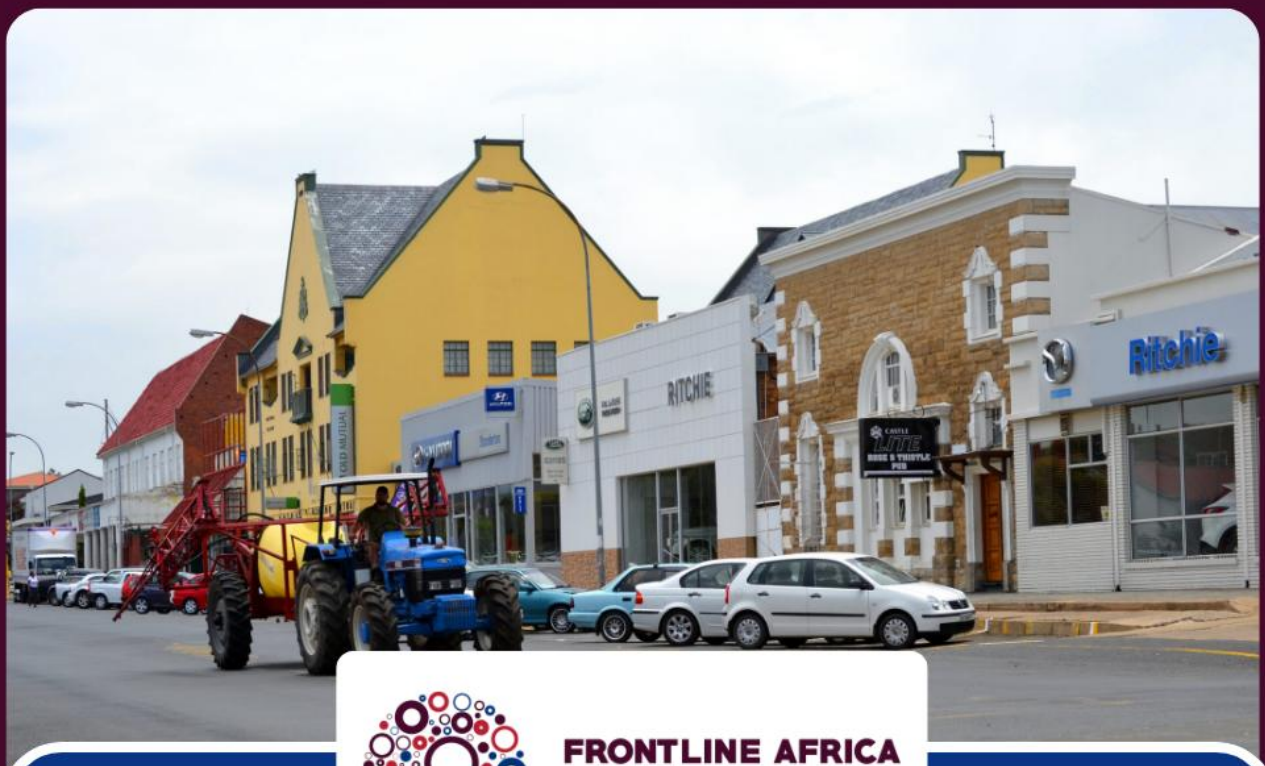

FRONTLINE AFRICA ADVISORY

The Impact of De-Industrialisation on Economic Decline and Social Resilience in South Africa's Small Towns:

Case Studies of Lichtenburg (North West) and Komati in Middelburg (Mpumalanga)

A FRONTLINE AFRICA ADVISORY RESEARCH PAPER

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

De-industrialisation refers to the sustained decline of manufacturing employment and output in an economy. It involves a structural shift away from anchor industries, often driven by technological change, global competition, and policy shifts, and typically resulting in social and regional economic consequences.[1] South Africa offers numerous and well-documented examples of this phenomenon.

The country's secondary towns have historically played a critical role in the national economy (see Figure 2). The country's economic "golden age" (1950s-mid-1970s) was driven by state-led industrialisation and fostered heavy industry and manufacturing growth, transforming these towns into industrial hubs anchored by the Minerals-Energy Complex.[2] Figure 1 analyses the scale and character of South Africa's economic transformation over the past century, showing data on the Gross Domestic Product (GDP) and its sectoral composition.

Figure 1 illustrates manufacturing's rise during state-led industrialisation (peaking at about 25% of the GDP in the early 1980s) and subsequent decline to approximately12% by 2023, reflecting premature de-industrialisation. Pre-1960 estimates from Boshoff & Fourie (2020) and the 1960-2023 from World Bank World Development Indicators.

The role of secondary towns in connecting rural production networks to national value chains and providing employment and services for large hinterlands remains indisputable. Over the past decade, however, many of these towns have experienced severe de-industrialisation and accelerating population decline.

This paper examines Lichtenburg (North West province) and Komati (Mpumalanga province) as case studies of industrial collapse, applying three analytical frameworks: a) Marshallian Development

[1] See Barry Bluestone and Bennett Harrison (1982). *The deindustrialization of America*. New York: Basic Books;

Robert Rowthorn and Ramana Ramaswamy (1997). **"***De-industrialization: Causes and Implications".* International Monetary Fund, *Working Paper* 97/42;

Ben Fine and Zavareh Rustomjee (1996). *The Political Economy of South Africa: From Mineral-Energy Complex to Industrialisation. New York: Hurst & Co and Westview Press;*

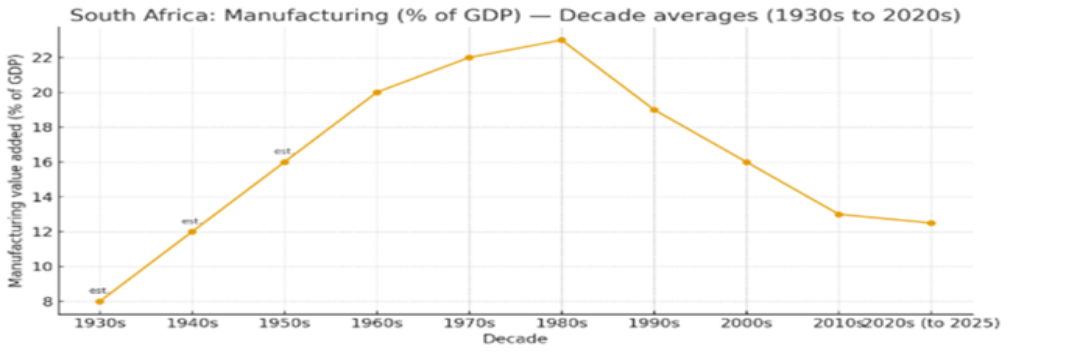
John Palmer (1972). *"British Capitalism, Workers and the Profits Squeeze"*. International Socialism (1st series), No.53, October-December 1972, p.40.;

Michael J Piore and Charles F. Sabel (1984), *"The Second Industrial Divide: Possibilities for Prosperity"*. *Faculty Books*.171. https://scholarship.law.columbia.edu/books/171.

[2] The Minerals–Energy Complex (MEC) is a key concept in understanding the structure and evolution of South Africa's economy. It comes from political economy literature (notably Fine & Rustomjee, 1996) and describes how mining and energy became the core, interconnected drivers of economic development.

Theory,[3] b) the Tripartite Social Resilience Framework[4] and c) the District Development Model (DDM) to understand decline dynamics, address the socio-economic impacts of de-industrialisation, and propose integrated recovery strategies. This paper contributes by linking de-industrialisation, municipal governance failure, and social resilience into a single place-based analytical framework.

Figure 1: South Africa's Manufacturing Share of GDP: 1930s – 2020s (author's construction).[5]



[3] The Marshallian Development Theory refers to ideas about economic development derived from Alfred Marshall, the British economist (1842–1924), whose work laid the foundations of modern microeconomics. While Marshall himself didn't create a formal "development theory," economists have extended his ideas to explain economic growth and development, particularly in the context of industrialisation and market-based economies.
Marshall emphasised the importance of small and medium-sized enterprises (SMEs) in driving industrial growth. He highlighted the role of localised industries and industrial districts where businesses benefit from proximity to suppliers, skilled labour, and knowledge spillovers.
He argued that as firms grow, they can experience internal economies of scale (cost advantages within a firm) and external economies of scale (benefits from being part of a cluster or industry hub).
This idea is key to understanding how industrial clusters in developing regions can stimulate economic growth.

[4]The Tripartite Social Resilience Framework conceptualises social resilience as a community's or individual's capacity to absorb, adapt, and transform in response to challenges. It is called "tripartite" because it encompasses these three interconnected dimensions.
The framework is not attributed to a single person in the same way some economic theories are, but it has been most closely associated with humanitarian and development research, particularly in the work of the United Nations, the Overseas Development Institute (ODI), and scholars in disaster risk and development studies.
The framework builds on social-ecological resilience concepts from researchers like Brian Walker and David Salt, who emphasised absorptive, adaptive, and transformative capacities in socio-ecological systems.
In development studies, Cutter et al. (2008) and Cretney (2014) have applied and expanded the idea of social resilience with the tripartite structure.
The UNDP (United Nations Development Programme) and other agencies often use this framework in community resilience assessments, especially in post-disaster and post-conflict contexts.

[5] A few important caveats:

- Pre-1960 (1930s–1950s): the values are reconstructed estimates based on the historical series and sectoral narrative in Boshoff & Fourie, *The South African Economy in the Twentieth Century* (2020). Those early-decade figures are annotated as *estimates* in the table and on the chart because exact year-by-year official WDI series begin in 1960.
- Post-1960 (1960s–2020s): the decade averages are aligned with internationally compiled series (World Bank WDI / The Global Economy / Trading Economics) for *manufacturing, value added (% of GDP)*. These series show a peak in manufacturing share in the late 1970s–early 1980s and a steady decline into the 2000s and 2010s.
- What the chart shows (high level)
    - A rise in manufacturing's share across the mid-20th century, peaking around the 1970s–1980s (peak ~23–25% of GDP in the early 1980s in most series).
    - A decline from the 1990s onward, falling into the low-to-mid teens by the 2010s and remaining around ~12–13% into the early 2020s.
    - Early decades (1930s–1950s) are presented as reconstructed values to show the long-run structural transformation from agrarian/mining dominance toward industrialisation.

Key findings

Industrial Collapse and Municipal Failure

Lichtenburg in Ditsobotla Local Municipality, within the Ngaka Modiri Molema District Municipality, in the North West province, lost Clover SA's cheese factory (June 2021) following years of infrastructure failure. Between 2011–2023:

- Unemployment rose from 28.5% to 44.8%
- Youth NEET rate increased to 55.1%
- Municipal own-source revenue declined by 40%
- Reliable water access fell below 50%

Komati Power Station's (in the Steve Tshwete Municipality within the Nkangala District Municipality, in the Mpumalanga province) decommissioning (October 2022) resulted in approximately 1,400 direct job losses and severe impacts on contractors, vendors, and the local service economy. While the Steve Tshwete Municipality remained relatively stable before 2022, modelled projections indicate that significant negative shocks will emerge in future datasets.

This paper connects local case studies to national challenges like state capacity erosion, illicit trade, and failing municipal governance with a view to demonstrating a systems-level lens on issues pertaining to underdevelopment, social and community vulnerability, and targeted investment and support.

Understanding these dynamics requires a social resilience lens. Social resilience moves beyond mere economic metrics to understand a community's capacity to anticipate, prepare for, respond to, and recover from systemic shocks like de-industrialisation.

Social resilience[6] is defined as "the existence, development, and engagement of community resources by community members to thrive in an environment characterised by change, uncertainty, unpredictability, and surprise."

This paper develops a framework to analyse the resilience responses in Lichtenburg and Komati, differentiating between mere coping and transformative adaptation.

Analysis through a resilience framework reveals that South Africa's de-industrialising towns are trapped in a vicious cycle of coping and fragile adaptation. Without functional institutions to foster collective agency and channel resources towards transformative projects, these communities cannot break the

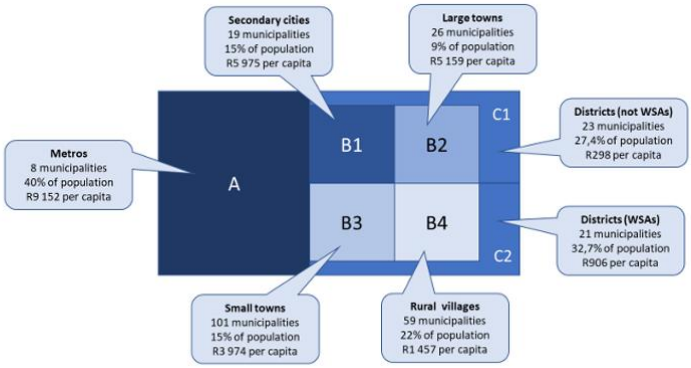
[6] Kathrina Magis, (2010). *Community Resilience: An Indicator of Social Sustainability.* Society and Natural Resources, 23(5), 401-416. https://doi.org/10.1080/08941920903305674

"peripheralisation loop."[7] The self-reinforcing cycles of economic decline, social vulnerability, and institutional weakness progressively marginalise peripheral towns.

The following sections on the District Development Model (DDM) and diversification incentives explore potential pathways to build this transformative capacity.

The paper applies the Marshallian Development Theory, which emphasises localised industrial clusters and shared economic infrastructure, which seems to underpin the DDM, opportunities in South Africa, especially towards the improvement and development of these small towns.

Figure 2: Schematic summary of local government systems



The DDM's "One Plan" approach, which is aimed at integrating planning, budgeting, and implementation across national, provincial, and local spheres, presents a critical opportunity to align disparate efforts into a coherent, place-based recovery strategy.

There is a profound disconnect between the National Industrial Policy Framework and local municipal realities and planning. The Department of Trade, Industry and Competition's (DTIC) Sectoral Master Plans and the Reimagined Industrial Strategy are designed for a spatially neutral, functional economy, operating under assumptions of capable municipalities, reliable infrastructure, and cohesive value chains - assumptions that are invalid in towns like Lichtenburg.

[7] A **"peripheralisation loop"** can be defined as a self-reinforcing cycle in which economic decline, social vulnerability, and institutional weaknesses in a town or region mutually exacerbate each other, trapping the locality in persistent underdevelopment. In this loop:

- **Economic decline** (e.g., industrial closures, job losses, shrinking local markets) reduces incomes and investment.
- **Social vulnerability** increases as households face poverty, migration, and weakened community cohesion.
- **Institutional weaknesses** (poor municipal capacity, failing infrastructure, and inadequate governance) limit the ability to respond effectively.
- The result is **further marginalisation**, discouraging investment and skilled labour, and reinforcing the cycle of decline.

Essentially, the loop describes how peripheral towns or regions become progressively marginalised relative to economic centres, with each factor reinforcing the others.

The paper explores ways to bridge this disconnect for a more cohesive and partnership-based framework from national, provincial, and local government policy perspectives.

The economic data for Ditsobotla reveal a municipality in free fall even before Clover SA's final exit, with unemployment and service access worsening dramatically. The decline in own source revenue, combined with the Cabinet's September 2025 decision to place the Ditsobotla Local Municipality under administration, confirms the paper's finding of a collapsing fiscal base. For Steve Tshwete, the data shows a relatively resilient economy pre-2022, but the modelled job losses and projected revenue decline point to a significant negative shock that will manifest in future datasets. This quantitative profile underscores that de-industrialisation is not an event, but a process that erodes a town's socio-economic foundation over the years.

The paper also explores the extent to which the small-town de-industrialisation and vulnerability context plays itself out through a gender lens. Economic shocks are never gender-neutral and, in this regard, the paper interrogates the extent to which the closure of formal industries reconfigures the gendered divisions of labour, income, and care work, often exacerbating existing inequalities.[8]

De-industrialisation is not gender-neutral: when an anchor employer closes, job losses and income shocks interact with pre-existing gendered divisions of labour and unequal access to assets, which can intensify household vulnerability and weaken community resilience. In many small-town contexts, women are more likely to absorb the unpaid "shock workload" created by declining incomes through expanded care work, informal trading, and household provisioning while simultaneously facing constrained access to formal re-employment pathways tied to historically male-dominated sectors. For this reason, resilience strategies and local recovery plans should explicitly track gender-differentiated impacts (employment losses, unpaid care burdens, informal income strategies, safety risks, and access to retraining) rather than assuming household adaptation is evenly distributed.

The paper identifies over-reliance on a single anchor enterprise as a critical community vulnerability and builds a case for anchor diversification incentives, fiscal and regulatory tools available to catalyse investment in new and expanding sectors within a specific locality, thereby reducing single economic anchors. Without proactive diversification, de-industrialising towns will continue to decline, and a strategic, well-designed package of these incentives, embedded within the DDM and aligned with a place-based industrial strategy, is a crucial tool for breaking the cycle of dependency and building resilient, diverse local economies.

The call to action to mitigate de-industrialisation and build resilience in small towns requires local and national stakeholders to consider the following interventions:

[8] Posel, D. *et al*. (2023). *Job loss and intra-household bargaining in South Africa*. Feminist Economics, 29(3), 1–28. https://doi.org/10.1080/13545701.2022.2165932

a) **Rebuild the industry commons:** Prioritise basic services (roads, water, electricity, and waste management) to restore confidence for investors and existing firms. Transparent governance and anti-corruption measures are essential to attract industry back to Lichtenburg and prevent further flight.
b) **Diversify the economic base:** Encourage development of agro-processing, renewable energy, tourism, and small-scale manufacturing. Municipalities can create incentives for cooperatives, support local suppliers to integrate into regional value chains, and provide infrastructure such as business incubators.
c) **Strengthen human capital:** Invest in vocational training, technical colleges, and entrepreneurial programmes to enhance adaptive capacity. Programs should prioritise retrenched workers from Komati Power Station and Lichtenburg's dairy sector, enabling them to transition into new industries.
d) **Facilitate just transitions:** For coal towns like Komati, implement comprehensive just-transition plans that include income support, retraining, and community participation. Ensure that repurposing projects (solar, wind, battery storage) provide local employment and supply opportunities through local content requirements rather than relying solely on external contractors.
e) **Promote collaborative governance:** Establish platforms where municipalities, industry, civil society, and academic institutions co-design development strategies. Such collaboration fosters learning and innovation, key features of Marshallian clusters and adaptive resilience.
f) **Monitor and evaluate resilience indicators:** Regularly collect and publish data on key development indicators (employment rates, poverty levels, service delivery metrics, informal-sector dynamics) to track progress. Incorporating additional measures such as employment rates, poverty levels, and informal-sector dynamics would enhance analysis and accountability.

These interventions must be implemented concurrently, as they reinforce one another and together address the systemic nature of small towns' de-industrialisation.

Addressing de-industrialisation in small towns requires an integrated approach to transform fragile industrial clusters into dynamic local economies capable of weathering shocks and embracing new development trajectories.

The paper concludes with a proposal for an integrated framework for building Heidelberg's Industrial Resilience. However, recent developments indicate that Heidelberg has begun to experience active de-industrialisation. In January 2026, British American Tobacco South Africa (BATSA) announced the closure of its Heidelberg manufacturing facility by 31 December 2026, affecting approximately 500 employees. The closure, driven by the illicit cigarette trade (estimated at 60-70% of the market), signals a shift from latent vulnerability to realised industrial contraction.

Secondary towns across South Africa remain vulnerable to de-industrialisation due to weak infrastructure, limited municipal capacity, and declining competitiveness. Heidelberg's emerging de-

industrialisation mirrors South Africa's wider challenges of governance weakness, institutional decay, and illicit trade, requiring an integrated response that rebuilds both its industrial base and social resilience. Applying Marshallian Development Theory highlights the need to restore the town's local production ecosystem - protecting anchor firms, reconnecting supplier networks, and strengthening vocational linkages to revive economic density and competitiveness.

The Tripartite Social Resilience Framework adds a coordinated approach for stabilisation, adaptation, and long-term transformation, from securing essential infrastructure and curbing illicit markets to institutional reforms that restore accountability and municipal professionalism.

The DDM, together with the 2020 *Growing Gauteng Together* economic blueprint for 2030,[9] provides the operational platform to align municipal, provincial, and national action, supported by a Heidelberg Economic Forum that synchronises short-term stabilisation with medium- and long-term renewal. Together, these frameworks offer a coherent pathway for Heidelberg to counter industrial decline, strengthen governance, and reposition itself as a model of inclusive, locally anchored industrial regeneration.

With the recent developments in Heidelberg in the Lesedi Local Municipality, indicating that this vulnerability is no longer merely prospective. The announced withdrawal of a major manufacturing anchor marks a transition from latent industrial risk to active de-industrialisation, underscoring how quickly structural weaknesses can translate into firm exit when governance and enforcement conditions deteriorate.

[9] Gauteng Provincial Government. (2020). *Growing Gauteng Together 2030: A Plan of Action for Economic Growth and Social Development.* Office of the Premier, Gauteng Provincial Government. Published 4 March 2020. Retrieved from https://www.gauteng.gov.za/Publications/PublicationDetails/%7B7AB8D1F1-9261-4E7C-A4F4-ED5A0F7D6DA8%7D

SECTION ONE: INTRODUCTION

When Clover SA announced the closure of its Lichtenburg cheese factory in Ditsobotla Local Municipality in June 2021, municipal officials blamed failing infrastructure, while Clover blamed municipal incompetence. Both parties were right. The cycle of blame and decline, repeated across dozens of South African small towns, shows a deeper crisis: the fundamental breakdown of the institutional and economic systems that once sustained secondary towns as productive nodes in the national economy. This paper examines how this process unfolds in South Africa's secondary towns, and how governance and institutional capacity shape whether decline becomes irreversible.

Lichtenburg is the seat of the Ditsobotla Local Municipality, historically built around maize agriculture and cement production. Komati lies near Middelburg in the Steve Tshwete Local Municipality. Both towns have recently lost key industrial employers: the closure of Clover SA's cheese factory in Lichtenburg in June 2021 and the decommissioning of Komati's Coal Power Station in October 2022. They now face declining employment, infrastructural collapse, and social vulnerability.

The choice of Lichtenburg (agro processing) and Komati (energy) provides a valuable comparative perspective on de-industrialisation from different sectors, highlighting underinvestment, governance, and just energy transition challenges.

The paper examines this breakdown through these two case studies. While this is not representative of all small-town experiences, these cases illuminate how government failures, deteriorating infrastructure, and inadequate transition planning accelerate local economic collapse.

A substantial body of political economy and industrial policy scholarship defines de-industrialisation as the sustained decline of manufacturing output and employment, accompanied by a structural shift toward services or other non-industrial sectors.[10] This transition is typically shaped by technological change, global competition, market reorientation, and domestic policy choices. In South Africa, its consequences are deeply spatial and uneven, intensifying unemployment, weakening municipal finances, and eroding community resilience.

Ultimately, this paper argues that without deliberate and coordinated interventions to rebuild industrial capacity and strengthen municipal governance, many South African small towns risk similar trajectories of industrial erosion, job loss, and social fragmentation.

[10] See Barry Bluestone and Bennett Harrison (1982), *op cit*; Robert Rowthorn and Ramana Ramaswamy (1997), *op cit*; Ben Fine and Zavareh Rustomjee (1996), *op cit;* John Palmer (1972), *op cit*; and Michael J Piore and Charles F. Sabel (1984), *op cit*.

By investigating these dynamics and assessing both formal policy responses and informal community resilience strategies, the study addresses a significant gap in empirical understanding of small-town de-industrialisation.

Research Design and Methodology

This paper adopts a qualitative, comparative case-study design to examine the socioeconomic impacts of de-industrialisation and the dynamics of social resilience in small towns. Lichtenburg and Komati were purposively selected because they represent distinct industrial legacies and contrasting forms of economic decline: Lichtenburg as an agro-industrial town destabilised by infrastructure collapse and the exit of a major anchor firm, and Komati as a mono-industry coal-energy town undergoing a rapid and poorly managed just-transition process.

The research is grounded in place-based economic analysis and governance-resilience theory, enabling identification of structural drivers of decline as well as town-specific pathways of adaptation. This multi-case approach supports a deeper understanding of the complex interplay between municipal capacity, institutional coherence, national policy frameworks, and community resilience.

Research Design

The study is organised around three analytical principles:

Place-based economic analysis

Examines how spatial conditions, infrastructure assets, historical economic roles, and proximity to markets shape each town's vulnerability and developmental prospects.

Governance resilience theory

Analyses municipal capacity, fiscal stability, institutional coherence, and intergovernmental coordination, assessing how these factors enable or constrain communities' ability to anticipate, absorb, and adapt to industrial shocks.

Stakeholder-centred inquiry

Recognises that de-industrialisation affects stakeholder groups differently. This informed the selection of interviewees from business, labour, local government, communities, non-governmental organisations (NGOs), technical experts, and former employees.

This design supports both the identification of structural similarities (e.g., municipal dysfunction, infrastructure decay, governance fragmentation) and the differentiation of town-specific resilience trajectories.

Methodology

A qualitative methodology was employed because the mechanisms linking industrial decline to governance failure and social vulnerability are institutional and relational rather than purely quantitative. It consists of:

Semi-structured interviews

These provided experiential, contextual, and expert insights into the drivers and consequences of de-industrialisation. Interviews allowed for open reflection while permitting the researcher to probe around core analytical themes.

Document and policy analysis

Municipal Integrated Development Plans (IDPs), audit reports, industrial policy frameworks, Just Energy Transition (JET) documentation, and academic literature were analysed to triangulate and validate stakeholder insights.

Thematic coding and synthesis

Interview transcripts and secondary materials were coded using inductive and deductive techniques to identify recurrent themes related to structural decline, governance failures, economic disruption, and social resilience.

This combination of qualitative methods supports both within-case depth and robust cross-case comparison, generating a coherent analytical narrative on the nature and consequences of de-industrialisation.

Analytical Framework

The thematic coding framework classified evidence around the following dimensions:

- Structural drivers of decline (infrastructure failure, fiscal instability, governance dysfunction).
- Industrial and value-chain disruptions.
- Institutional capacity and policy coherence.
- Social resilience strategies (coping, adaptive, transformative).
- Labour-market transitions and socioeconomic vulnerability.
- Intergovernmental coordination and policy alignment.

Cross-case analysis enabled the identification of systemic failures - such as governance paralysis, value-chain fragmentation, and misaligned policy incentives - as well as localised resilience

opportunities, such as agro-industrial revival potential in Lichtenburg and just-transition pathways in Komati.

Municipal performance was benchmarked against Municipal Finance Management Act (MFMA) compliance indicators, MDB spatial data, DTIC industrial strategy documents, and national energy-transition policies.

Data Collection Methods

Interview Design and Procedure

Interviews were conducted between 17 June and 14 August 2025. Semi-structured interviews were selected to allow participants to provide detailed and nuanced reflections, while enabling the researcher to explore emerging issues more deeply.

Interviews focused on three thematic domains:

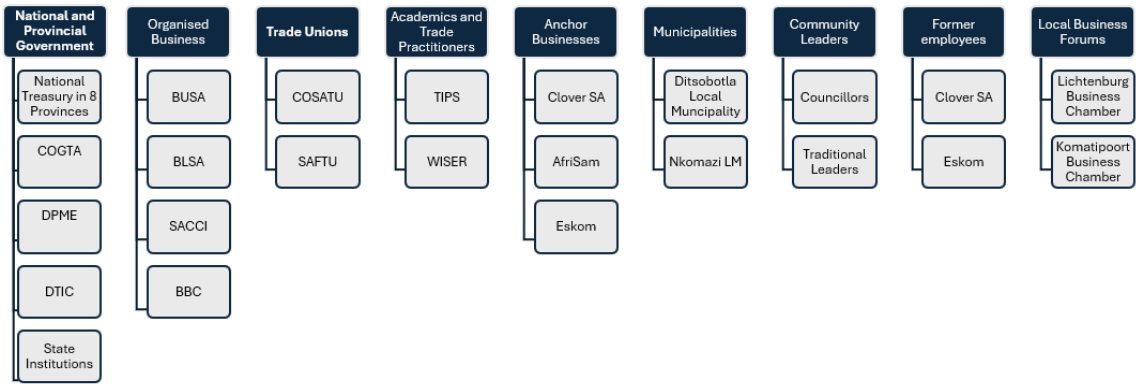
a) Economic significance of industrial activity.

b) Socioeconomic vulnerability, labour dynamics, and household resilience.

c) Municipal sustainability, governance quality, and service delivery.

A total of twenty-five (25) interviews were conducted across nine stakeholder categories: business, labour, municipal officials, provincial/national policymakers, community leaders, NGOs/CBOs, technical experts, former employees, and local entrepreneurs.

Figure 3: Stakeholder interview distribution



Purposive sampling ensured inclusion of individuals with deep knowledge of industrial dynamics, governance challenges, and lived experiences of decline. Data saturation was reached at 25 interviews.

Interviews were conducted in person where possible (especially in Gauteng, Lichtenburg, and Steve Tshwete Municipality) and online via Google Meet for remote participants.

Secondary Data Collection

Secondary data played a crucial role in shaping the analytical framework and triangulating interview findings. Sources included:

- IDPs, Spatial Development Frameworks (SDFs), annual reports
- Auditor-General findings
- DTIC industrial-policy documents
- JET studies
- Academic literature on small-town decline
- Employment, migration, and spatial-demographic indicators

This evidence base was essential for validating stakeholder claims, contextualising historical development trajectories, and identifying structural governance patterns.

Data Sampling

Thirty (30) potential stakeholders were initially identified based on expertise, industrial experience, community position, or lived experience of de-industrialisation. Twenty-five (25) were ultimately interviewed due to availability constraints. The diversity of the sample strengthens internal validity across sectors, institutional roles, and perspectives.

Limitations of the Study

- The interview target of 30 was reduced to 25 due to scheduling constraints.
- Case-study findings are not statistically generalisable to all South African towns due to varying histories, geographies, and industrial structures.
- Town-level quantitative data are often fragmented or aggregated at district and provincial levels.
- Some company-level commercial data remains inaccessible.
- Recall bias may affect accounts from former employees or longstanding community members.
- Some stakeholders have vested interests; triangulation was therefore essential.

These limitations were mitigated through cross-verification with documentary evidence and comparison across stakeholder groups.

Ethical Considerations

All participants provided informed consent. Given the sensitivity of issues such as municipal dysfunction, political contestation, labour disputes, and allegations of mismanagement, strict anonymity

and confidentiality protocols were applied. The data were anonymised, and findings were validated against secondary evidence to minimise bias.

Research Problem Statement

South Africa's National Development Plan (NDP 2030) emphasises the need for an industrial strategy capable of leveraging niche export opportunities and supporting globally competitive sectors:

> *"South Africa needs to adjust its focus in light of the changing global economic landscape. This is particularly urgent in trade and industrial policy. South Africa should redirect its attention to pursuing niche export opportunities in the economic powerhouses of the future, many of them emerging economies. These opportunities can only be exploited if industrial policy supports sectors and industries that can best produce the goods and services required of the new markets South Africa wishes to serve."*[11]

Since the adoption of the NDP by the South African Cabinet in 2012, the NDP envisioned a developmental state capable of coordinating industrial policy, infrastructure investment, and skills development to achieve inclusive growth by 2030, this remains largely unrealised.

Yet three decades later, the country's small towns-once anchored by strategic industries-have experienced severe industrial contraction. Lichtenburg's Clover SA processing plant and the Komati Coal Power Station exemplify how the withdrawal or closure of anchor industries destabilises local economies: job losses, shrinking municipal revenue, infrastructure decay, and weakened service delivery. Despite national industrial-policy commitments listed in the NDP, small towns remain disproportionately vulnerable to disinvestment, governance failures, and spatial inequality, suggesting a fundamental disconnect between national policy frameworks and local implementation realities.

Moreover, limited empirical research exists on how de-industrialisation has contributed to small-town economic decline, the governance dynamics that accelerate or mitigate its effects, and the adaptive strategies communities employ. Conflicting accounts from Clover SA and the Ditsobotla Municipality during the plant closure, with Clover SA citing infrastructure failures and the municipality citing corporate disinvestment, which underscores the need for independence, highlighting the knowledge gaps and the need for grounded, context-specific analysis.

This study, therefore, investigates the relationship between de-industrialisation and small-town economic decline, as well as the institutional and community responses that shape resilience. By focusing on Lichtenburg and Komati, the research generates insights for regional development policy, spatial justice, and sustainable re-industrialisation in South Africa. Specifically, it examines: (a) how

[11]National Planning Commission. (2015). *National Development Plan (NDP) 2030: Our Future- Make it work.* Pretoria: National Planning Commission of South Africa.

governance structures mediate industrial shocks, (b) what resilience strategies communities employ and why some succeed while others fail, and (c) how national industrial policy can better align with local municipal realities.

Structure of the Paper

The paper is structured as follows:

a) **Section Two** traces the historical rise and decline of South Africa's manufacturing sector from the 1920s to the present, examining the drivers of "exceptional de-industrialisation" and placing South Africa's experience in a comparative global perspective.
b) **Section Three** examines post-1994 governance and development objectives, analysing tensions in post-apartheid industrial policy, implementation capacity, and documenting the alignment (or misalignment) between municipal strategy and national industrial goals.
c) **Section Four** presents the case-study analysis of Lichtenburg and Komati, applying Marshallian Development Theory, the Tripartite Social Resilience Framework, and the District Development Model (DDM) to understand the socioeconomic impacts of de-industrialisation.
d) **Section Five** applies the analytical framework developed through the Lichtenburg and Komati cases to propose an integrated industrial-resilience framework for Heidelberg, linking the findings to broader policy and spatial-economic debates relevant to the Lesedi Local Municipality.

SECTION 2: SOUTH AFRICA'S MANUFACTURING SECTOR

The Rise and Fall of South Africa's Manufacturing Sector

South Africa's manufacturing sector peaked during the so-called "Golden Age" (late 1930s-early 1970s), when import substitution policies drove GDP growth, averaging 5.1% annually between 1950 and 1967, reaching 7.6% in 1964.[12] This era laid the foundation for the country's "Minerals-Energy-Complex"[13] and transformed many small towns into industrial nodes. However, the late 1970s marked the onset of structural decline. Manufacturing growth slowed, and its GDP share contracted due to multiple factors: rising global competition, apartheid era economic sanctions, capital flight and political instability, as well

[12] Smil, D.J. and van der Walt, B.E. (2022) *"Growth trends and business cycles in the South African economy, 1972 to 1981"* in South African Reserve Bank's ***Quarterly Bulletin***, 19 August 2022. p. 44. https://www.resbank.co.za/content/dam/sarb/publications/quarterly-bulletins/quarterly-bulletin-publications/1982/5251/04Growth-trends-and-business-cycles-in-the-South-African-economy--1972-to-1981.pdf

[13] South Africa's MEC is a theoretical framework describing the historical dominance of powerful mining and energy sectors that have shaped the country's economy, development, and persistent structural inequalities since the late 19th century. Coined by economists Fine and Rustomjee, the MEC was characterised by a powerful coalition of mining and energy conglomerates and state-owned enterprises that historically prioritised cheap energy for mining, stifled diversification, and maintained a commodity-dependent industrial structure, often linked to racial inequalities and environmental threats.

as saturation of protected domestic markets, and emerging infrastructure constraints and energy insecurity.

The decline was compounded by the flawed policy environment of the PW Botha administration (colloquially termed "Bothanomics") in the 1980s, which pursued deregulation, privatisation, and fiscal tightening in the face of escalating global and domestic pressures, further undermining manufacturing competitiveness.

The economy also showed symptoms of the "Dutch Disease",[14] when South Africa over-depended on gold exports, it skewed the economy, stifling manufacturing and non-commodity exports.

Manufacturing expanded under import-substituting industrialisation and specific post-1994 programmes (notably in automotive), but from the 2000s it increasingly exhibited "premature de-industrialisation"[15]: manufacturing's share of jobs and value added fell to relatively low-income levels compared with earlier industrialisers. Global forces, especially intensified competition from China, eroded output and jobs in a range of tradable subsectors, with careful estimates attributing sizeable employment and output losses to import penetration.[16]

Domestic factors compounded the decline: industrial policy emphasis struggled to restore broad competitiveness beyond pockets like automotive, and export performance weakened through the 2010s.[17]

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[14] **Dutch Disease** is an economic phenomenon in which a country experiences a resource boom - typically from natural resource exports like oil, gas, or minerals - that leads to a strengthening of the national currency, making other sectors, particularly manufacturing and agriculture, less competitive internationally. Key effects include:

- **Currency appreciation** – Resource exports increase demand for the local currency, making non-resource exports more expensive abroad.
- **Sectoral shift** – Labor and capital move from manufacturing or agriculture to the booming resource sector, reducing diversification.
- **Economic vulnerability** – Dependence on a single resource makes the economy more susceptible to commodity price shocks.

The term originated from the Netherlands in the 1960s, when natural gas discoveries led to a decline in the country's manufacturing competitiveness.

[15] See Anthony Black, Stephanie Craig and J. Paul Dunne *"Why has manufacturing employment declined so rapidly?"* https://www.econ3x3.org/article/why-has-manufacturing-employment-declined-so-rapidly?utm

[16] Lawrence Edwards and Rhys Jenkins (2015): *"The Impact of Chinese Import Penetration on the South African Manufacturing Sector*", ***The Journal of Development Studies***, DOI: 10.1080/00220388.2014.983912.

[17] See (i) Johnny Coetzee, 2012. *'The transformation of municipal development planning in South Africa (post-1994): impressions and impasse'*, published in ***Town and Regional Planning,*** Vol. 61 (2012);
(ii) G. M. Lincoln, J. J. McCarthy and N. Dorasamy, 2024. '*Place-Based Regional Planning: Shaping Governance, Planning Policy and Practices in a South African Region, 1994–2022'*, ***Urban Geography***, Vol. 46 (2024); (iii) Glen Robbins, 2025. *'A tale of no cities? The neglect of cities in South Africa's post-apartheid national economic policies'*, ***Area Development and Policy***, Vol. 10 (2025)**;** (iv) Gerrit van der Waldt, 2018. *'Local economic development for urban resilience: The South African experiment'*, ***Local Economy***, London South Bank University, Vol. 33(7) (2018); and (v) Makgetla, N., et al, 2022. '*Alignment of Local Economic Development and Industrial Policy*', **TIPS *Working Paper***, Trade and Industrial Policy Strategies (TIPS), Pretoria. https://tips.org.za/research-archive/trade-and-industry/item/4523-alignment-of-local-economic-development-and-industrial-policy

Recent analyses show that South Africa lost market share and dynamism in manufacturing exports, even as industrial policy sought to pivot to higher-value niches (e.g., EVs).[18] The consensus across this literature is that without productivity-enhancing reforms and targeted, capability-building industrial policy, manufacturing will remain small and vulnerable to import pressure despite episodic successes.[19]

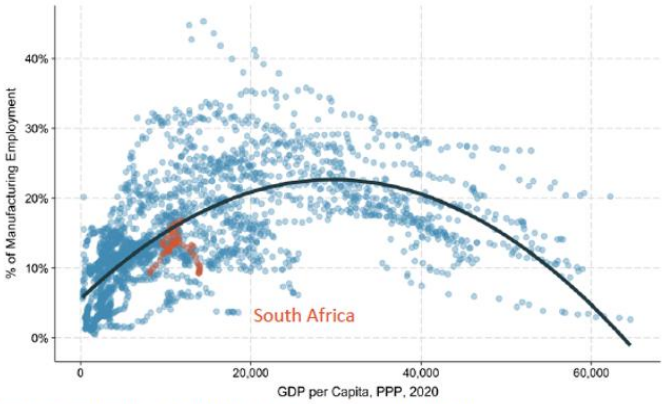
In both Lichtenburg and Komati, industrial decline has been linked to rising unemployment, reduced disposable incomes, infrastructure decay, and outmigration, particularly among the youth in the municipalities.

South Africa's De-industrialisation in the Global Context

De-industrialisation is not unique to South Africa; it is a global phenomenon, especially visible in middle-income countries. However, the process has accelerated and occurred earlier in income trajectories than in the past, the phenomenon of "premature de-industrialisation".[20]

Across the globe, the peak share of manufacturing employment has shifted downwards and to the left - developing nations now reach their manufacturing zenith earlier and with fewer jobs than industrialised countries did in the 20th century – "Downward Shifting Curve".[21]

Figure 4: Mean manufacturing earnings VS National income level



Source: The Economic Transformation Database & The Conference Board Data

As Lawrence[22] explains, premature de-industrialisation is driven by two structural forces:

[18] DTIC (2023). ***Electric Vehicles White Paper*** (November 2023).

[19] See OECD press release, ***South Africa needs ambitious reforms to boost productivity and employment.*** 5 June 2025: https://www.oecd.org/en/about/news/press-releases/2025/06/south-africa-needs-ambitious-reforms-to-boost-productivity-and-employment.html?utm ; Kamil Dybczak and Delia Velculescu (2025), ***Boosting Growth and Prosperity in South Africa.*** 10 March 2025. IFM Country Focus: IMF: https://www.imf.org/en/News/Articles/2025/03/10/cf-boosting-growth-and-prosperity-in-south-africa?utm_source

[20] Andreoni, A., & Tregenna, F. (2021). The Middle-Income Trap and Premature De-industrialisation in South Africa. In A. Andreoni, P. Mondliwa, & S. Roberts, *Structural Transformation in South Africa: The Challenges of Inclusive Industrial Development in a Middle - Income Country* (pp. 237-260). Oxford: Oxford Academic.

[21] *Ibid.*

[22] Lawrence, R. (Forthcoming), *"Behind the Curve: Can Manufacturing Still Provide Inclusive Growth?"* [unpublished manuscript].

- *Productivity Growth*: Rapid productivity gains in manufacturing mean fewer workers are needed to produce the same output.
- *Elasticity of Demand*: Demand for manufactured goods does not grow proportionately with income, meaning higher productivity does not translate into sustained employment gains.

Accelerants:

- Globalisation and trade concentrate manufacturing in highly competitive, low-cost regions.
- Technological change and automation displace labour, particularly medium-skill jobs.
- Falling consumption share of manufactured goods (relative to services) reduces long-term domestic demand.
- South Africa's Position on the Curve: When mapped against global patterns, South Africa shows signs of severe premature de-industrialisation. Both manufacturing value added and employment have fallen more steeply than predicted by international trends. This suggests that domestic factors, not just global shifts, are at play.

What Explains South Africa's Exceptional De-industrialisation?

Post-2008 Collapse

The 2008 global financial crisis marked a turning point for South African manufacturing. Output stagnated, investment slowed, and employment declined sharply. Unlike other emerging markets, which recovered manufacturing output quickly, South Africa experienced a prolonged downturn, indicating structural weaknesses.

Demand-side Constraints

Collapsing Domestic Demands: Declining household consumption - driven by rising unemployment, stagnant wages, and high inequality, combined with weak public and private investment in manufacturing, has created a vicious cycle. Policy uncertainty, regulatory burdens, and deteriorating infrastructure have further eroded investor confidence, constraining both consumption and capital formation.[23]

External Demand Weakness: South Africa's export performance in manufactured goods is modest. The country remains dependent on raw material exports, and industrial exports are constrained by competitiveness issues, limited product diversity, and infrastructure bottlenecks.[24]

[23] Sulla, V., Zikhali, P., & Cuevas, P. (2022). *Inequality in Southern Africa: An Assessment of the Southern African Customs Union.* Washington, D.C: World Bank Group.

[24] Ncanywa, T. (2024). The Trends of the South AfricanEconomic Complexity Landscape. *Journal of Public Administration and Development Alternatives*, 67-86

Supply-side Disruptions

Electricity Crisis: Energy insecurity has been the most visible and crippling supply-side constraint. Persistent load-shedding since 2007 (intensifying from 2019), rising electricity tariffs, and supply unreliability have made production costs volatile and eroded firm competitiveness, particularly in energy-intensive sectors.

Logistics and Port Inefficiencies: Rail and port backlogs have added to cost pressures, affecting time-sensitive exports like automotive components and food products.

Other Structural Suspects

Labour Costs and Rigidity: While manufacturing wages are relatively high by regional standards, unit labour cost growth outpaced productivity gains in many subsectors since 2008. Labour market rigidity also limits firm flexibility in adapting to market changes, though this must be balanced against the need for worker protections and decent work.[25]

Import Competition: Liberalisation of trade in the 1990s exposed local manufacturers to cheap imports, particularly from Asia. Without adequate support or upgrading, many firms contracted or closed.[26]

Addressing Horizontal Constraints

These are economy-wide bottlenecks that affect all firms:

- **Electricity Reform**: Urgently restore energy security through grid reform, independent power producers (IPPs), and tariff rationalisation while protecting vulnerable industries during transition.
- **Logistics Efficiency**: Modernise rail and ports, enable private participation, and upgrade freight corridors.
- **Stimulate Demand**: Use public procurement, infrastructure investment, and credit easing to stimulate consumption and fixed capital formation.

Targeting Vertical Constraints

These are sector- or region-specific challenges:

[25]Fedderke, Johannes. (2012). *The Cost of Rigidity: The Case of the South African Labour Market*. Comparative Economic Studies.
[26] Edwards, L., & Jenkins, R. (2014). The Impact of Chinese Import Penetration on the South African Manufacturing Sector. *The Journal of Development Studies*, 447-463

- Develop place-based industrial policies that revive manufacturing in lagging provinces and secondary towns.
- Offer skills development and enterprise upgrading tailored to the needs of particular value chains.

SECTION 3: POST-1994 GOVERNANCE AND DEVELOPMENT GOALS

Key Tensions in Post-Apartheid Economic and Industrial Policy

Post-apartheid South Africa shifted from a state-led protectionist model to one centred on private-sector-driven growth. Macroeconomic frameworks such as the Growth, Employment and Redistribution strategy (GEAR, 1996) reflected post-Washington Consensus neoliberal thinking, emphasising fiscal discipline, deregulation, and trade liberalisation. The Accelerated and Shared Growth Initiative for South Africa (ASGISA, 2006) represented a partial shift toward infrastructure investment as a key driver of growth.[27]

These approaches, alongside South Africa's accession to the World Trade Organisation (WTO) in 1995, which required compliance with the General Agreement on Tariffs and Trade (GATT,1994) for goods and the General Agreement on Trade in Services (GATS,1995) for services agreements, sought to boost competitiveness and attract foreign direct investment. However, trade liberalisation also exposed domestic manufacturers, particularly labour-intensive sectors, to intense global competition. Many firms could not withstand import pressures, leading to job losses, premature de-industrialisation, and marginalisation within global value chains.[28]

While GEAR stabilised macroeconomic fundamentals, it failed to deliver on its core promise of employment creation and inequality reduction.[29] ASGISA attempted to address these shortcomings by targeting infrastructure and labour-intensive industries, yet weak institutional capacity and fragmented execution limited its effectiveness.[30] The Congress of South African Trade Unions (COSATU) and the South African Communist Party (SACP) frequently criticised over-liberalisation, arguing that an export-led model overly reliant on raw material exports and manufactured imports exacerbated trade deficits,

[27] Trevor Ngwane and Patrick Bond (2020). "South Africa's Shrinking Sovereignty: Economic Crises, Ecological Damage, Sub-Imperialism and Social Resistances". p. 69.
[28] Congress of South African Trade Unions (COSATU). (2010). *Submission on The South African Trade Policy and Strategy Framework*. COSATU.
[28] Mthembu, L (2024). Industrial Policy in Context: An Overview of NIPF and IPAPs. Pretoria: Trade and Industrial Policy Strategies (TIPS).

[29]Edwards, L., & Jenkins, R. (2014). The Impact of Chinese Import Penetration on the South African Manufacturing Sector. *The Journal of Development Studies*, 447-463. See also Asghar Adelzadeh (2022). *Why Is the South African Economy Stuck in Chronic Crises?* Applied Development Research Solutions (ADRS) Working Paper
May 2022.

[30] *Ibid*.

as seen in the South Africa-China trade imbalance. Currently, roughly 25% of domestic wealth is spent on imports, constraining industrial development. [31]

Terreblanche (2002) argued that South Africa's adoption of free-trade and neoliberal economic policies after 1994 contributed to de-industrialisation and weakened domestic manufacturing capacity.[32] This, shared by trade unions and economists, gained empirical support as manufacturing employment declined.

Complementary microeconomic initiatives, most notably the National Industrial Policy Framework (NIPF) and successive Industrial Policy Action Plans (IPAPs), sought to reverse de-industrialisation and foster labour-absorbing industries. Yet a lack of policy coherence, limited technical capability, and capital-intensive bias hindered their reach, especially in small-town and peripheral economies. [33]

As shown in Graphs 6 and 7, post-apartheid industrial policy, shaped by trade liberalisation under WTO accession and macroeconomic reforms like GEAR, had a profound impact on manufactured imports and exports. The sharp reduction in tariffs and deregulation facilitated a surge in manufactured imports, which grew significantly faster than domestic output, raising import penetration from around 20% in the early 1990s to over 40% by the mid-2010s.

Exports of manufactured goods did expand, particularly in resource-based and capital-intensive sectors such as metals, chemicals, and automobiles, but the country struggled to diversify into higher-value, labour-intensive exports, leading to persistent trade imbalances. By the 2020s, manufactured exports accounted for roughly 35-40% of total exports, while manufactured imports represented more than 60% of the country's total imports, highlighting the structural asymmetry created by liberalisation. This imbalance contributed to de-industrialisation, job losses in light manufacturing, and dependence on imported intermediate and consumer goods, undermining the developmental aspirations of industrial policy.

More recently, the DTIC, established in 2019 through the merger of the Department of Trade and Industry (DTI) and the Economic Development Department, has promoted localisation, Small, Medium and Micro Enterprises (SMME) development, and black-owned industrial participation through schemes such as the Black Industrialists Programme.[34]

[31] DTIC. (2021). *Policy Statement on Localisation for Jobs and Industrial Growth.* Department of Trade, Industry and Competition
[32] Sampie Terreblanche (2002). *A History of Inequality in South Africa, 1652–2002.* Pietermaritzburg & Sandton: University of Natal Press & KMM Review Publishing.
[33]Torreggiani, S., & Andreoni, A. (2023). Rising to the challenge or parish? Chinese import penetration and its impact on the growth dynamics of manufacturing firms in South Africa. *Structural Change and Economic Dynamics*, 199- 212.

[34]South African Government. (2020). *Economic Reconstruction and Recovery Plan (ERRP).* South African Government.

Figure 5: Real manufactured imports and exports VS Share of manufactured imports/exports

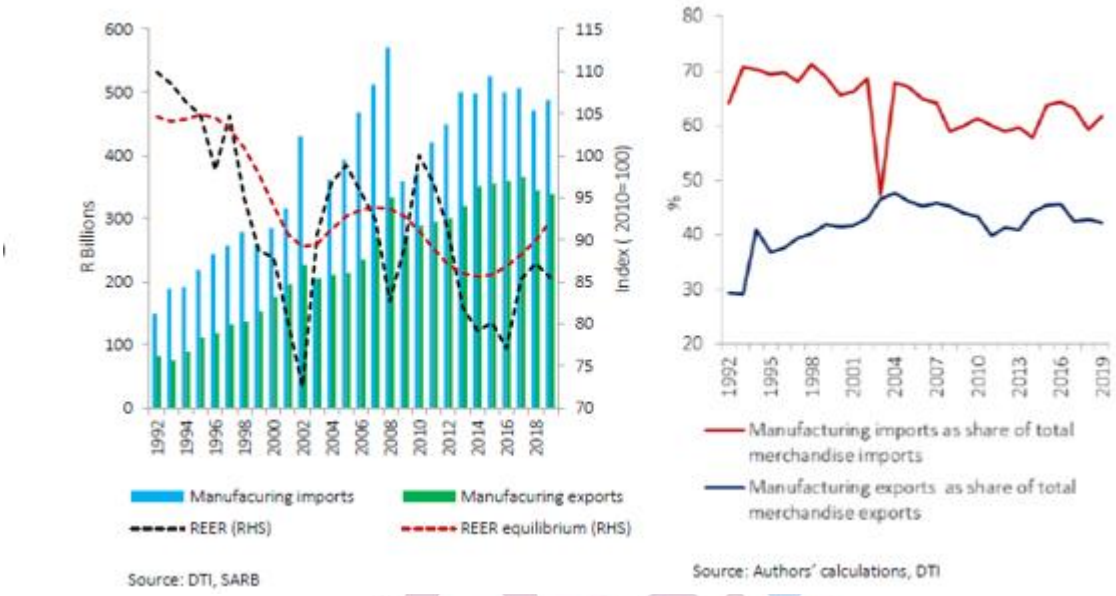
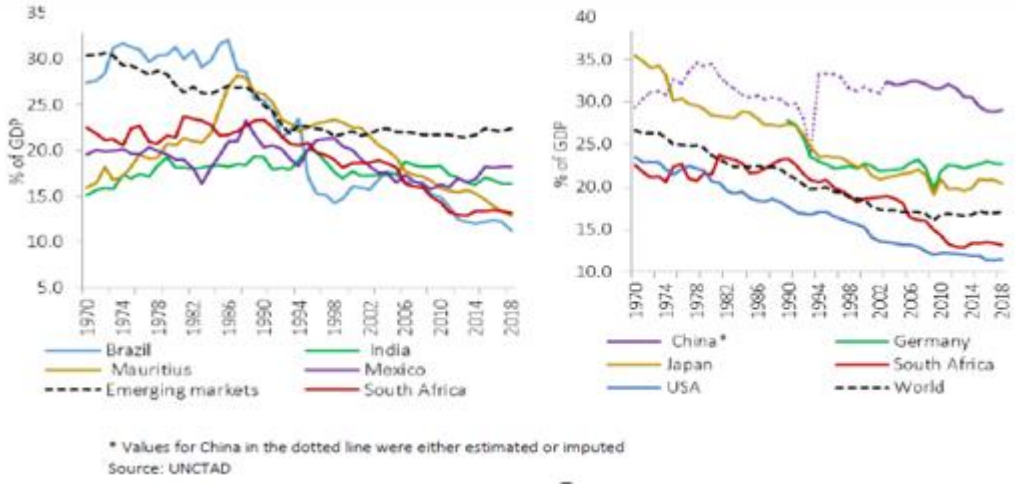


Figure 6: Manufacturing's share in GDP (EM's) VS Manufacturing's share in GDP (ALL)



The Economic Reconstruction and Recovery Plan (ERRP, 2020) set ambitious targets, including a 20% reduction in imports within five years through enhanced local procurement, industrial revival, and export diversification. However, these efforts have often disproportionately benefited a narrow elite rather than broadening industrial participation.

Persistent infrastructure constraints have further undermined industrial recovery. Ageing power plants, an unreliable freight rail system, port inefficiencies, and water and sanitation deficits have all raised operational costs, reducing both domestic and export competitiveness. In addition, structural challenges, including entrenched economic concentration, low investment in productive sectors, and financialisation, have deepened vulnerabilities. Large conglomerates have embraced globalisation and capital flight, while manufacturing-related capital stock has stagnated, weakening prospects for job creation and industrial diversification.[35]

The NDP envisioned inclusive growth, industrial renewal, and equitable economic transformation; however, its success hinges on political will, institutional coherence, and structural reform - areas where implementation has thus far been severely deficient. By 2024, the NDP's industrial targets remained largely unmet.[36] Without foundational improvements in infrastructure, investment climate, and state capacity, these ambitions remain aspirational rather than attainable.

Post-apartheid industrial policy has been characterised by fundamental contradictions between stated goals and implementation capacity. These tensions (listed in Table 1) are not merely theoretical inconsistencies but practical barriers that have prevented the translation of national policy into local economic transformation. Understanding these contradictions is essential to explaining why towns like Lichtenburg and Komati were left vulnerable to de-industrialisation.

Table 1: Tensions / Contradictions Between Post-Apartheid Industrial Policy Aspirations and Implementation Realities

Policy Aspiration	Intended Goal	Tensions / Contradictions
Developmental State Aspiration	State-led industrialisation through SOEs & strategic sectors	Weak capacity, SOE failures, governance deficits
Economic transformation & redistribution	Broad-based empowerment, localisation, B-BBEE	Compliance burdens, investor uncertainty, and economic concentration persist
Inclusive, people-driven change	Industrialisation as a mass job creator & skills driver	Jobless growth, capital-intensive industries, and limited labour absorption
Private-sector-led but State-guided growth	State sets direction, private capital invests	Adversarial state–business relations, policy unpredictability, delayed investment
Institutional & technical capacity	Build a capable state with strong bureaucratic & technical skills	Skills shortages, cadre deployment, and poor implementation
Labour rights & decent work	Protect workers, collective bargaining, and ensure decent jobs	Rising labour costs, competitiveness challenges in light manufacturing

[35] Wall, K. (2025). *Primary causes of the condition of public sector fixed infrastructure in South Africa*. Acta Structilia, 32(1), pp. 63-90.

[36] See Bureau for Economic Research (2021). ***South Africa's Progress Towards its Development Objectives: 2021 Assessment Report.*** Stellenbosch University. www.ber.ac.za

Integration into the global economy	Export-led growth, global competitiveness, trade liberalisation	Premature de-industrialisation, import surges, commodity-dependent export structure

In essence, despite ambitious policy frameworks, post-apartheid South Africa's industrial strategies fell short due to weak execution, infrastructure decay, structural economic constraints, and global competition dynamics. Reversing de-industrialisation requires a renewed focus on infrastructure revitalisation, robust institutional capacity, inclusive finance, and coordinated industrial strategy - grounded in practical rather than aspirational ambitions.

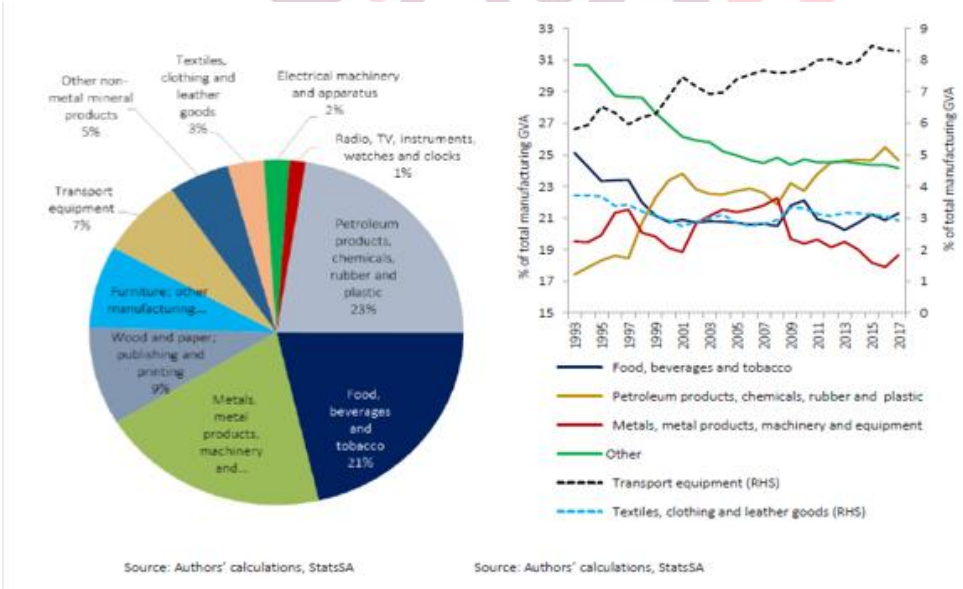
Structural Characteristics of South Africa's Manufacturing Sector

South Africa's manufacturing sector exhibits a distinct structural and historical profile, shaped by its unique trajectory of industrialisation and economic transformation. Eight core features define the sector today.

Sectoral Concentration

The sector is heavily concentrated in metals, petrochemicals, automotive, and food processing. These industries dominate both output and exports, mirroring the country's comparative advantages rooted in mineral resources and raw material processing.

Figure 7: Path Dependency from State-led Industrialisation – L: Manufacturing sub-sector share:1993-2017. R: Evolution of MVA: selected sub-sectors



Much of South Africa's manufacturing composition reflects a legacy of state-driven industrialisation pre-1980s, particularly during apartheid, where industrial policy was designed to support the minerals-

energy complex. This legacy has resulted in a heavy emphasis on upstream, capital-intensive industries aligned with mining outputs.

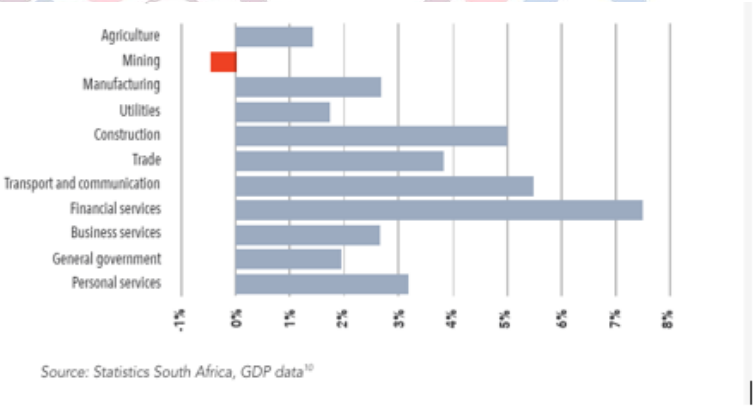
Table 2: Percent change in gross value added

	1993-1999	2000-2007	2008-2017
	% change in GVA		
Manufacturing	14.4	30.5	1.1
Food, beverages and tobacco	-3.8	29.7	5.2
Textiles, clothing and leather goods	-5.3	24.7	0.4
Wood and paper; publishing and printing	7.3	9.3	1.0
Petroleum products, chemicals, rubber and plastic	46.4	26.1	14.0
Other non-metal mineral products	-7.4	24.7	-18.7
Metals, metal products, machinery and equipment	16.2	49.0	-15.2
Electrical machinery and apparatus	37.2	30.4	5.9
Radio, TV, instruments, watches and clocks	-15.6	36.9	31.0
Transport equipment	23.8	45.8	10.4
Furniture; other manufacturing	2.5	21.0	-0.8

Source: Authors' calculations, StatsSA

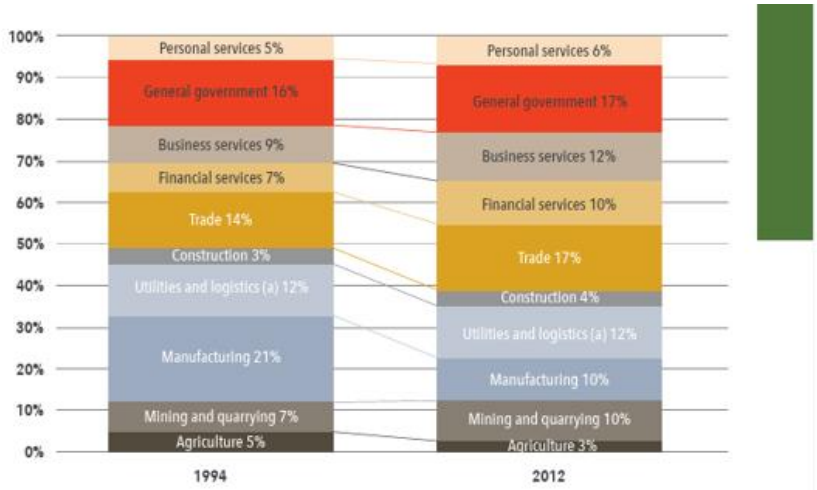
Historically, South African manufacturing developed as capital-intensive, partly due to apartheid-era policies that suppressed labour costs for low-skilled workers while investing in capital stock for strategic autonomy. Over time, however, capital intensity has converged with global norms but remains elevated compared to lower-middle- income peers.

Figure 8: Average annual percentage change in value add in volume terms, 1994-2012, by sector



Source: Statistics South Africa, GDP data[10]

Figure 9: Composition of GDP by major industries, 1994 and 2012



Source: Statistics South Africa, GDP data[11]

The sector is highly energy- and electricity-intensive, consistent with its concentration in heavy industries such as steel, chemicals, and smelting. This dependency makes manufacturing uniquely vulnerable to electricity shortages, tariff hikes, and load-shedding - factors that have grown increasingly disruptive since the mid-2000s.

Limited Labour Absorption, Skewed Skills Demand

Despite its large economic footprint, South Africa's manufacturing sector is not labour-intensive. Employment is relatively low compared to capital investment, and when jobs are created, they are skewed away from medium-skilled occupations, concentrating either in low-skilled manual tasks or high-skilled technical roles, with a missing middle in the skills ladder.[37]

Relatively High Wages

Manufacturing jobs offer relatively high average wages, especially in large firms, partly due to unionisation and legacy collective bargaining structures. This contributes to both higher unit labour costs and the exclusion of informal or marginal workers from the sector.[38]

Spatial Inequality in Manufacturing Location

The sector is spatially concentrated in higher-income provinces - notably Gauteng, Western Cape, and KwaZulu-Natal. This reflects historical infrastructure investments, port and logistics access, and urban market proximity, but also reinforces regional inequality in employment and economic opportunity. These three provinces account for over 75% of manufacturing employment, leaving secondary provinces and small towns marginalised.

[37] Black, A., Craig, S., & Dunne, P. (2017). Capital intensity, employment and sustainabilirt in the South African manufacturing sector. *TIPS Conference.* Cape Town: TIPS.

[38] Hlangoti, N. (ND). *Analysing the impact of collective bargaining in an industry where workers have low bargaining power: Case Study of the KZN contract cleaning industry.* Johannesburg: University of the Witwatersrand.

Stagnation and Employment Decline Post-2008

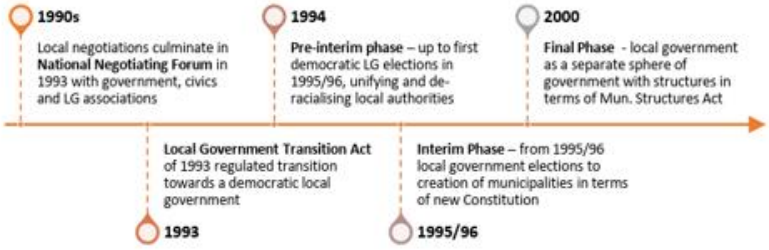
The sector entered a marked period of stagnation and job losses starting in 2008, coinciding with the global financial crisis, electricity supply deterioration, and weakening domestic demand. The sector's contribution to GDP and employment has since steadily declined, marking the onset of a de-industrialisation phase. Manufacturing employment fell from 2.11 million (2008) to approximately 1.6 million (2023).

Municipal Strategy and the Lack of Industrialisation Prioritisation

Post-apartheid South Africa embarked on a transformative governance agenda that emphasised service delivery, decentralisation, and democratic participation at the municipal level. However, this strategy notably under-prioritised industrialisation as a lever for local economic development. Several scholars have documented how South Africa's post-apartheid municipal strategy systematically de-prioritised industrialisation, including Coetzee (2012),[39] Lincoln, *et al* (2024),[40] Robbins (2024),[41] van der Waldt (2018),[42] and Makgetla, *et al* (2022).[43]

According to Coetzee,[44] following the end of apartheid in 1994, South Africa undertook a radical overhaul of municipal planning, aiming to create a planning system that was integrated, developmental, democratic, strategic, and sustainable. He posits that early progress in the mid- to late 1990s saw key policy tools and structures introduced, such as the Integrated Development Plans (IDPs), reflecting international best practices and addressing poverty, inequality, and social exclusion.

Figure 10: South African local government transition



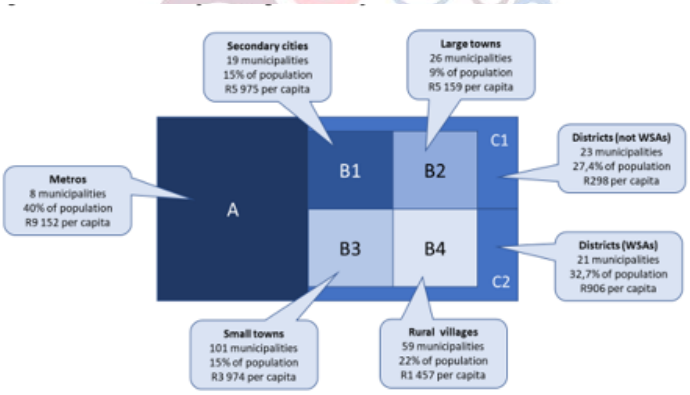
[39] Johnny Coetzee, 2012. *'The transformation of municipal development planning in South Africa (post-1994): impressions and impasse'*, published in *Town and Regional Planning,* Vol. 61 (2012)
[40] G. M. Lincoln, J. J. McCarthy and N. Dorasamy, 2024. '*Place-Based Regional Planning: Shaping Governance, Planning Policy and Practices in a South African Region, 1994–2022'*, *Urban Geography*, Vol. 46 (2024)
[41] Glen Robbins, 2025. *'A tale of no cities? The neglect of cities in South Africa's post-apartheid national economic policies', Area Development and Policy*, Vol. 10 (2025)
[42] Gerrit van der Waldt, 2018. *'Local economic development for urban resilience: The South African experiment'*, *Local Economy*, London South Bank University, Vol. 33(7) (2018)
[43] Makgetla, N., et al, 2022. '*Alignment of Local Economic Development and Industrial Policy*', TIPS *Working Paper*, Trade and Industrial Policy Strategies (TIPS), Pretoria. https://tips.org.za/research-archive/trade-and-industry/item/4523-alignment-of-local-economic-development-and-industrial-policy
[44] Johnny Coetzee, *op cit.*

Their primary mandate became:

- Providing basic services (water, electricity, sanitation)
- Promoting local economic development (LED)
- Advancing participatory democracy
- Spatial restructuring and integration

While these aims were progressive, they did not foreground industrialisation as a central pillar of economic transformation.

Figure 11: Schematic summary of local government system



Coetzee concludes that, nearly two decades later (by 2012), while the framework exists on paper, many municipalities fail to internalise or implement the ideals elucidated in the Constitution, resulting in widespread planning stagnation and poor development outcomes. The result has been limited industrial transformation, persistent spatial inequality, and weak local economic diversification.

As highlighted in Time for a Skills Rethink, Botha, Havemann, and Bisseker (2025), SETAs lack geographic responsiveness and often pursue generic training mandates disconnected from local economic realities. This disconnect has left municipalities ill-equipped to support re-industrialisation or absorb displaced labour.

Municipal Strategy and LED: Service-Oriented, Not Production-Oriented

The LED framework introduced in the late 1990s encouraged municipalities to stimulate local economies. However, LED in practice became:

- SMME-focused: Prioritised micro-enterprises, informal trade, and survivalist activities.

- Tourism and real estate-driven: Promoted place marketing and urban regeneration over industrial clustering.

- Non-strategic: Lacked integration with national industrial policy instruments or sector-based development planning.

Industrialisation, understood as the deliberate development of manufacturing and value-adding sectors, was largely absent from municipal economic planning.

Lincoln, *et al*,[45] provide valuable empirical context through their study of the iLembe District in KwaZulu-Natal, where a declining sugar industry dominates the local economy. They write that under apartheid, regional planning prioritised industrial decentralisation and "growth centres" in former Bantustans (Transkei, Bophuthatswana, Venda and Ciskei); however, it lost credibility after 1994 and was largely abandoned, making way for new municipal boundaries and governance structures under legislation such as the Municipal Demarcation Act (1998), Municipal Structures Act (1998), and Municipal Systems Act (2000).

Lincoln, *et al*, note that the 2015 Spatial Planning and Land Use Management Act (SPLUMA) and National Spatial Development Framework 2050 sought to revive regional planning within a modern framework driven by national goals such as economic diversification, green growth, and spatial transformation.

However, local and district Spatial Development Frameworks (SDFs) and Integrated Development Frameworks (IDPs) were often compliance-driven, reflecting provincial or national mandates rather than meaningful strategic development tailored to the region's unique needs.

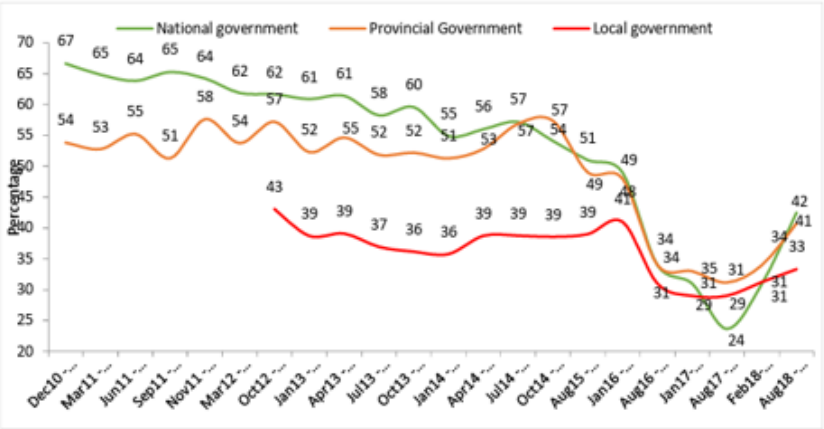
They further argue that, even today,[46] planning remains fragmented across institutional spheres, with poor intergovernmental relations limiting cohesive region-building. District-based coordination models like the DDM have struggled to overcome political and administrative silos. Furthermore, relations among government, civil society, and business are strained, inhibiting collective regional agency and democratic governance.

Institutional and Structural Barriers

Makgetla *et al*[47] evaluate how municipalities are institutionally and operationally distanced from national industrial instruments, such as Special Economic Zones (SEZs) and state industrial parks. They profile metros, secondary cities, and smaller towns, showing that LED efforts rarely integrate industrial policy or value-chain development in their economic planning.

[45] Gill Lincoln *et all*, *op cit.*
[46] *Ibid*
[47] Neva Makgetla *et al, op cit*

Figure 12: Trust in government institutions – how well is government doing its job (25 Year Local Government Review – Synthesis)



Source: GCIS 2018

Robbins[48] discussed national strategies like the Micro-Economic Reform Strategy (MERS) and Integrated Manufacturing Strategy (IMS), noting they acknowledge geographic inequities but fail to operationalise industrial development at municipal or city cluster levels, leaving cities sidelined in actual implementation.

He argues that industrial policy has largely been blind to geographic variation, treating South Africa as a spatially neutral economy and ignoring the critical role of small-town centres in shaping economic growth.

Several structural and institutional factors contributed to the de-prioritisation of industrialisation. Firstly, there were capacity constraints. Many municipalities lacked the technical capacity to design and implement complex industrial strategies. Secondly, there was the problem of the fiscal model. The local government financing model depended heavily on service charges and intergovernmental transfers, discouraging long-term productive investment. Thirdly, there was policy fragmentation. Weak coordination between national departments (e.g., the Department of Trade and Industry (DTI) – predecessor-in-title to the DTIC) and municipalities resulted in misaligned objectives. Fourthly, there was the challenge of urban bias. Major industrial development was concentrated in metros, while smaller towns and rural municipalities were marginalised.

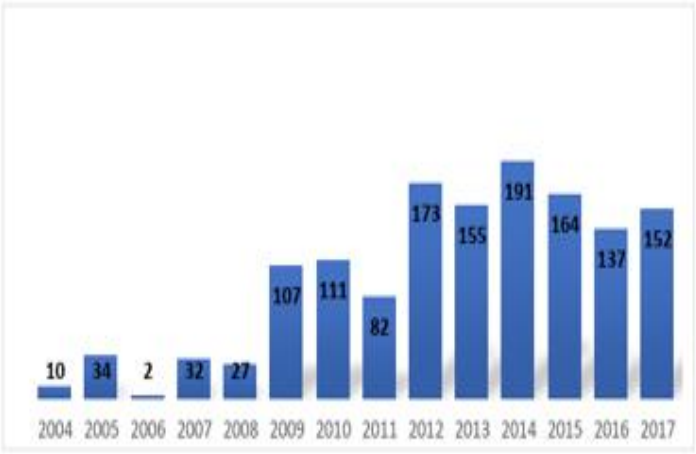
Missed Opportunities for Industrialisation

Municipalities could have played a stronger role in creating industrial parks and SEZs tied to local comparative advantages; supporting industrial skills development through TVET linkages; facilitating

[48] Glen Robbins, *op cit*

infrastructure for production (e.g., logistics, energy reliability); and attracting anchor firms to drive value chains in agro-processing, metal fabrication, etc.

Figure 13: Annual number of service delivery protests in South Africa, 2005 -2017



Source: Municipal IQ, 2018

Instead, most municipalities opted for low-capacity, low-impact interventions such as hawker stalls, events, and beautification projects. Van der Waldt (2018) found that in a survey of 40 municipalities, LED strategies, over 70% focused primarily on informal sector support and tourism promotion, with fever that 15% including manufacturing or industrial development as core priorities.

The Department of Cooperative Governance and Traditional Affairs (COGTA) clearly mandates that municipalities hosting SEZs integrate them into their local LED strategies, SDFs, and infrastructure plans. This includes revitalising industrial parks and aligning with district-level development plans, not just symbolic or low-skilled initiatives.

Table 3: Recent efforts to revive local government

District Development Model	**Municipal Structures Amendment Bill, 2024 ("Coalition Bill")**	**2025 White Paper on Local Government Review**
The DDM is a place-based governance approach aimed at fixing local government challenges by integrating planning, budgeting, and implementation across national, provincial, and local spheres through a single **"One Plan"** per district or metro. It promotes coordination via political champions, community engagement (e.g., Presidential Imbizos), and alignment with municipal Integrated Development Plans. **Progress so far:** Piloted in Waterberg, OR Tambo, and eThekwini, with about 35 One Plans completed. New regulations give the model legal backing, encouraging joint	The Bill seeks to stabilise hung municipalities by: • **Formalising coalition governance** through binding written agreements to ensure transparency and continuity. • **Shifting executive systems** in no-majority councils from mayoral to collective executives for broader inclusion. • **Enhancing accountability** via open show-of-hands	**Overall goal -** A **strategic reset** to make local government **fit for the 21st century**, responsive to citizens and the economy, and resilient to shocks - built on four pillars: governance, institutional arrangements, service delivery & infrastructure, and financial sustainability.

planning, resource sharing, and stakeholder participation. **Ongoing challenges:** • **Complexity and skills gaps** hinder municipal adoption. • **Political dynamics** risk inconsistent support and interference. • **Perceptions of bureaucracy** and unclear rollout reduce efficiency. • **Financial weaknesses** in municipalities remain unresolved despite better coordination.	voting and defined removal grounds for office-bearers. • **Reducing council fragmentation** with a 1% minimum vote threshold for party representation. **Intended impact:** Reduce instability, unblock service delivery, and make governance more transparent. **Criticisms:** Possible constitutional conflicts (over provincial powers and electoral rights), risk of disenfranchising small parties, and concerns that automatic executive system changes may limit local flexibility.	**Timeline:** Discussion document released April 2025 → public input by 30 June 2025 → final White Paper due March 2026.

These three initiatives: the DDM, the Coalition Bill, and the White Paper review represent the most significant attempt to reform local government since the introduction of the municipal systems in 2000. For de-industrialising towns like Lichtenburg and Komati, their success or failure will determine whether coordinated state intervention can arrest decline or whether these towns will continue their trajectory toward economic and institutional collapse. The DDM offers a potential mechanism for aligning industrial policy with local realities, the central challenge identified throughout this section.

The Deputy Minister of Trade, Industry and Competition, Zuko Godlimpi,[49] has been quoted in the media (during his address at the 2nd Annual District Development Model (DDM) Conference held at Nelson Mandela University in Gqeberha, posted on 16 November 2024) emphasising that municipalities should actively support manufacturing - not merely through incentives, but by enhancing services, reducing red tape, and integrating industrial parks and SEZ facilities into townships and local economies to attract anchor firms.

A survey of selected municipalities[50] found that successful investment-attracting municipalities actively focus on industrial nodes, SEZs, logistics corridors, and skills development aligned with economic advantage. In contrast, municipalities that do not prioritise these strategic opportunities face stagnation.

The Municipal Systems Act, 2000, defines LED as a municipal development function and encourages the provision of infrastructure, investment in skills, and activation of economic resources; yet implementation across municipalities remains uneven.

Academic literature on LED practice shows that smaller municipalities - particularly in rural and labour-sending regions - often adopt a pro-poor LED orientation (e.g., hawker stalls, tourism activation,

[49] https://www.thedtic.gov.za/deputy-minister-godlimpi-calls-for-local-action-to-boost-manufacturing-and-exports-at-ddm-conference/

[50] Infrastructure investment research (2023) Administration Publica.

beautification, events), rather than pro-market or industrial strategies. This is due to limited capacity, weak private sector networks, and institutional gaps.

Studies also note that many municipal LED initiatives are short-term, low-impact, informal-economy focused, and not aligned with economic infrastructure or firm-based value chains. Analysis of post-1994 policy shows that national industrial strategies (RDP, GEAR, ASGISA) often sidelined cities' roles. Municipal LED was typically tasked with public works or pro-poor projects, while anchoring industrial or manufacturing projects remained centrally driven with limited municipal agency.

Outcomes and Implications

The sidelining of industrialisation at the municipal level contributed to continued de-industrialisation, especially in secondary cities and former mining towns; high unemployment, particularly youth unemployment in peri-urban areas; entrenched spatial inequality, with economic opportunity clustered in metros; and weak resilience to global shocks, as local economies remained consumption- and service-based.

De-industrialisation and Secondary Cities

Economic Transition research[51] shows that secondary cities (e.g. Emalahleni, Matjhabeng, Newcastle) are overly dependent on mining and have struggled to diversify. Path dependency, poor governance, and limited municipal capacity have hindered successful industrial redevelopment. Only Newcastle showed early signs of transformation. The manufacturing sector's share of GDP dropped from over 19% in 1994 to about 12% by 2022, reflecting structural de-industrialisation.

Unemployment and Youth Immobility

Nearly two-thirds of South African unemployed working-age individuals live in townships/peri-urban areas, which were initially designed as labour dormitories. Structural economic neglect and underinvestment have left these regions with high NEET rates (~36%).

Municipal employment initiatives, such as public works or temporary projects, lack strategic industrial focus, limiting long-term job creation. Studies show municipal efforts often revolve around low-impact programmes with little traction in formal job markets.[52]

Spatial Inequality and Metro-Centric Growth

Apartheid-era spatial policies entrenched peripheral underdevelopment: the urban-rural divide and the clustering of economic opportunity around metros persist into the present, constraining municipal-level

[51] See Götz, G. and Harrison, P., 2021. '*Secondary Cities in South Africa: Path Dependency, Resilience and Restructuring*', *Politics and Governance*, 9(1), pp.65–75. https://www.cogitatiopress.com/politicsandgovernance/article/view/4032
[52] Robbins, G., 2010. '*Beyond local economic development? Exploring municipality-supported job creation in a South African city', Development Southern Africa. Vol. 27 (2010):* https://doi.org/10.1080/0376835X.2010.508584

industrial activity.[53] Regional unevenness persists; the Gauteng-Witwatersrand–Vereeniging economic complex largely outpaces peripheral townships like Ga-Rankuwa and Winterveld, which remain underdeveloped and disconnected from local economic clusters.[54]

Poor Resilience to Global Shocks

Municipal governance failures, such as limited infrastructure planning, institutional instability, and service failure, have weakened cities' response to shocks like energy outages, economic downturns, or commodity price shifts.[55] Thus, reversing de-industrialisation is vital to addressing unemployment and generating resilience. Failure to do so leaves local economies overly dependent on consumption and limited services, unable to withstand external shocks or generate sustainable employment.

Reimagined Industrial Strategy: Sectoral Master Plans

The Master Plans, jointly developed by government, business, and labour, are located within the overall framework of South Africa's *Reimagined Industrial Strategy*. They target manufacturing sectors facing import competition, low localisation, and transformation deficits. They are central to the 6th (2019-2024) administration and the current 7th (2024-2029) administration's industrial strategy, replacing prior policies with targeted, outcome-oriented interventions.

Table 4: Sector Snapshot

Sector	Focus and Objectives	Status / Progress Highlights
Automotive	Double production & employment, boost local content, pivot to EVs and local battery value chains	Incentives via AIS; EV White Paper priority; growing investor interest
CTFL	Localisation, import substitution, job creation, transformation for SMEs and entrepreneurs	CTFLGP funded ~R1.87 bn; ~24 000 jobs supported
Poultry	Retain jobs, reduce imports, and grow local contract growers	~52 930 jobs retained; new black-grower network built
Steel & Fabrication	Lower domestic steel cost, encourage export manufacturing, and drive infrastructure coordination	~R209 m support disbursed; 2 439 jobs leveraged
Furniture	Protect firms, boost local demand, export via AfCFTA, build skills, and raw materials capacity	Strategy toolkit covers procurement, design, skills, local sourcing
Sugar	Substitute imports, strengthen retailer sourcing, support growers	Signed 2020; Shoprite partnership in place

Impact and Trends

- These plans collectively cover industries contributing 6% of GDP**,** 25% of exports, and employing approximately 700 000 people.[56]

[53] Cilliers, J. and le Roux, A. *South Africa: Introduction. African Futures Institute: Geographic Futures.* 17 July 2025.*:* *https://futures.issafrica.org/geographic/countries/south-africa/?utm*

[54]Traditional Authority and Territorialised Underdevelopment: Urban-Industrial Fractures in Ga-Rankuwa and Winterveld**:** https://www.regionalstudies.org/rsa-blog/2025-blog-traditional-authority-and-territorialised-underdevelopment-urban-industrial-fractures-in-ga-rankuwa-and-winterveld/?utm

[55]Marais, L. *et al*, 2021. 'Economic Transitions in South Africa's Secondary Cities: Governing Mine Closures', *Politics and Governance.* Open Access Journal, Vol. 9. No. 2 (2021) - ISSN: 2183-2463.: https://www.cogitatiopress.com/politicsandgovernance/article/view/4032?utm

[56] DTIC. (2024). *Industrial Policy and Strategy Review - Transforming Vision into Action: Charting South Africa's Industrial Future.* Pretoria: DTIC. https://www.thedtic.gov.za/sectoral-master-plans-bearing-fruits-creating-jobs-transforming-the-economy-deputy-minister-gina/

- Key outcomes include enhanced localisation**,** increased investment**,** poverty-focused industrialisation**,** export growth, and stronger transformation across sectors.
- They reflect a shift to industrial policy as a macroeconomic anchor, integrating procurement, infrastructure, competition law, and financing policy to support long-term competitiveness and inclusion.

While South Africa's sectoral master plans are well-intentioned efforts to revive local industries, stimulate job creation, and enhance export competitiveness, they are increasingly proving to be overly ambitious, misaligned with global trade realities, and ultimately unsustainable in their current form.

Firstly, the assumptions underpinning these master plans are unrealistic. They rely heavily on coordinated public-private collaboration, sector-specific investment, and localisation targets that far exceed the current capacity of local industries. Many sectors – such as steel, poultry, and automotive – lack the industrial base, infrastructure, or skilled workforce to scale up production competitively in the short-to-medium term. Moreover, several of these plans assume high levels of state support, funding, and administrative capacity – resources that South Africa's constrained fiscus and overstretched public sector are increasingly unable to provide.

Secondly, the global trade environment is shifting rapidly and often unpredictably. The recent decision by the United States to impose a 30% tariff on certain South African steel and aluminium exports is a case in point. This action underscores the growing trend of protectionism among major economies and highlights the vulnerability of South Africa's export-led industrial strategy. If even long-standing trade partners like the U.S. are willing to penalise South African goods to protect their own industries, it raises a fundamental question: how viable is South Africa's strategy of expanding sectoral output for export under the assumption of stable or growing global market access?

Such developments expose a critical flaw in the master plan approach: it largely ignores the geopolitical and economic volatility shaping global trade. By focusing inwardly on production targets and localisation metrics without sufficient flexibility or adaptability, these plans risk anchoring South Africa's industrial policy to outdated assumptions of global cooperation and open markets.

Furthermore, localisation targets that restrict imports to promote local procurement may backfire by reducing competitiveness and increasing input costs, especially in sectors heavily reliant on imported intermediate goods. This can lead to price inflation, reduced quality, and potential retaliatory trade measures – all of which undermine the very industries these plans aim to protect.

These limitations suggest that sectoral master plans while valuable for specific industries cannot substitute for placed based adaptive industrial strategies tailored to local context particularly in secondary towns where national policy assumptions rarely hold.

A more pragmatic approach would be to focus on improving industrial competitiveness through broad-based reforms, such as reducing logistical bottlenecks, enhancing energy security, and fostering innovation, rather than relying on rigid, sector-specific plans vulnerable to both internal weaknesses and external shocks.

Beyond Industrial Nostalgia

South Africa's manufacturing sector is in trouble, not simply because of global forces but because of energy crises, internal policy drift, and weak competitiveness; all this shows that the country's experience with premature de-industrialisation is more severe, indicating deep structural issues. Yet industrial policy debates remain haunted by two nostalgic visions: the state-led industrialisation of the 1960s-70s, and the export-led miracle of East Asian Tigers. While both offer lessons, neither provides a replicable model for contemporary South African small towns.

The former relied on apartheid-era labour suppression and import barriers incompatible with modern trade rules; the latter required state capacity, labour discipline, and geopolitical conditions absent in today's South Africa. Moving beyond nostalgia requires acknowledging that small-town reindustrialisation will look fundamentally different from either historical model, which is more decentralised, more adaptive, and more reliant on local governance than national directives.

The East Asian Miracle – Relevance or Obsolesce?

The East Asian Tigers - South Korea, Taiwan, Hong Kong, and Singapore - experienced rapid industrialisation through strategic planning, export orientation, disciplined governance, and human capacity investment. South Korea built on heavy manufacturing and chaebols, Taiwan developed electronics with strong SME foundations, Singapore became a trade and tech hub, and Hong Kong leveraged finance and services. Their success rested on institutional coherence, developmental state capacity, and timing conditions that are difficult to replicate in today's geopolitical and trade environment.

For South Africa, the East Asian experience offers qualified lessons. The emphasis on human capital, export competitiveness, and policy coordination remains relevant. However, blind trade liberalisation without industrial capacity-building, overdependence on natural resources (South Africa's enduring trap), and weak institutions that enable short-termism are precisely the pitfalls South Africa has already fallen into.

Table 5: Characteristic of the ASIAN model

Country	Key Characteristics
South Korea	Heavy manufacturing (steel, autos, electronics); Chaebol-driven growth (e.g., Samsung, Hyundai)
Taiwan	Electronics and tech; strong SME base; land reform and state investment
Singapore	Trade hub; high-tech manufacturing; strong FDI inflows
Hong Kong	Services and trade; finance-led development; light manufacturing in early phases

Table 6: Lessons for developing countries

What to Learn	What to Avoid
Invest in **human capital**	Blind liberalisation without industrial capacity
Promote **competitive exports**	Overdependence on natural resources
Ensure **policy coordination** and institutional discipline	Weak institutions and short-termism

The challenge is not to replicate the Tiger model but to adapt its principles of strategic state intervention to the realities of fiscally constrained municipalities and globally integrated value chains.

SECTION 4: FOCUSED ANALYSIS ON LICHTENBURG AND KOMATI

Having established the context of manufacturing (Section 2) and the policy implementation disconnect (Section 3), this section develops the analysis for understanding de-industrialisation at the local level. The paper presents a comparative perspective on how sectors move beyond descriptive to analytical interpretation through three frameworks: social resilience theory, Marshallian industrial cluster analysis, and the DDM, and then applies these systematically to Lichtenburg and Komati. These cases represent agro-processing and energy sector de-industrialisation, respectively, and how de-industrialisation unfolds in specific places, shaped by local governance capacity, industrial structure, and community resilience.

The analysis proceeds in four parts:

- **First**, we develop a social resilience framework to categorise community responses (absorptive, adaptive, and transformative).
- **Second**, we examine each town through a Marshallian lens, analysing the industrial clusters and the 'commons' that anchor industries create.
- **Third**, we assess how the DDM could provide coordinated intervention (and why it has largely failed to do so).
- **Fourth**, we present quantitative evidence documenting the scale and trajectory of decline. Finally, we examine how de-industrialisation's impacts differ by gender, demonstrating that economic shocks are never socially neutral.

The economic data for Ditsobotla reveals a municipality in freefall even before Clover's final exit, with unemployment and service access worsening dramatically. The decline in own revenue, as well as the September Cabinet decision to place the Ditsobotla Local Municipality under administration, confirms

the report's finding of a collapsing fiscal base. For Steve Tshwete, the data shows a relatively resilient economy pre-2022, but the modelled job losses and projected revenue decline point to a significant negative shock that will manifest in future datasets. *This quantitative profile underscores that de-industrialisation is not an event, but a process that erodes a town's socio-economic foundation over the years.*

The report also explores the extent to which the small-town de-industrialisation and vulnerability context plays itself out through a gender lens-should be in a dedicated gender section. Economic shocks are never gender-neutral, and in this regard, we interrogate the extent to which the closure of formal industries reconfigures the gendered divisions of labour, income, and care work, often exacerbating existing inequalities.[57]

The report identifies over-reliance on a single anchor enterprise in any community as a critical vulnerability and builds a case for anchor diversification incentives for single or multiple players as fiscal and regulatory tools available to catalyse investment in new and expanding sectors within a specific locality, reducing single economic factor dependency. Without proactive diversification, deindustrialising towns will continue to decline and a strategic, well-designed package of these incentives, embedded within the DDM and aligned with a place-based industrial strategy, are a crucial tool for breaking the cycle of dependency and building resilient, diverse local economies.

A Framework for Analysing Social Resilience in Deindustrialising Towns

The Tripartite Social Resilience Framework conceptualises resilience as the ability of individuals and communities to absorb, adapt, and transform in response to shocks. According to the humanitarian organisation Agency for Technical Cooperation and Development (ACTED), resilience is the capacity of a system to “absorb, a Marshallian Development Theory adapt and transform from shocks and stresses without compromising and potentially enhancing long-term prospects”.

Alfred Marshall's analysis of industrial districts remains remarkably relevant for understanding small-town de-industrialisation. Marshall observed that firms in specialised localities benefit from three types of external economies: a) Labour market pooling, b) Specialised input suppliers, and c) Knowledge spillover.

These three externalities create the "industrial commons": shared infrastructure, knowledge, and institutions that no single firm could create alone but from which all benefit. The commons include:

a) Physical infrastructure: Roads designed for heavy trucks, water systems for industrial use, reliable electricity supply.

[57] Posel *et al*., *Op cit*.

b) Institutional infrastructure: TVET colleges training relevant skills, municipal planning aligned with industry needs, and business associations facilitating coordination.

c) Social infrastructure: Networks of trust, shared norms of quality and reliability, collective identity as "industrial town."

While Marshall emphasised networks of small firms, South African small towns evolved hub-and-spoke structures: firms (Clover SA, Komati Power Station) anchoring networks of smaller suppliers and service providers. This concentration creates acute vulnerability, and when the hub closes, the entire structure collapses. This is not a gradual decline but a sudden systemic failure, and what was observed in both case studies.

Social resilience moves beyond GDP and employment to understand community capacity for navigating change. Magis (2010)[58] emphasise on community agency in the resilience process, defining it as the active engagement of community resources to thrive among change and uncertainty. Resilience is not inherent but must be built through deliberate action.

The three capacities are defined as follows:

a) **Absorptive capacity**: the ability to cope with and moderate the impacts of shocks, preserving essential structures and functions. Examples include using coping strategies or strengthening physical assets to withstand hazards or to expand household sources to buffer impacts on livelihoods and basic needs.
b) **Adaptive capacity**: the ability to adjust behaviours and practices to moderate future impacts, learning from experience and changing actions while maintaining core functions. For instance, factory workers who were retrenched acquired new skills to transition to new or different sectors, illustrating adaptive change.
c) **Transformative capacity**: the ability to create fundamentally new systems to avoid future shocks. Transformation implies longer-term structural change, such as shifting from agriculture to other livelihoods or changing governance arrangements. ACTED highlights that transformative capacity allows communities to build entirely new systems when existing ecological or economic structures become untenable.

These capacities provide a lens for analysing how Lichtenburg and Komati communities respond to industrial decline and reveal that transformative capacity is fundamentally institutional. Absorptive capacity reflects immediate coping, adaptive capacity reflects learning and diversification, while transformative capacity involves reimagining the local economy.

We categorise community responses:

[58] Magis *op cit*.

Absorptive Capacities

Lichtenburg: The absorptive response was characterised by survivalist informal trading, reliance on social grants, and outmigration of youth. The immediate aftermath of Clover's exit was characterised by classic absorptive strategies. Former Clover employees relied on severance packages (typically 2-3 months' salary), while the broader community experienced a rise in survivalist informal trading and increased dependence on social grants as formal income sources dried up. The outmigration of skilled youth is another coping mechanism that provides individual relief but depletes community capital.

Komati: The absorptive capacity was characterised by the use of severance packages, reliance on extended family networks, and a shift to informal vending. As with Lichtenburg, the initial shock triggered absorptive measures. Contractors and local SMEs that serviced the power station were forced to close or downsize. Modelled data on job losses in the transport and vendor sectors point to a significant absorptive burden on the local economy.

Adaptive Capacities

In Lichtenburg, adaptive capacities were characterised by farmers seeking new buyers after Clover's exit. Remaining anchor businesses like Tacet Cement adapted by privately funding road maintenance- a costly substitution for municipal failure that illustrates both adaptive capacity and its limits, but a necessary step to continue operations.

The Komati case is unique due to the structured JET process. Adaptive capacity is being formally encouraged through Eskom's reskilling programmes and plans to repurpose the site for renewables. However, this adaptation is largely driven from the top down by Eskom and the government, leaving a conclusive assessment that adaptive capacity is evident but fragmented.

Transformative Capacities

Lichtenburg: The near-total collapse of municipal governance (12 managers in 5 years, and a dissolved council) destroyed the primary institutional platform for coordinating a transformative response. Community agency was channelled into protests and service delivery demonstrations, a negative form of resilience that expressed frustration, yet was unable to generate constructive alternatives. Without a functional municipality, coordinated resources, and implementation development plans, transformative capacity will remain absent.

While in Komati, the top-down, Eskom / World Bank-driven repurposing plan risked sidelining local and community agency. Stakeholder and community members felt excluded ("no one consulted us"), stifling the potential for a locally owned, transformative outcome. The report's modelled data on job losses in the transport and vendor sectors points to a significant absorptive burden on the local economy.

This resilience framework reveals that South Africa's deindustrialising towns are trapped in a cycle of coping and fragile adaptation. The decline of manufacturing, as documented in the cases of Lichtenburg and Komati, represents a profound socio-economic shock.

These strategies are essential for survival but do not alter the underlying vulnerability. Rising informal trade and youth outmigration are classic signs of absorptive, but ultimately limiting, resilience.

The case studies confirm that resilience is not an automatic or innate community trait and that it needs to be actively mediated by institutional capacity and collective agency. In Lichtenburg, institutional failure pre-empted transformative action. In Komati, a strong national institution (Eskom) is driving the process, but its success hinges on its ability to cede space and build local institutional and agency capacity. Where institutions are weak or exclusionary, communities remain trapped in reactive coping modes, unable to engineer a new future.

The social resilience framework reveals a stark reality: that the de-industrialisation of South Africa's small towns is not merely an economic crisis but a crisis of governance and agency. While communities demonstrate remarkable absorptive and adaptive capacities, the transformative capacity required to break the "peripheralisation loop" is almost absent. Building this capacity requires more than project funding; it necessitates the deliberate strengthening of local institutions and the creation of inclusive platforms for community-led planning, a challenge that the DDM is ostensibly designed to meet.

The DDM: A Vehicle for Coordinated Redevelopment or Another Missed Opportunity?

The announcement by President Ramaphosa (June 2019 SONA) represents South Africa's most ambitious attempt to fix the fractured governance system that enables peripheralisation. The DDM's potential lies in addressing the institutional preconditions for both cluster development and transformative resilience.

As discussed earlier, a **Marshallian industrial cluster (or 'agglomeration')** emerges when firms accumulate specialised skills and machinery in a particular locality and exchange inputs and knowledge through dense networks. Two features of the theory are particularly relevant for de-industrialising towns:

- **Path dependence and vulnerability to anchor firms**: While Marshallian clusters emphasise networks of small firms, in practice, many South African clusters evolved into hub-and-spoke structures where one or two large firms (e.g., a cement plant or a power station) dominate supply chains. When such a firm downsizes or relocates, the local economy loses both direct employment and the networked demand that sustained smaller suppliers.
- **Importance of infrastructure and public goods**: Marshall argued that clusters thrive where infrastructure (transport, utilities, regulation) supports efficient exchange. Persistent service delivery failures - such as poor roads, unreliable electricity, or corruption - undermine this "industrial commons" and erode competitiveness. The closure of Clover's cheese factory in Lichtenburg illustrates how infrastructure collapse can push industry to relocate.

South Africa's DDM seeks to break down planning silos by developing integrated "One Plans" that coordinate investments and service delivery across national, provincial, and local government within each district.

Connecting Marshallian theory and DDM:

- **Shared emphasis on spatial planning and economic specialisation**: Both Marshallian theory and the DDM recognise that economic development has a strong spatial dimension. Marshallian clusters develop when firms and labour concentrate around a speciality. The DDM, on the other hand, seeks to spatialise development priorities by translating economic planning and development objectives into specific district plans and coordinating investments across government. Using a cluster lens within the DDM could help identify *comparative advantages* and develop targeted industrial strategies for each district (e.g. renewable-energy technology around Komati or agro-processing in OR Tambo).
- **Potential for leveraging existing industrial commons**: The DDM's call for "One Plans" encourages alignment of infrastructure, land-use planning, and economic programmes. A Marshallian approach could operationalise this by mapping existing clusters, assessing supply-chain linkages, and identifying the common pool of skills and institutions that support them. For example, Lichtenburg hosts four major cement producers within 80 km, demonstrating a strong industrial cluster. Therefore, integrating this information into DDM planning could prioritise infrastructure (roads, energy, and water) that sustains the cement cluster while diversifying into value-added products.
- **Flexibility versus bureaucracy:** Marshallian clusters evolve through bottom-up processes, informal networks, and incremental innovation. The DDM, by contrast, relies on formal intergovernmental structures and long-range plans. Evidence from pilot municipalities shows that developing a single plan across national, provincial, and local levels is difficult, with *party-political dynamics and ambiguous roles* impeding agreement.
- **Need for data and knowledge networks:** Marshall noted that clusters prosper because firms share tacit knowledge. The DDM pilots reveal significant data gaps resulting in municipalities lacking up-to-date information on population, migration, and sector projects. Without a robust evidence base, planners cannot identify cluster dynamics or evaluate interventions. Establishing district research hubs and open data systems would align the DDM with Marshallian principles of knowledge exchange.
- **Complementarity with social resilience:** Marshallian clusters can enhance absorptive and adaptive capacities by creating diverse employment and social networks, while DDM must address resilience across sectors. Pilot reviews from the Eastern Cape warned that overreliance on existing planning instruments replicates the very challenges the DDM seeks to solve. A Marshallian lens encourages continuous observation and learning rather than one-off plans, which could strengthen the DDM's transformative ambitions.

Critical Gaps in Implementation

Despite DDM's good design, the process of implementation is experiencing challenges:

a) Capacity Constraints: Through observations, many municipalities lack staff to participate meaningfully in planning processes.

b) Political Dynamics: Politically, the parties' conflicts override technical coordination.

c) Fiscal Constraints: One Plan identifies needs, but budget allocations remain siloed.

d) Limited Authority: As DDM is a coordination mechanism, it is not an implementation authority; therefore, it cannot compel action.

e) Data Gaps: Poor information systems prevent evidence-based planning.

These gaps are particularly critical in distressed municipalities like Ditsobotla, where DDM is most needed but least viable given current capacity.

The DDM represents South Africa's most coherent policy response to its fractured governance system. For de-industrialising towns, it offers a framework to replace chaos with coordination. Its failure in Newcastle would be a devastating indictment of the state's capacity for self-reform. Its success, however, could provide a replicable model for managing industrial decline and building place-based resilience across the country.

Simply overlaying Marshallian cluster concepts onto the DDM is wholly insufficient. The model must address systemic governance, capacity, and data issues to provide a fertile environment for localised industrial development. The case studies of Lichtenburg and Komati are testaments to the catastrophic consequences of uncoordinated governance. The failure to address municipal dysfunction in Lichtenburg and to holistically plan for Komati's closure highlights a systemic flaw in South Africa's intergovernmental system.

Lichtenburg – Clover South Africa

Lichtenburg is an agricultural and industrial town where four major cement producers operate within an 80-km radius. It also hosts maize farming and previously hosted the Clover cheese factory. However, poor municipal service delivery led Clover to relocate in 2021, causing job losses and highlighting the fragility of the local industrial base.

Although Ditsobotla is not a DDM pilot, it exemplifies how weak municipal governance and infrastructure can undermine industrial clusters. A DDM approach informed by Marshallian theory would emphasise maintaining basic services, upgrading infrastructure, and coordinating stakeholders to retain and grow the cement cluster.

A retrospective application of the DDM framework illustrates both its necessity and the consequences of its absence.

A fully functional DDM process would have identified the operational risks to Clover, due to water, electricity, and road failures, as a critical early warning. The DDM's joint planning structure could have mandated a coordinated intervention from National Treasury (fiscal support), COGTA (governance support), and the relevant technical departments to stabilise Ditsobotla before the company's exit. Post-closure, the DDM would provide the mandated structure for aligning local economic development (LED) strategies, SMME support, and social protection measures, preventing the current ad-hoc and fragmented response.

Komati – Komati Coal Power Station

The Komati Power Station supported roughly 5 900 jobs per year[59] in Mpumalanga through its daily operations, contributing R964 million to household incomes, including R105 million to low-income households.

Komati illustrates the need for a just transition within district planning. A Marshallian perspective would emphasise developing new clusters (e.g., renewable-energy manufacturing or agri-processing) using existing skills and infrastructure. The DDM could provide the governance platform to align Eskom, provincial departments, and community initiatives in reskilling programmes and infrastructure investments.

The DDM is the ideal institutional mechanism for ensuring the JET is "just" at a local level. A robust "One Plan" for the Nkangala District would coordinate:

a) Eskom and the DTIC on the physical repurposing of the asset.
b) The Department of Higher Education and Training and the Mpumalanga Economic Growth Agency (MEGA) on skills development and economic diversification.
c) The Steve Tshwete Local Municipality and the private sector to leverage the transition for broader local economic benefits.

Another Case: Newcastle – AMSA

The case of Newcastle, where ArcelorMittal South Africa (AMSA) announced the closure of its Newcastle Works in 2025. This provides a third, real-time test of whether South Africa's governance system can apply lessons from Lichtenburg and Komati to mount a coordinated preventive response.

Newcastle's economy is dominated by manufacturing, with the Newcastle Works steel mill forming the backbone. An independent Econometrix Study[60] estimates that the plant's output at basic prices

[59] KPMG (2017) – Impact Assessment of Komati Power Station
[60] Econometrix (2025) – Economic Impact of Tax policies on South Africa's Steel Sector and Economy

increased from R7 billion in 2022 to R12.9 billion in 2023, generating an estimated R3.5 billion in gross value added (GVA).

The plant contributed 11.4% of Newcastle Local Municipality's GVA and about 63.6% of its manufacturing GVA. At the district level, it accounted for 54.5% of Amajuba District's manufacturing GVA and 0.3% of KwaZulu-Natal's GVA*. Such dominance illustrates a typical single-industry cluster: suppliers, contractors, and small businesses co-evolved around the steelworks, forming a Marshallian industrial common*. But by 2025, the commons had been eroded. AMSA reported persistent losses: long-steel operations registered an operating loss of R1.1 billion in 2024 (versus R600 million in 2023).

The Marshallian approach underscores that Newcastle's industrial commons revolve around the steel plant. Over decades, an ecosystem of suppliers, technical skills, housing, schools and civic institutions coalesced around the plant, enabling economies of scale and scope. De-industrialisation undermines these external economies: suppliers lose orders, skilled workers leave, and local institutions atrophy. The Marshallian theory, therefore, predicts that sudden plant closures create spillovers beyond the firm, affecting human capital, supplier networks, property markets, and municipal revenue.

Regarding the announced closure of AMSA Newcastle Works by 2025 (November 2025), AMSA says it has ceased long steel production at its Newcastle plant and placed most of its facilities under care and maintenance. It will continue to trade its remaining stock), threatening 3,500 direct and indirect jobs, presents a live and urgent test for the DDM. A reactive application of the DDM would see it used only to manage the social fallout of retrenchments. The plant's closure thus represents a severe shock to Newcastle's industrial commons, necessitating strategies that enhance social resilience capacities.

Therefore, a proactive, resilience-building application, however, would see the DDM activated *immediately* to:

a) Rebuild industrial commons: Apply Marshallian principles by fostering specialised supplier networks, technical training centres, and business incubators around emerging industries (e.g., renewables, advanced manufacturing, metal recycling). Encourage clustering through tax incentives and targeted infrastructure in industrial zones.

b) Facilitate a Just Transition Plan: Convene AMSA, the DTIC, the Department of Forestry, Fisheries and the Environment, and labour unions under the DDM structure to explore options for repurposing the site for green steel production, metal recycling, or advanced manufacturing that leverages existing skills and infrastructure.

c) Drive Economic Diversification: Use the DDM platform to fast-track the development of an SEZ or industrial park in Newcastle, leveraging the town's existing infrastructure, logistics network, and skilled workforce to attract new investment.

d) Integrate Social and Economic Planning: Ensure that the company's Section 189 process and social plan are seamlessly integrated with provincial and municipal social development and employment programmes, avoiding bureaucratic silos that leave workers behind.

The cases of Lichtenburg, Komati, and Newcastle reveal a consistent pattern: South Africa possesses 'all good' national policy frameworks (sectoral master plans, just transition commitments, the DDM itself) but lacks functional mechanisms to translate these into coordinated local action when anchor industries close. The gap between policy ambition and implementation reality is not merely a matter of insufficient resources or political will; it reflects a fundamental structural misalignment between how national industrial policy is designed and how local economies function. The next section examines this disconnect in detail.

Aligning National Industrial Policy with Local Municipal Reality

A central theme emerging from this research is the profound disconnect between the design of national industrial policy and the implementation reality at the local municipal level. Local and district SDFs and IDPs are often compliance-driven, reflecting provincial or national mandates rather than meaningful strategic development tailored to the region's unique needs.

Policies like the Sectoral Master Plans and the Reimagined Industrial Strategy are conceived for a spatially neutral, functionally capable state. They operate under assumptions of reliable infrastructure, effective municipal governance, and cohesive value chains. These assumptions are often misplaced or invalid in towns like Lichtenburg and Komati.[61],[62]

Key Dimensions of the Misalignment

The case studies reveal several critical points of failure:

a) *The Infrastructure Assumption:* National localisation targets, for example, assume consistent electricity and water supply.

Lichtenburg's experience, where production was halted by outages, demonstrates that without this foundational support, national industrial ambitions are unattainable at the local level.

b) *The Capacity Assumption*: Programmes such as the Black Industrialists Scheme require sophisticated business plans, compliance reporting, and networking; all of which are beyond the reach of most SMMEs in environments where the local municipality itself is in administration. The finding that municipal LED efforts often default to "low-impact interventions" like hawker stalls is a direct result of this capacity gap.

[61] Robbins (2024)
[62] Makgetla et al (2022)

c) The Spatial Blindness: Post-apartheid industrial policy has largely treated the economy as spatially homogeneous. It fails to account for the unique economic structures, assets, and liabilities of specific places. A master plan for the poultry industry developed in Pretoria may have little relevance to the specific value chain disruptions experienced in Lichtenburg following Clover's exit[63].

The misalignment between national industrial ambition and local municipal incapacity is a primary driver of spatial inequality and de-industrialisation. Without deliberate and structured mechanisms to bridge this gap, national policies will continue to fuel growth in metropolitan hubs while bypassing the peripheral towns that are most in need of investment and jobs. Therefore, integrating place-based principles into the heart of industrial policy design is not an optional add-on but a prerequisite for inclusive growth.

A Pathway to Alignment: From Spatially Blind to Place-Based Policy

Closing this chasm requires a fundamental paradigm shift from spatially blind to place-based industrial policy (OECD, 2021). This involves:

a) Embedding Local Economic Reality in National Diagnostics: The formative stage of every national industrial strategy must include a mandatory "spatial risk and opportunity assessment." This would evaluate the strategy's viability and requirements across different municipal contexts, specifically identifying potential bottlenecks in distressed municipalities.

b) Decentralising Implementation and Building Capability: National departments must move beyond a compliance-oriented, head-office mindset. This requires establishing dedicated, skilled units to work *in* districts and hubs, partnering with municipalities to co-design implementation pathways for national policies that are tailored to local realities.

c) Leveraging the DDM as the Mandatory Interface: The DDM's "One Plan" should be the non-negotiable vehicle through which municipalities access national industrial incentives and support. This forces alignment by ensuring that national resources are directed towards a coherent, locally owned strategy rather than isolated, uncoordinated projects.

A Quantitative Profile of Decline: Measuring the Socio-Economic Impact

This section quantifies the socio-economic decline in the case study towns. Using publicly available data, we construct a statistical profile to substantiate the claims of economic collapse and social vulnerability, providing a harder-edged evidence base for the policy recommendations that follow.

Between 2011 and 2022, Ditsobotla’s population exhibited a negative Compound Annual Growth Rate (CAGR) of −0.26% per year, while Steve Tshwete recorded a positive CAGR of 0.47% per year

[63] Robbins (2024)

(reflecting growth up to 2016). After 2016, both municipalities lost residents, but Steve Tshwete's decline was steeper. The decline in higher-education attainment in Steve Tshwete could indicate out-migration of skilled workers after the power-station closure. The demographic ageing and population loss point to declining absorptive capacity, as working-age residents leave and the towns' ability to support dependants diminishes.

Both municipalities exhibit an ageing trend[64]. The share of residents under 15 years dropped by 3 percentage points in Ditsobotla and 1.4 points in Steve Tshwete[65], while the share of over 65 years rose. This demographic shift increases the dependency ratio unless working-age employment opportunities expand.

In both towns, the immediate shock absorbed by workers and households has been severe. In Lichtenburg, employees from the Clover factory and supporting dairies lost jobs and incomes. Interview evidence revealed that many households lacked savings and relied on informal trading or remittances, revealing weak absorptive capacity. The municipality's failure to provide reliable services further compromised coping strategies, as business owners faced high costs and residents experienced water and electricity outages.

The quantitative data provide unambiguous confirmation of two key qualitative findings: *a) De-industrialisation is a process of cumulative causation; and b) Job losses cycle, leading to a shrinking municipal revenue base, which leads to infrastructure and service decline, which further discourages investment and job creation*. This vicious cycle is vividly clear in the data for Ditsobotla and is a looming threat for Steve Tshwete, underscoring the urgent need for the coordinated interventions outlined in this paper.

Quantitative Analysis: Ditsobotla Local Municipality (Lichtenburg)

The data for Ditsobotla (Table 6) reveals a municipality in a state of accelerating decline, a trend that was evident even before Clover's final exit in 2021. The soaring unemployment and youth NEET rates point to a rapidly shrinking formal labour market. The steep decline in municipal own-source revenue - a direct result of business closures and a shrinking ratepayer base - confirms the qualitative finding of a collapsing fiscal base, which in turn cripples the municipality's ability to maintain the very services needed for economic recovery.

These four indicators tell 'a story' of municipal collapse. Between 2011 and 2023, which indicates that unemployment nearly doubled, youth economic participation collapsed, municipal revenue fell by nearly 40%, and basic service access deteriorated sharply.

[64] https://municipalities.co.za/demographic/1202/ditsobotla-local-municipality#:~:text=2022%202016%202011%20Population%20164,74.0
[65] https://municipalities.co.za/demographic/1158/steve-tshwete-local-municipality#:~:text=2022%202016%202011%20Population%20242,90.8

Table 6: Socio-economic indicators for Ditsobotla Local Municipality (Lichtenburg)

Indicator	2011 (Baseline)	2016 (Stable)	2022/23 (Post-Closure)	Source
Unemployment Rate	28.5%	35.2%	44.8% (est.)	Stats SA, QLFS
Youth NEET Rate	31.9%	38.5%	55.1% (est.)	Stats SA, QLFS
Municipal Own Revenue (% of Total)	65%	55%	<40% (severe decline)	NT, Stats SA, STLM IDP
Households with Reliable Water Access	75%	65%	<50%	Stats SA, Census/CS

The severity of decline in the post-2021 period confirms that Clover's exit accelerated pre-existing trends rather than causing them, though it pushed the municipality past a tipping point toward institutional failure, formalised by the Cabinet's September 2025 decision to place Ditsobotla under administration.

Quantitative Analysis: Steve Tshwete Local Municipality (Komati)

In contrast to Ditsobotla, Steve Tshwete (Table 7) presented a picture of relative economic stability before Komati's decommissioning. The quantitative impact is therefore more about a future negative shock captured in projections and models.

Table 7: Socio-economic indicators for Steve Tshwete Local Municipality (Komati)

Indicator	2011 (Baseline)	2016 (Stable)	2022/23 (Post-Decommissioning)	Sources[86]
Unemployment Rate	19.7%	17.3%	22%+ (projected)	Stats SA, STLM IDP
Municipal Own Revenue (% of Total)	70% (est.)	Stable (~68%)	Projected decline	NT, Stats SA, STLM IDP
GVA Contribution (Electricity)	Significant	Significant	Sharp Contraction	STLM Annual Reports

The stability pre-2022 underscores Komati's role as a contributor to, but not the sole anchor of, a more diversified local economy. However, modelled job losses (~1,400 total) and projected municipal revenue decline from lost contracts and reduced economic activity signal a significant negative shock. This quantitative projection validates the qualitative concerns raised by stakeholders about the gap left by Komati's closure.

The Gendered Dimensions of De-industrialisation

The decline of manufacturing in South Africa's small towns, a process termed "premature de-industrialisation," is well-documented in economic literature. However, the impacts of this decline are not gender neutral. This section examines scholarly and grey literature to analyse the multifaceted and

disproportionate consequences of de-industrialisation on women and women-led businesses. The findings suggest that the closure of anchor industries triggers a cascade of gendered effects, intensifying women's unpaid labour, pushing them into precarious informal work, and crippling the ecosystem for female entrepreneurship, thereby reinforcing existing gendered cycles of poverty and inequality.

Ignoring the gendered dimensions of de-industrialisation risks reinforcing inequality and undermining the effectiveness of recovery policies. By recognising and addressing the disproportionate burden on women, resilience strategies can become more inclusive and effective, ensuring that the path to economic recovery does not leave half the population behind.

Gendered Employment and the "Feminisation of Survival"

The report does not disaggregate job losses by gender, but the affected sectors (heavy agro-processing and energy) have historically been male-dominated in South Africa. The loss of these formal, often unionised, "breadwinner" jobs creates a crisis of masculine identity and places immense financial pressure on households. In response, a process of "feminisation of survival"[66] occurs, whereby women absorb the shock through two primary channels:

a) Expansion of Informal and Precarious Work: Women increasingly take on low-income, insecure work in the informal economy, such as street vending, domestic work, or home-based care, to supplement lost household income.

b) Intensification of Unpaid Care Work: As municipal services collapse, the labour of social reproduction intensifies. The tasks of fetching water, finding alternative energy sources, and caring for family members whose health is compromised by these conditions fall disproportionately on women, constraining their ability to engage in paid work.

c) Social Reproduction Theory (Bhattacharya, 2017): This framework distinguishes between productive labour (wage-earning) and reproductive labour (the work of maintaining the workforce, such as cooking, cleaning, and childcare). De-industrialisation cripples the productive economy while simultaneously increasing the burden of social reproduction, as public services fail. This "crisis of care" falls disproportionately on women.

According to Stats SA, female-headed households, which are overrepresented among the poorest quintiles in South Africa, are uniquely vulnerable. They have less access to savings, severance packages, and extended social networks to cushion economic shocks. Women who lose formal employment face prolonged economic hardship with fewer alternative pathways than their male counterparts.

[66] Sylvia Chant, (2008). *The "feminisation of poverty" and the "feminisation of anti-poverty programmes": Room for revision?* **The Journal of Development Studies**, 44(2), 165–197. https://doi.org/10.1080/00220380701789810

d) Direct Employment and the "Last Hired, First Fired" Phenomenon: While large-scale manufacturing (e.g., steel, automotive) is male-dominated, small-town agro-processing (dairies, abattoirs, fruit canneries) and textile factories have historically been significant employers of women, particularly black women[67]. When these factories close, women lose formal employment with benefits and relative job security. Studies suggest that during retrenchment processes, women, often in temporary or lower-skilled roles, are frequently the first to be let go.[68]

e) Forced Entry and Expansion in the Informal Economy: With formal jobs gone and household income slashed, women are pushed into the informal economy. This is not a choice but a survival strategy. Common activities include a) Informal Trading: Street vending of food, clothing, or other goods in a shrinking local market, b) Home-Based Work: Hairdressing, sewing, baking, or other services provided from home, and c) Paid Care Work: Providing childcare or caring for the sick and elderly. These activities are characterised by low and unpredictable incomes, no social protection, and high vulnerability to economic shocks.[69] Consider a scenario: 'A woman is retrenched from the Clover SA factory and receives severance pay to buy stock and become a street vendor. However, she enters a saturated market where every other retrenched worker is doing the same, leading to fierce competition and plummeting profits.'

f) Impact on Women-Led Businesses: Women-led SMMEs, which are often micro-enterprises in the retail, services, and hospitality sectors, face a dual crisis when a town deindustrialises:

i. Collapse of Local Demand: The loss of stable wages from the anchor industry and its supply chain decimates local consumer spending. A café owner, a salon operator, or a spaza shop owner sees her customer base evaporate.

ii. Deterioration of the Operating Environment: As municipal services fail, these businesses face higher costs (e.g. buying generators, purchasing water) and operational disruptions, from which they have less capital to buffer themselves compared to larger firms.

iii. Less Access to Capital: Research by the Trade & Industrial Policy Strategies (TIPS) has shown that women entrepreneurs often have less access to capital, networks, and property, making them less resilient to such systemic shocks.[70]

The gendered impacts of industrial closure in these small towns cannot be overstated. Women bear disproportionate burdens across multiple dimensions. There continues to be a severe shortage of town-level, sex-disaggregated data on employment, unemployment, and SMME ownership pre- and post-de-

[67] Beall, J., *et al.* (2015). *Uniting a Divided City: Governance and Social Exclusion in Johannesburg*. Routledge.

[68] Posel et al (2023)

[69] Caroline Skinner & Vanessa Watson (2017). *The informal economy in cities of the Global South: Challenging planning theory and praxis.* In G. Bhan, S. Srinivas & V. Watson (Eds.), *The Routledge Companion to Planning in the Global South*. London: Routledge. https://www.wiego.org/wp-content/uploads/2019/09/Day%202.1%20-%20Urban%20Planning%20-%20Skinner%20and%20Watson.pdf

[70] Makgetla et al (2022)

industrialisation. In addition, more research is needed on how these impacts are compounded by race, class, and migrant status. The experience of a woman running a spaza shop in a township is different from that of a woman running a B&B in a formerly white-dominated town centre. While the negative impacts are clear, women-led resilience strategies, such as the formation of cooperatives or successful advocacy for municipal services-remains understudied, and future research or studies should prioritise documenting these responses.

Designing Effective Anchor Diversification Incentives

Without proactive economic diversification, de-industrialising towns face a future of managed decline. A strategically designed, well-governed, and place-sensitive package of Anchor Diversification Incentives is not a silver bullet, but it is an essential component of a broader strategy to break the cycle of mono-industrial dependency and build resilient, diverse, and inclusive local economies.

Applying Principles for Effective Incentive Design

Drawing on international best practice (OECD, 2019) and the specific context of South African small towns, effective diversification incentives must be:

a) Place-Based: Tailored to the unique assets and opportunities of each town, not a one-size-fits-all national formula.

b) Conditional and Performance-Linked: Benefits must be tied to verifiable outcomes, such as net job creation, local procurement targets, and investment in employee skills.

a) **Time-Bound and Phased:** Offered for a fixed period to catalyse initial investment without creating long-term dependency, potentially with incentives decreasing over time.
b) **Integrated:** Part of a broader package that includes the resolution of horizontal constraints (energy, water, logistics) through the DDM.

Towards A Menu of Incentive Mechanisms

A strategic mix of the following could be deployed in designated "Economic Resilience Zones":

a) Enhanced Employment Tax Incentive: A significant tax credit for every new permanent job created in a target sector outside the dominant anchor industry.

b) Accelerated Depreciation Allowances: Allow businesses investing in productive assets (machinery, technology) within these zones to write off 100% of the cost in the first year, improving cash flow and encouraging capital investment.

c) Infrastructure Co-Funding Grants: Match funding for businesses that invest in mitigating municipal service failures, such as solar power installations, water recycling plants, or private security for logistics corridors.

d) Anchor-tenant Supply Chain Development: Offer the remaining anchor firms (e.g., Columbus Stainless, Afrimat) a tax credit or other incentive for increasing their local procurement percentage, thereby actively nurturing an ecosystem of local SMMEs.

Ensuring Effectiveness and Accountability

The success of these incentives depends on robust governance mechanisms. Economic Resilience Zones should be managed through tripartite committees (government, business, labour) with clear performance metrics, transparent reporting, and independent audits. Incentives should be designed to prevent elite capture through a) preferential access for SMMEs and black-owned enterprises, b) strict local employment and procurement requirements, and c) regain provisions if targets are not met. The DDM provides the ideal coordinating structure for such oversight, integrating incentive monitoring into the 'One Plan' framework.

SECTION 5: BUILDING HEIDELBERG'S INDUSTRIAL RESILIENCE: AN INTEGRATED FRAMEWORK

The Heidelberg Context

Heidelberg is a town in the Lesedi Local Municipality, located within the Sedibeng District, Gauteng province. The town developed as an agricultural hub and diversified to include a manufacturing centre, home to industries like British American Tobacco South Africa (BATSA), food processing (Eskort Limited), and industrial equipment (Zest WEG).

Current developments in Heidelberg illustrate this dynamic in real time. On 14 January 2026, BATSA announced the closure of its long-standing Heidelberg manufacturing facility by 31 December 2026, affecting approximately 500 employees. The plant, which has operated in Heidelberg for decades as a cornerstone of the local manufacturing sector, has been running at only 35% capacity due to the devastating impact of the illicit cigarette trade.

Unlike Lichtenburg and Komati, where de-industrialisation has already occurred, Heidelberg faces an imminent threat with BATSA's announced closure by the end of this year. The closure directly results from the growth of the illicit tobacco trade, estimated at 60-70% of the market, which has rendered legal manufacturing commercially unviable. In announcing the closure, BATSA stated that "despite our best efforts, we have been unable to compete" with illicit products flooding the market. The impact extends beyond the approximately 500 direct BATSA employees. The closure threatens upstream suppliers, downstream distributors, and the broader local service economy that has developed around the plant over the decades. Municipal service delivery is deteriorating but has not yet collapsed, and the town's

remaining industrial base remains intact but increasingly vulnerable. Heidelberg thus offers a critical window for preventive intervention, applying lessons from Lichtenburg and Komati before the crisis becomes irreversible. However, this window is narrow with the closure set for December 2026, and coordinated action must begin immediately.

BATSA closure exemplifies how illicit trade can systematically destroy formal manufacturing. With the plant operating at just 35% capacity, the facility became economically unsustainable despite investments in automation and efficiency. The affected workers represent not just jobs lost, but specialised skills, institutional knowledge, and household incomes that sustain the broader Heidelberg economy. Within all this happening, the municipality will also lose significant revenue from taxes, while local businesses, from suppliers to retailers, will face reduced demand and potential closure. More fundamentally, the BATSA closure illustrates a governance failure that extends beyond municipal boundaries. The growth of the illicit tobacco trade to 60-70% of the market represents a breakdown in law enforcement, border control, customs enforcement, and intergovernmental coordination. This is not simply a business decision; it reflects the state's inability to protect legitimate economic activity from criminal competition.

The unfolding situation in Heidelberg further illustrates that de-industrialisation risk is not confined to coal-dependent or transition-affected towns. Manufacturing centres exposed to illicit markets and weak enforcement fall outside existing policy frameworks, revealing significant blind spots in current industrial and localisation strategies.

This section develops an integrated framework for building Heidelberg's industrial resilience, demonstrating how the three analytical frameworks employed throughout this paper (Marshallian Development Theory, Tripartite Social Resilience, and the DDM) can be synthesised into a coherent, actionable strategy.

Heidelberg’s looming de-industrialisation reflects not only localised economic distress, but South Africa’s broader crisis of state capacity, governance failure, and the expansion of illicit trade - dynamics explicitly recognised in Growing Gauteng Together 2030 (GGT 2030) as binding constraints on inclusive growth. Once a stable manufacturing hub anchored in legal tobacco and food processing, Heidelberg now faces industrial decline as weak enforcement and fragmented governance allow illicit markets to undercut formal producers, eroding jobs, municipal revenue, and community stability. Reversing this trajectory requires a holistic, place-based framework that integrates local industrial theory, social resilience, and multi-level governance aligned with Gauteng’s long-term vision of a capable, ethical state and a reindustrialised, employment-intensive provincial economy.

This framework draws on Marshallian Development Theory, the Tripartite Social Resilience Framework, and the DDM, while situating Heidelberg firmly within the strategic priorities of GGT 2030, notably: rebuilding state capability, strengthening the productive economy, combating the illicit economy, and advancing spatially inclusive development.

Marshallian Development Theory underscores the value of localised industrial districts**,** where firms, workers, and institutions generate collective efficiency through proximity, knowledge spillovers, and supply-chain interdependence. GGT 2030 similarly emphasises the revitalisation of industrial nodes and corridors as engines of provincial growth. For Heidelberg, this translates into rebuilding its local production ecosystem: protecting anchor firms such as British American Tobacco South Africa (BATSA), Eskort Limited, and Zest WEG, reviving supplier networks, and strengthening vocational and artisan pipelines through local TVET colleges. Re-embedding industrial activity within dense local networks not only preserves jobs and skills but restores the economic complexity and productive capacity that GGT 2030 identifies as essential for Gauteng's long-term competitiveness.

The Tripartite Social Resilience Framework adds a dynamic lens for managing shocks through collaboration between government, business, labour, and civil society - a governance approach explicitly endorsed by GGT 2030's commitment to social compacts and co-production. The framework operates through three reinforcing capacities.

Absorptive capacity entails stabilising existing industries and institutions in the face of immediate shocks. In Heidelberg, this would include securing reliable energy and transport infrastructure, strengthening law enforcement against illicit trade, and establishing a rapid-response coordination mechanism through a local Industrial and Economic Emergency Centre, aligned with provincial safety, revenue, and economic development structures.

Adaptive capacity involves repositioning the local economy in response to structural pressures. This includes supplier diversification, demand-driven skills development aligned with Gauteng's priority sectors, and strengthened inter-agency collaboration - particularly between the South African Revenue Service (SARS), the South African Police Service (SAPS), municipal authorities, and provincial departments - to curb illicit trade that undermines formal manufacturing. These measures directly advance GGT 2030's emphasis on rebuilding the rule of law as a precondition for growth.

Transformative capacity requires deeper structural reform. For Heidelberg, this means professionalising municipal governance, restoring institutional integrity, rebuilding planning and financial management capability, and embedding transparent accountability mechanisms. These reforms echo GGT 2030's central proposition: that inclusive growth is inseparable from a capable, ethical, and developmentally oriented state.

The DDM provides the operational vehicle for implementing this integrated approach. By aligning municipal, provincial, and national interventions around a single, district-level plan, the DDM responds directly to GGT 2030's call for policy coherence, spatial targeting, and coordinated delivery. A Heidelberg Economic Forum (HEF) - representing the tripartite partnership - would serve as the institutional anchor for this process, aligning short-term stabilisation measures with medium-term adaptation and long-term structural transformation, while ensuring consistent monitoring and accountability.

In essence, Heidelberg's resilience depends on rebuilding both its industrial ecosystem and its institutional foundations, in line with the ambitions of GGT2030. A Marshallian approach nurtures local economic interdependence; a tripartite resilience model ensures social cohesion and shared responsibility; and the DDM grounds these efforts in coherent, accountable governance. Together, these frameworks offer a pathway for Heidelberg not merely to survive de-industrialisation pressures, but to emerge as a model of inclusive, place-based industrial renewal within Gauteng's evolving developmental landscape.

CONCLUSION

This paper has demonstrated that de-industrialisation in South Africa's small towns is not a discrete economic event, but an increasing, governance-mediated process that progressively erodes local economies, municipal fiscal bases, and community resilience. Through the comparative case studies of Lichtenburg and Komati, the analysis shows that the loss of anchor industries interacts with infrastructure failure, weak intergovernmental coordination, and misaligned national policy assumptions to trap towns in a cycle of decline, coping, and fragile adaptation. De-industrialisation thus emerges as both an economic and institutional crisis, requiring responses that extend beyond sectoral support to encompass governance reform, place-based planning, and the deliberate rebuilding of local industrial ecosystems.

The cases of Lichtenburg and Komati demonstrate that de-industrialisation in South Africa's secondary towns is a multidimensional crisis, where industrial decline, social vulnerability, governance weaknesses, and spatial marginalisation reinforce one another. While the pathways differ, Lichtenburg reflecting infrastructure-led collapse and Komati illustrating transition-induced shock, both cases reveal common structural dynamics: dependence on single anchor industries, erosion of the industrial commons, weakening municipal capacity, and limited mechanisms for converting short-term adaptation into long-term transformation. These shared dynamics underscore that resilience is not simply a function of economic diversification, but of institutional capability and coordinated action across scales of government.

In South Africa, these challenges are compounded by weak municipal capacity, infrastructure decay, and policy misalignment between national industrial policy and local implementation realities. Together, creating a "peripheralisation loop" that traps towns in cycles of declining economic activity that reduces municipal revenue, undermines service delivery, accelerates firm exit, and deepens social vulnerability, further entrenching spatial and economic exclusion. Without deliberate intervention, this loop risks normalising decline across a growing number of secondary towns.

Current developments in Heidelberg illustrate this dynamic in real time. The announcement long-standing Heidelberg manufacturing facility closure is affecting approximately 500 employees. The closure undermines a significant source of municipal revenue and disrupts upstream and downstream economic linkages in the Lesedi Local Municipality. Local suppliers, service providers, and retail

businesses face cascading impacts as the economic anchor that sustained them for decades is removed.

Addressing these challenges requires integrated, place-based strategies that combine industrial diversification, human capital development, and strengthened governance and are capable of addressing de-industrialisation as a systemic challenge rather than a series of isolated firm closures. Such a strategy must simultaneously rebuild the industrial commons, strengthen municipal and intergovernmental coordination, and enable communities to move beyond coping and fragmented adaptation toward transformative resilience. Heidelberg is presented here not as a separate case study, but as a real-time model application of the lessons derived from Lichtenburg and Komati. Its recent industrial disruption underscores the urgency of implementing resilience frameworks before towns are further marginalised.

Drawing on the Marshallian Development Theory, the Tripartite Social Resilience Framework, and the District Development Model, interventions should rebuild local industrial ecosystems, protect anchor firms, foster knowledge spillovers, and strengthen absorptive, adaptive, and transformative capacities. By embedding resilience and fostering collaboration across government, business, and civil society, South Africa's secondary towns can move from fragile coping to dynamic, inclusive, and locally driven economic recovery.

Ultimately, the trajectory of South Africa's small towns is not predetermined. While de-industrialisation seems to be widely spreading, unmanaged de-industrialisation almost inevitably results in deepening inequality, institutional decay, and long-term economic exclusion. Now, the choice facing all the institutions, government, and municipalities is therefore not whether structural change will occur, but whether it will be coordinated, place-sensitive, and institutionally supported. By treating towns like Heidelberg as laboratories for reform rather than sites of inevitable decline, South Africa can begin to transform vulnerability into resilience, anchoring a more balanced and inclusive national development path. The unfolding situation in Heidelberg serves as both a cautionary tale and an opportunity to test resilience-building strategies that, if successful, could be adapted across other towns facing similar industrial decline.

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