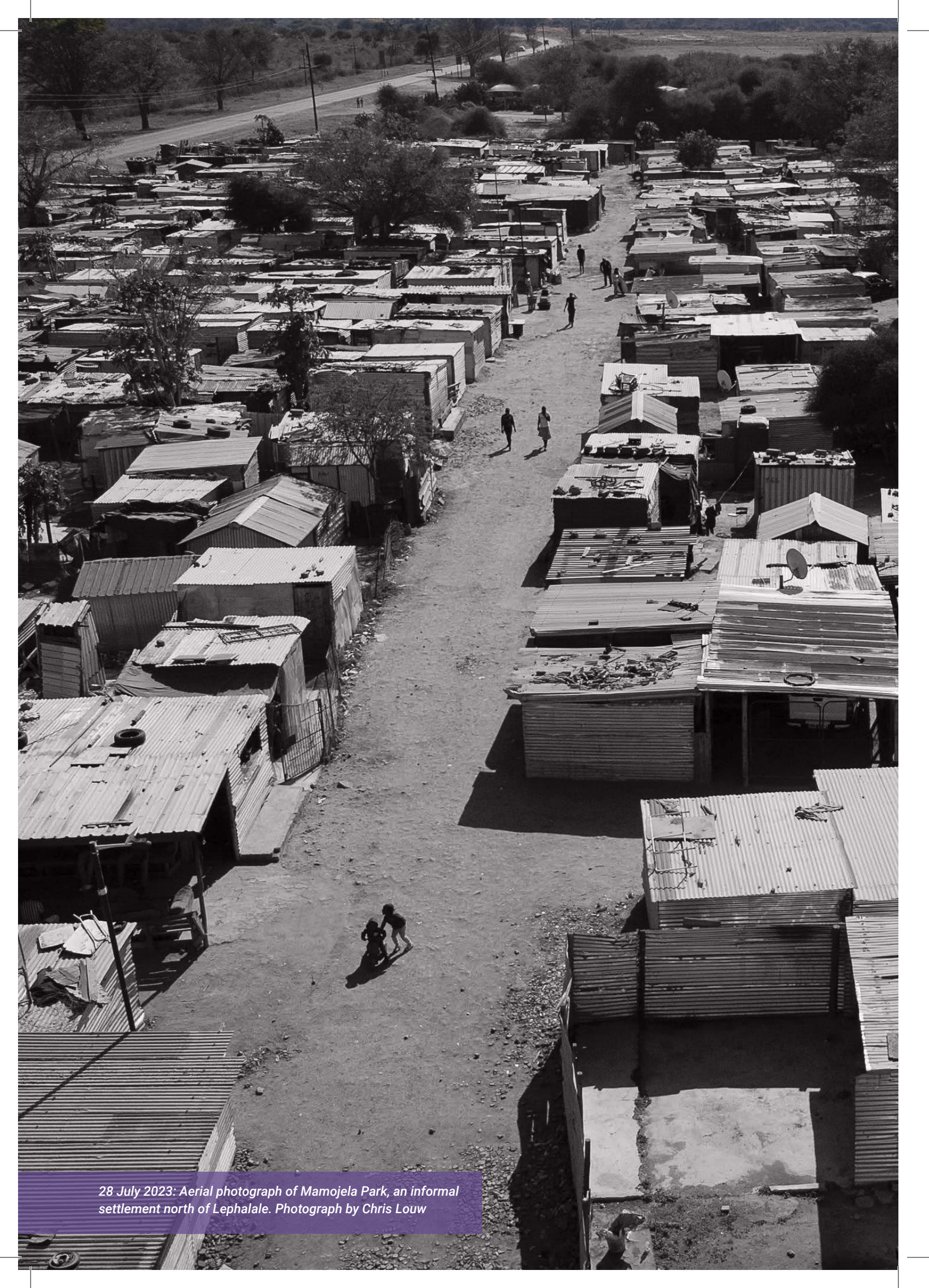
Another interviewee noted that where local women are employed at Medupi, it is usually in lower-paying, precarious contract positions as cleaners or security guards.

One interviewee noted that a by-product of this absence of any formal forum for engagement with Medupi is that community members feel hesitant to voice complaints directly to Eskom or Medupi management, as there is a perception that criticizing these entities might jeopardize either job opportunities or personal safety. Therefore, during the few opportunities to engage with decision-makers, there are still limitations regarding the effectiveness of these engagements, and fear becomes the prevailing theme.

A different interviewee echoed this sentiment, emphasizing how those who speak up against Medupi are perceived as being against the project itself.

“When I went to the forum . . . they said ‘no, here we have traitors. We must deal with traitors’. This word scared me. I ran for my life. It was raining and I ran for my life.”

Recognised environmental activists are thus the primary voice for amplifying community concerns.



28 July 2023: Aerial photograph of Mamojela Park, an informal settlement north of Lephalale. Photograph by Chris Louw

4.2 IMPACTS ON INFRASTRUCTURE AND BASIC SERVICE DELIVERY

Interviewees were at pains to emphasise the far-reaching impacts on local infrastructure and service delivery of locating Medupi near their communities. In short, it was always expected that many contractors and job seekers would move into the area when the construction of Medupi began, and this is indeed what transpired.

Despite this, it is apparent that when planning for the development and construction of Medupi, the IFIs/DFIs which financed Medupi and Eskom to which the financing was allocated had failed to consider the state and capacity of local infrastructure to accommodate the megaproject. Likewise, the Local Municipality does not appear to have either developed new infrastructure or bolstered existing infrastructure in advance of the construction of Medupi, or properly planned for the increase in service delivery which was needed to cater to the growing population.

"[T]he poor Municipality . . . was not geared for the influx of people, and on district and provincial and national level, all the politicians have their mouths full that Lephalale is going to be the . . . first green city, it is a new hub in Limpopo, it is this, it is that, but they never spent a cent [in] support to our Municipality."

All surrounding communities have thus experienced some degree of dilapidated or non-existent infrastructure, made worse by the influx of people into the area which overwhelmed the system. This impact has many repercussions.

ROAD AND TRANSPORT SYSTEM

This issue encompasses the roads in the area, which were apparently not upgraded nor reinforced to ensure that they could handle the increased influx of trucks and large vehicles required for Medupi's construction and operation. The interviewees noted that the road system servicing the communities around Lephalale is accordingly dilapidated and often crumbling, while heavy duty vehicles continue their travel to and from the area.

The interviewees expressed that this failure to upgrade the road infrastructure despite increasing heavy-duty vehicle traffic has made the roads much more dangerous for those using them, whether in vehicles or as pedestrians; even in the quieter communities it is felt that the road system is overloaded, traffic is too heavy and road safety is undermined.

DELIVERY OF BASIC MUNICIPAL SERVICES

It incorporates the delivery of basic municipal services. At the outset, the interviewees note that local infrastructure has never been upgraded – or even constructed where it still does not exist – to accommodate the influx of contractors and job seekers drawn by the promises made about an economic boom flowing from Medupi. The water, sanitation and electricity delivery systems which were never adequate for the communities living in the area are now grossly under-capacitated, with most residents making do in the absence of government services.

Water

Water scarcity and a lack of adequate water infrastructure was the biggest issue highlighted by the interviewees, an issue which predates Medupi.

“Our main issue is water. We can go for up to a week without water, unless you have a private borehole. Even before Medupi.”

Most communities do not have any form of water infrastructure, or at best rely on communal pumps located some way from their houses. Many interviewees acknowledged that they often have to rely on scarce rainwater, as even existing systems are susceptible to failure – even the communal taps will quickly dry up. Others are compelled to either install self-funded water infrastructure themselves or pay their neighbours for access to self-dug boreholes, to avoid travelling long distances to collect water.

Where water infrastructure does provide piped water, it is often dirty and needs to be boiled before use. There are reports of it turning brown when it has been stored for days, and being salty. Others spoke of the water being so filthy that it is sometimes not even possible to bath. Piped water is also often cut off without warning, disrupting daily life and causing children to be sent home from schools, disrupting their education.

Where fresh, clean water was once available, it is now polluted due to overuse and crowded informal settlements relying on it in the absence of formal infrastructure, such as the Steenbokpan spring which was highlighted by one interviewee as now serving as a dumping ground.

Notably, gathering water for the home has a particular gendered effect, with the interviewees recognising that it is most often the women and girl-children’s responsibility to fetch water from the nearest source and bring it home. This is often done in the early mornings, rendering them vulnerable to sexual harassment and exploitation.

Many interviewees expressed confusion at how the extensive construction of Medupi as a water-hungry power station failed to take in account the existing water shortage in the area, or consider the effect of Medupi's coming online on surrounding communities, many of which rely on backyard gardens to allay food insecurity. They feel that their scarce water supply is prioritised for Medupi's use, at their expense.

Sewage

An interviewee located in Marapong described the sewage system as “a disaster”, with dilapidated pipes and sewage flowing through the streets.

The interviewees from the more rural communities, such as Shongoane and Ga Seleka, noted an enduring absence of sewerage infrastructure in their communities. These hardships serve to worsen an already difficult life made increasing unbearable by the intersection of Medupi's impacts.

Electricity

It is particularly painful to the interviewees that their communities remain without electrification, despite the size and capacity of Medupi being on their doorstep. This pain is exacerbated by the extensive negative effects which they have felt that Medupi introduced in their lives.

In one shocking example, a sports field in Marapong was built with six large floodlights to ensure safety and provide the community with an extracurricular outlet. The floodlights have however never been connected to the electricity grid, and so stand as a stark reminder of the area's failed service delivery.

HOUSING INFRASTRUCTURE

The interviewees who are residents of Marapong, the community located closest to Medupi, noted that the housing shortage which emerged shortly after the development of Medupi began, initially proved to be a money-spinner for the residents of Marapong. Those with houses and land quickly built additional rooms to rent to contractors and job-seekers, and were able to make a comfortable living while construction was ongoing. However, once construction was finalised those rooms quickly emptied as the monied contractors moved elsewhere, leaving the residents despondent and without further economic opportunity. A short drive through Marapong's main streets tells this story first-hand, with crumbling dirt roads leading to derelict houses which clearly stand unoccupied.

In other communities, the housing shortage resulted only in denser informal settlements which continue to spring up as increasingly more job-seekers moved to Lephalale.

Lephalale's aging infrastructure quickly buckled under the pressure of the influx of new residents, demonstrating an inability to plan by the Local Municipality, and a broader failure by the IFIs/DFIs to

consider the development of Medupi in a holistic, sustainable manner, rather than as a ring-fenced, isolated megaproject.

EDUCATION INFRASTRUCTURE

Each interviewee highlighted the shortage of tertiary education and technical skills training institutions in the area, which would assist the surrounding communities to upskill and thus qualify for jobs at Medupi. There is only one Technical and Vocational Education and Training (TVET) college in the Local Municipality area, despite a clear need for the skills taught at such institutions to be widespread in order to obtain employment at Medupi.

This perpetuates the cycle in terms of which workers from other areas are attracted to Lephalale for work, and they are preferred for any available jobs due to their higher skills level.

HEALTH INFRASTRUCTURE

Like with educational facilities, the health system in the area is simply overwhelmed and under-capacitated. This was worsened by the Covid-19 pandemic, which interrupted access to non-urgent services and overloaded the system with Covid-19 patients.

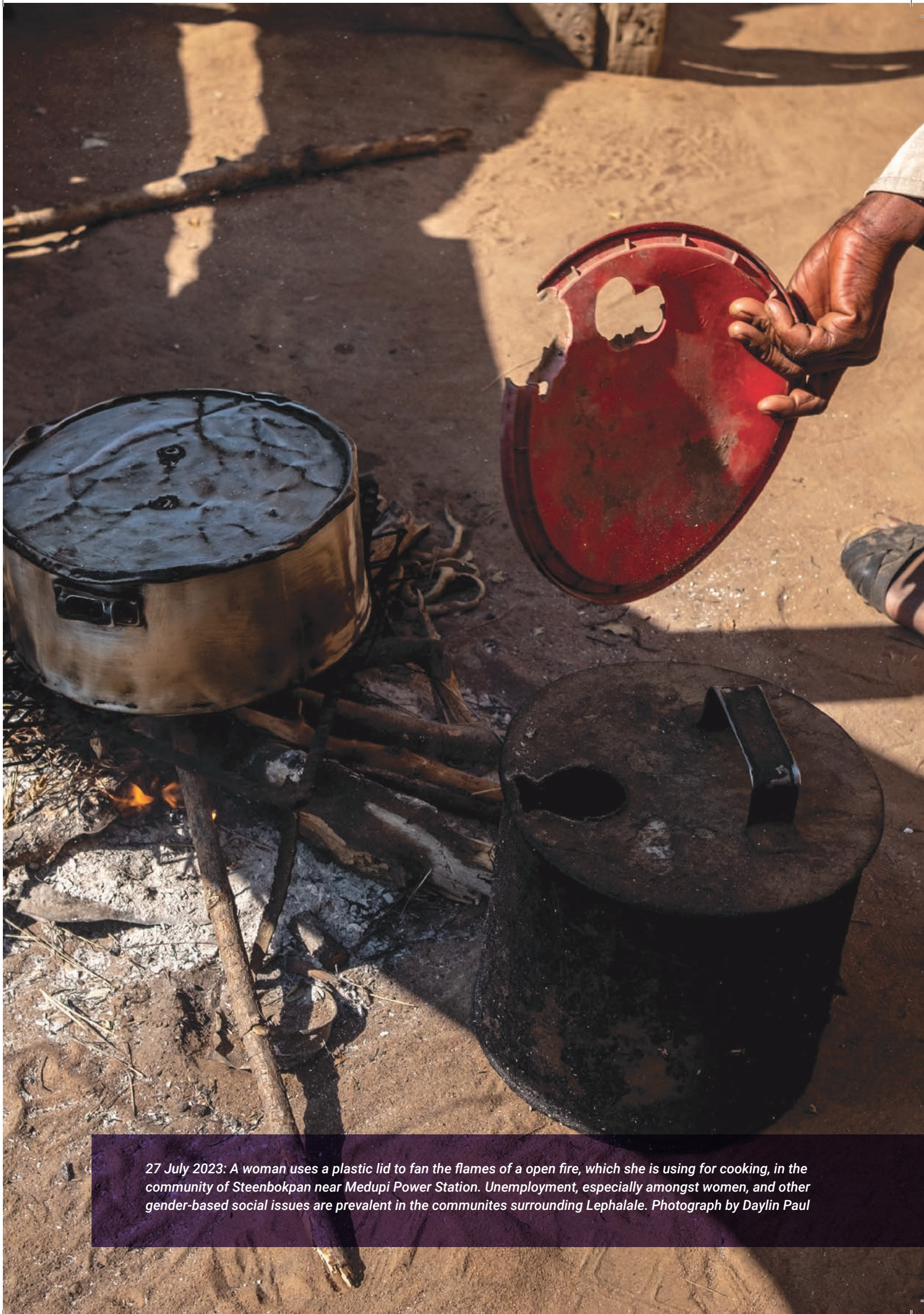
CONCLUSION

Each of these infrastructure impacts is an ongoing and worsening crisis; as the overwhelmed system continues to crumble, it becomes increasingly susceptible to further breakdowns. There appears to be no indication that the Local Municipality is capacitated to address any of these issues. For the interviewees, this underscores their perception that the needs of Medupi are prioritised at their expense.

In summary therefore, interviewees reflected that the Local Municipality was not capacitated – whether financially, with resources or in terms of development and planning assistance – to handle an additional megaproject within their jurisdiction.

Importantly, the collapse of Lephalale's infrastructure had significant secondary effects on the socio-economic standards of the communities surrounding Medupi.





27 July 2023: A woman uses a plastic lid to fan the flames of an open fire, which she is using for cooking, in the community of Steenbokpan near Medupi Power Station. Unemployment, especially amongst women, and other gender-based social issues are prevalent in the communities surrounding Lephalale. Photograph by Daylin Paul

4.3 ENVIRONMENTAL AND HEALTH IMPACTS

While recognising that Matimba and Grootgeluk existed in the area prior to Medupi's construction, and thus likely contribute to the issues being experienced, the interviewees noted that the environmental and health issues being experienced were clearly exacerbated by the construction of Medupi, both directly and indirectly.

AIR POLLUTION

An overarching complaint was that Lephalale does not have its own air quality office, with the nearest office being located almost two hours' drive away in Modimolle. This is despite the heavy polluting megaprojects which exist in Lephalale in such close proximity to many communities. As such, the actual scientific impacts of Medupi on the air quality in Lephalale cannot be reliably assessed, which in turn precludes the Municipality from having to address such complaints. The communities have raised this issue with the Municipality in discussions around the municipal Integrated Development Plan, to no avail.

Interviewees noted that dust in the area from the ash burns (a bi-product of the power station's operations) is a reality of daily life, polluting their homes and gardens, and even rainwater. Rainwater must be boiled before use to rid it of polluting ash particles, and extra water is always needed to clean dusty surfaces. This is often accompanied by a sulphuric ("spoilt egg-like") smell in the area and visible cloud pollution which is worse in the early mornings and late evenings and which seems to emanate from Medupi.

"Sometimes you get a sharp headache; a headache that is so strong it won't go away even if you drink medication."

Despite what appears to the interviewees to be objective and in their view indisputable proof of the polluting effects of Medupi, they reflect that Eskom has consistently denied the problem or that Medupi is its cause.

An enduring frustration of the interviewees is how, when they complained to Eskom about the air pollution in about 2021, they were told that this was caused by the communities' own cooking fires, or *chisa nyamas*, rather than the massive, polluting megaproject in their backyard. This was perceived by the communities as an insulting slight from a disinterested state which saw them as mere collateral in a greater economic project, and validated their feeling that Eskom does not care about the affected communities.

CHANGING CLIMATE

The interviewees also tie the construction and operation of Medupi to an acceleration of the changing climate in the area, with a noticeable increase in temperature, drought, and irregular rain patterns. Lives and livelihoods which have been dependant on an unchanged climate for decades, have been uprooted as a result.

OVERARCHING HEALTH ISSUES

The air pollution is particularly acute in Marapong, which is located closest to Medupi. An interviewee who is a resident of Marapong reflected that their children have developed issues with their eyesight, which health practitioners have been unable to identify.

Each of the interviewees was quickly able to recount how a family member or neighbour suffers from respiratory disease or infection, which they attribute to pollution emanating from Medupi. Interviewees noted that there is an increase in the number of community members suffering from tuberculosis and cervical cancer, both of which they attribute to the environmental impacts of Medupi.

"We do not benefit anything from Medupi, the only thing we get is diseases."

Furthermore, the view expressed is that any other underlying health conditions are exacerbated by the air pollution, with the effect being much weaker communities all round. This must be viewed alongside limited access to healthcare, funding and specialists, making it difficult to receive proper or consistent medical attention.

4.4 GENDERED SOCIO-ECONOMIC IMPACTS

It has always been clear that the impacts of the financing to Medupi on the surrounding communities are not isolated under each of these themes; rather they are cross-cutting and operate alongside one another. This is particularly so for the gendered nature of those impacts, as it is well-known that women, sexual minorities and gender-diverse persons are often the most vulnerable to the impacts of any negative occurrences.

With this in mind, the interviewees were quick to highlight the overwhelming effect that the influx of contractors and job-seekers moving into the area once construction of Medupi began had on the social and economic structures of life in their communities.

Prior to Medupi, the communities' socio-economic profile had been typical of most rural South African towns and villages; quiet, underprivileged and largely unchanged for decades. However, the influx of moneyed contractors who were well-compensated for their work on Medupi changed things fairly quickly.

Existing residents quickly realised that they had to compete with the arriving contractors for Medupi's limited employment opportunities, most often losing out due to a lack of education and skills training. Everyone was compelled to fight for limited resources and opportunities.

As detailed above, in the absence of any new housing developments to accommodate the contractors working at Medupi, they sought accommodation within the surrounding communities, often in rooms or backyards constructed quickly to capitalise on this need. Most of these contractors were single men or men whose families lived elsewhere (as is typical for migrant workers), who sought companionship from the women of the surrounding communities. The interviewees reflected that these contractors could offer money and an exciting "fast" life with cars, alcohol and drugs, which was all new to the women and girls of Lephalale, and thus very attractive.

"The effect was too much. Like it was a busy place, a lot of people. The mindset of the people was like here we are going to make business . . . some people opened up their homes to rent to the contractors, some opened shops, some opened small businesses to sell alcohol."

An interviewee who had been in high school in the 2010s recalled that many schoolgirls were caught up in this excitement, becoming sexually active and practicing risky sexual behaviour in exchange for gifts, money and companionship. Contractors would 'date' multiple partners at once, and play them against one another. Many such young girls fell pregnant and elected to leave school before completing their certificates or obtaining the skills necessary to support themselves. This left them reliant on their partners for financial support, further entrenching the economic disparity and, in turn, their vulnerability.

This wave of change exacerbated what the interviewees referred to as "social ills", which had always been present in their communities albeit at much lower levels. These include underage drinking, drug and alcohol abuse, sexually-transmitted diseases, teenage pregnancy and gender-based violence and harassment. Risky sexual practices were entrenched through enduring stigma around HIV/AIDS and anti-retroviral usage, despite sex education being introduced in the local schools.

These ills were all further exacerbated by the power dynamics which developed between the moneyed contractors and their economically dependant, often younger local partners. The risk of gender-based violence increased when the contractor lost his job, feeling entitled to the partner they were previously supporting financially but no longer able to provide the life they had once offered.

Sex work also increased in the communities, no doubt to service the increasing need emanating from the contractors.

The interviewees acknowledged that almost every family's life was somehow disrupted in these ways. They felt that the streets of their communities had become unsafe places for women and children, particularly girls. There was a sense that this had corrupted their – likely romanticised – quiet, rural lives.

“Life since Medupi is worse, even the price of food. Before, things were cheaper. Now you have to spend; it's all about money.”

However, this was not to last. Once the construction of Medupi was complete, the contractors moved on, leaving the original community behind to deal with the whirlwind they had introduced. This included women and girls whom they had partnered and fathered children with, now left to raise those fatherless children without financial or emotional support. Those women and girls had not previously worked, and now needed to find employment in a contracting local economy and in the absence of skills. They often turned to sex work or other piecemeal economic opportunities, whatever was available, especially given the perceived politicised nature of jobs at Medupi itself, from which they are largely excluded. In turn, their children are raised in precarious environments, rendering them susceptible to drugs, crime and abandonment of education.

Interviewees reflected on the profound mark that Medupi's development has left on their social structures and family units, eroding their traditional values and family systems.

4.5 IMPACTS ON TRADITIONAL COMMUNITY LIFE AND LIVELIHOODS

While Onverwacht, Marapong and Lephalale are today urban settlements, communities in Shongoane and Ga Seleka remain largely rural. For decades, they had maintained their harmonious rural lifestyles, being reliant on subsistence farming on the land which they owned around their homesteads, and essentially being self-sufficient.

IMPACTS ON SUBSISTENCE FARMING AND FOOD SECURITY

The communities had historically relied on self-cultivated crops which were abundant, with surplus produce being sold for profit. However, the construction and operation of Medupi appears to have changed the options available to such communities, with many interviewees reflecting that their crops are no longer sufficient to feed their families. They attribute this both to changing weather patterns (such as less rain in an already water-scarce area, and greater heat) and air pollution which has impacted their soil's fertility, both of which they believe emanate from Medupi.



27 July 2023: A young woman takes her washing off the line in the community of Shongwane near Medupi Power Station. Unemployment, especially amongst women, and other gender-based social issues are prevalent in the communities surrounding Lephalale. Photograph by Daylin Paul



With increasing food insecurity, greater numbers of young persons in these communities moved to the urban areas to seek work and livelihoods. As this was happening alongside the influx of contractors and job-seekers from further abroad, it fed into the broader infrastructure issues highlighted above. However when the contractors moved away once construction was complete, these locals stayed behind.

“Before [when] we used to stay at the farms, [life] was better than now. . . At the farm, we used to plough. Life was difficult then, but it was better than now. Now we are staying at a place we can’t do nothing. We are not working. This is the problem. There is no income that we are getting. We can’t grow our own food, you have to buy. Where do we get money to buy?”

The interviewees acknowledged that the subsistence farming which does continue in these more rural communities is now almost exclusively left to the older generation, with few youths showing interest in these traditional farming practices. Many plots of land lie fallow, either in an attempt to rejuvenate the soil or otherwise because attempts to cultivate that land have simply been abandoned.

ACCESS TO GRAVEYARDS AND CULTURALLY SIGNIFICANT SPACES

A well-recorded impact of the construction of Medupi on the selected land relates to culturally significant communal spaces located therein.

When the Medupi compound was demarcated, it became apparent that the land concerned included the graveyards of several families, with many of those families’ survivors today living in Steenbokpan.

This issue was raised by those families in initial consultations with the IFIs/DFIs and Eskom, to no avail. When the complaint detailed above was laid with the AFDB’s IRM, much attention was given to this issue. Ultimately the resolution was that a ‘memorial site’ was erected by Eskom and the Banks as a surrogate space of commemoration, while some (but not all) affected families were offered compensation for their loss.

“We have experienced a lot of loss since the construction of Medupi. We have lost graves. Even now, we do not know where these graves are.”

The interviewees who are members of the affected families were adamant both that the 'memorial site' erected is insufficient to satisfy their cultural needs and practices, and that not all affected families were included in the compensation process. This matter continues to sow division in the community.

Families now cannot access their graveyards, whether to honour their dead and mourn their loved ones, or to perform significant cultural rituals related to their ancestors. This has ongoing repercussions for the communities, with one interviewee telling the following story of a neighbour: He is afflicted with an illness that Western medicine cannot heal, and has been advised by his traditional healer that he needs to consult with his ancestors in order to heal. He cannot do so, as the site of that consultation would be at his family's graveyard, which is within the Medupi compound and thus cannot be accessed. His life is at stake, and the fact of Medupi is precluding him from accessing relief.

4.6 CONCLUSION

Ultimately, an overwhelming majority of the interviewees indicated that their lives and those of their communities were negatively impacted by the overall Medupi project. This is no doubt exacerbated by the excitement generated by discussions around the advent of the project, and the promises made then of economic development and sustainable employment for all affected communities that remain largely unmet.

This flies in the face of the purported intention of development finance and major infrastructure projects, being to stimulate economic growth and social development.

5. RECOMMENDATIONS

As detailed above, while the scope of the research did not allow for the researchers to draw definitive causal conclusions on the various impacts of Medupi on surrounding communities, the lived experiences of the affected communities are clearly both wide-spread and serious, affecting every aspect of community life and livelihoods. Addressing these challenges requires a comprehensive approach that ensures transparency, accountability, and equitable access to resources and opportunities for the communities.

The researchers thus find it appropriate to make the following recommendations to the relevant role-players, which we believe can assist in addressing and redressing the impacts detailed above.

RECOMMENDATIONS TO THE RELEVANT IFIS AND DFIS⁵³ WHICH PROVIDED FINANCING FOR THE VARIOUS ASPECTS OF THE DEVELOPMENT OF THE MEDUPI POWER PLANT:

When devising a megaproject such as Medupi, the IFIs and DFIs must work together with the local authority (at both national and local level) to ensure that there is adequate planning and financing of infrastructure development, capacitation and service delivery to accommodate the expanding economy which flows from the megaproject.

Free, prior and informed consent of affected communities must be obtained before any megaproject is undertaken and must be embedded into IFI and DFI policies – any consultation with affected communities which is undertaken prior to the development and construction of a megaproject must furnish those communities with both positive information and advise them of the potential shortcomings and harmful impacts of the megaproject.

IFIs and DFIs must ensure that their policies align with international environmental and human rights standards and best practices, and must make their policies and processes publicly available and accessible.

The IFIs and DFIs must urgently seek to work together with Eskom and the Lephalale Local Municipality to engage the surrounding communities in a permanent, formal and representative forum that serves to allow community members to raise the full scope of the issues detailed above.

The IFIs and DFIs cannot consider their agreements with Eskom to have lapsed until the required flue gas desulphurisation technology has been fitted at Medupi and is fully operational, as per their agreements. Eskom's failure to comply with this commitment under those agreements should be addressed as a matter of urgency.

⁵³ Namely: The African Development Bank; the World Bank; and the New Development Bank.

RECOMMENDATIONS TO ESKOM

When constructing a power station, Eskom must ensure that the surrounding communities' needs are prioritised and that such communities are electrified.

A community engagement forum must urgently be set up by Eskom and Medupi management, with monthly meetings allowing for representatives elected by the surrounding communities to raise, discuss and (along with Eskom and Medupi management) seek to address issues which arise.

The advertising and recruitment of employment opportunities at Medupi must be centralised, transparent and accessible for all job seekers, including members of the surrounding communities. In turn, this will ensure that any corruption and nepotism in access to employment within Medupi is undermined.

Medupi must urgently be fitted with the flue gas desulphurisation technology for which the NDB has provided finance.

Eskom should consider partnering with the local education department to offer bursaries and training to youth from the Lephalale area, to ensure that the affected communities are able to benefit directly from Medupi through employment there, in turn ensuring the longevity and sustainability of both Medupi and the surrounding communities.

Eskom must work with the families whose graveyards are located within the Medupi compound, to ensure regular access thereto in fulfilment of their communal and traditional cultural rights.

RECOMMENDATIONS TO THE LEPHALALE LOCAL MUNICIPALITY

The infrastructure in the area – including roads, sewage, water and electricity – must be urgently upgraded to ensure that all communities are able to live in dignity and access their human rights.

The shortage of dignified housing in the surrounding communities must urgently be addressed.

Addressing any corruption and nepotism which exists in accessing employment across the Municipality – and particularly at Medupi – is crucial, as greater employment rates will empower the surrounding communities and create sustainable opportunities for skills development and lasting employment, ultimately fostering a brighter future for all.

RECOMMENDATIONS TO THE NATIONAL GOVERNMENT OF SOUTH AFRICA

A holistic approach to development through megaprojects requires that the potential socio-economic impacts of the construction and operation of the megaproject must be considered and planned for at national government level. This includes the recognised effects of rapid urbanisation and an influx of money into poor communities, with attendant gendered impacts.

An action plan must be developed to outline the processes which ensure that all IFI/DFI-financed infrastructure development is undertaken in a holistic manner, which requires community and local government-level engagements with the relevant Banks both at the planning and implementation stage of such projects, to ensure adequate local preparation and capacitation prior to the construction of such projects.

The Lephalale Local Municipality must be capacitated and properly financed to ensure that it can address any infrastructure deficiencies including, where necessary, the construction of new infrastructure and upgrading of existing frameworks.

An air quality office must urgently be established within Lephalale itself – the town cannot rely on an office located over two hours' drive away.

The Department of Forestry, Fisheries and the Environment must ensure that entities operating projects with significant environmental impacts are compliant with their licenses and with South Africa's environmental and air quality legislation and the minimum emissions standards contained therein.

The limited educational opportunities and skills' training available to the communities surrounding Medupi must be addressed – the location of a megaproject should result in economic development for affected communities through sustainable employment, which is premised on education and training opportunities.

Back cover: A memorial to those whose bodies remain buried under the grounds of Medupi Power Station. The monument, though small, is guarded by two security officers. Photograph by Daylin Paul



*Family of warthogs under power pylons from one of the two coal-fired power stations hosted in the city of Lephalale.
Photograph by Daylin Paul*

IN MEMORY OF THOSE WHO WERE BURIED AT MEDUPI
POWER STATION WHOSE GRAVES COULD NOT BE LOCATED
WHOSE SPIRITS WERE BROUGHT TO REST HERE:

NAME	DOB	DOD
ANTON MAGOAI	*1930's	
NONYONKO MAGOAI	*1930's	
MOSES LETSEBE	*1935	+ 1940
SANA LETSEBE	*1939	+ 1942
BABY LETSEBE (TWIN)	*1940's	
BABY MOLESIWA (TWIN)	*1950's	
BABY MOLESIWA (TWIN)	*1950's	
BABY MOLESIWA	*1950's	
BABY MOLESIWA	*1950's	
IRANS MAROPOLA	*	
JAN MAROPOLA	*	+ 1944
JOHANNA MOATSHE	*1965	+ 1944 + 1969

WHO JOINED THOSE WHO WERE ALREADY INTERRED HERE:

MOTLOGELOA MMAAPI PAULINA
MAGOAI RAMASHOTONG JAN
LEOLA MMAAPI
MAROPOLA RADINONYANE DANIEL
JOHANNA MOATSHE

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African Climate
Reality Project



Centre for
Environmental Rights
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