RMIOSA

The Institute of Risk Management
SOUTH AFRICA

10TH EDITION
2014 - 2024

RISK REPORT 2024/25

Marsh

Thriving amid uncertainty: Building resilience

Enabling organizations to anticipate, adapt, and respond to risks, and capitalize on opportunities for growth.

marsh.com

A business of Marsh McLennan

TABLE OF CONTENTS

2. **Foreword** by Prof. Tinyiko Maluleke

PROF TINYIKO MALULEKE

Vice Chancellor and Principal
Tshwane University of Technology

Deputy Chair
National Planning Commission

Non-Executive Director
MTN SA Foundation

'Managing the risks that attend to the pursuit of sustainable development.'

South Africans today may feel that they are living inside Charles Dickens' Tale of Two Cities.

In the One City, a smaller portion of society feels empowered and excited about the unfolding future, gathering pace on the wings of the ongoing technological revolution and new political possibilities. The unprecedented results of the 2024 elections require citizens, political parties, the State, and corporates to reinvent a political future that will serve the interests of our entire nation. Yet in Another City, a larger portion of our nation remains excluded from the benefits of democracy and a more equalitarian world.

Being caught in this Tale of Two Cities is not unique or confined to South Africa. The explosion of communication technologies has brought us into each other's living rooms locally and globally, so to speak. This has enabled the world to both share and tackle its interrelated challenges – polycrises and permacrises. Our collective effort to identify and resolve these challenges is guided by the agenda set by the UN Sustainable Development Goals.

A decade of Risk Reports shows that while we understand our risks and interpret them well, our urgent challenge is to respond appropriately to national and international operational and strategic risks that attend to the pursuit of sustainable development. This year's Report explores how to leverage our resilience as a globally connected country. To overcome our challenges, we must constantly build consensus and coordinated policy solutions. These solutions must be implemented promptly, consistently, and constantly to build public trust in the State.

Philosophers have only interpreted the world in various ways; the point is to change it.' Karl Marx

‘Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, and all there ever will be to know and understand.’ Albert Einstein

In this context, none better than risk managers understand the importance of being bold, creative, and forward-looking. We must be courageous and innovative as we attend to our readiness for, and pursuit of, sustainable development, by managing all risks that threaten the developmental goals of the country. One way of ensuring creativity, boldness and foresight is to factor in the views and experiences of young people in the crafting and execution of risk management strategies.

Above all, by providing frameworks for forward-focused risk-based decision-making, risk managers enable entities to navigate uncertainty with the imagination, empathy, and urgency needed to navigate a complex and rapidly changing world. Only in this way will we turn challenges into opportunities for growth and innovation. Amid great technological changes, we must take the bull by the horns and not (solely) rely on AI and predictive technologies. In a world where information and services are instantly available, we may be tempted to create echo chambers and avoid discomfort. Astute risk management gives us the only chance of survival. More than ever before, we must do the things that machines cannot do or cannot do well. Intuition, instant processing of information based on instinct, and the human drive for improved lives, will set us apart in a digital world.

In challenging environments like South Africa, where inequality, poverty, and crime confront us every day, we cannot afford to be nonchalant about the fate of our dying earth; nor can we become passive spectators. Now is the time for risk managers to lead from the front. Now is the time for South Africans to become leaders in their everyday lives, to be accountable with purpose, to build on our learnings from the past and to bridge the social divides that remain in our society. The 2024/25 IRMSA Risk Report outlines the kind of action and engagement that will turn passive spectators into active participants. The Report emphasises vision, action, and imagination, and presents information about our possible futures from different lenses (risk, economic sector, and geography) with suggestions to inspire proactive solutions rather than induce paralysis.

While we may be running out of our national ‘resilience’, there are many positive developments that support achievement of our goals. As our risks have become more critical, action is needed, and indeed being taken. For a brighter future, we must continue to refocus our priorities and direct scarce resources to where it matters most, and work with those who are already finding solutions. As we navigate uncertainty, we must build a future where our political and economic efforts support an optimally functioning State, a growing economy, and the rule of law. We must leverage technological advances to deliver water and energy, to ensure food security, to mitigate climate change, and to roll out education programmes that will power the country for the 21st century.

3. **Preface** by the IRMSA President

South Africa is marking 30 years of democracy with great pride and optimism. This milestone is not only a celebration of our democratic journey, but also a moment to reflect on the significant strides IRMSA has made in advancing risk management in and beyond our country.

BHEKI GUTSHWA
CRM Prof
President
Chairperson of the Board
IRMSA

We wish strength to the people that have been elected to leadership positions. We trust that they will take appropriate and risk-informed decisions for the betterment of South Africa and her people.

IRMSA embraces its role as the sole professional body for risk management in South Africa with a deep sense of responsibility and commitment. Our vision to be the leader in risk management supported by our mission to empower, advocate, and be a centre of excellence to advance the discipline beyond our country, reflects our commitment to growth and innovation. In this significant year, IRMSA celebrates a decade of Risk Reports, which have evolved into our flagship product, providing critical insights and guidance to navigate our complex risk landscape. The Report highlights the risks facing the country and is a global benchmark for risk management practices that underscores South Africa's position as a global risk management thought leader.

Committed to extending our reach, we have integrated Africa into our agenda (as also reflected in this Report). By involving our African counterparts, we foster a more inclusive dialogue on risk that considers our uniquely African challenges and opportunities. This strengthens our regional leadership position and enhances the relevance and effectiveness of the risk management expertise, capacity building, and focused professionalisation efforts across the region. In addition to our regional focus, we actively build relationships with global counterparts, to remain a leading voice in risk management internationally. This global perspective enriches our relevance and enables us to bring innovative and best practice benefits to our members. Recognising that the future of risk management is in the hands of the next generation, we have launched several initiatives to empower and develop young risk professionals. Our mentorship programs, educational workshops, leadership opportunities, and inclusion in this Report, continue to equip the youth with the skills and knowledge needed to drive the profession forward.

In conclusion, I extend my deepest gratitude to IRMSA's Board and executive leadership. Your unwavering dedication, support and visionary guidance are the backbone of our success and instrumental in steering IRMSA to new heights. To our members and sponsors, thank you for your continued commitment to IRMSA, as evidenced through your growing participation (including in this Report). This is vital to our collective progress, and I am confident that together we will continue to achieve great things.

4. **Prologue** by IRMSA Chief Executive

After three decades of democracy, South Africa is at a crossroads, shaped by the accomplishments and challenges of our past.

Coinciding with this reflection on our national journey, is this 'special edition' IRMSA South Africa Risk Report, 10th Edition, which I am distinctly honoured to present. The Report comprehensively reflects on South Africa's multi-faceted risks: from socio-economic disparities and political uncertainties to environmental concerns and technological disruptions. These risks are complex and dynamic, and the Report is a crucial tool to identify, understand, and respond to these risks, thus enabling informed decisions that safeguard our nation's future.

The value of this Report extends beyond its immediate practical applications. It is the collective wisdom and insight of diverse experts, making it an indispensable resource for policymakers, business leaders, and risk professionals. Encapsulated in these pages is an essential strategic framework to navigate the uncertainties of our contemporary world. Continually advancing the Report, we have for the first time triangulated younger views by converging multiple generations of knowledge. We have also enhanced the Report's geographic reach by incorporating a reflection on SADC, Africa, and the world – in line with our strategy to collaborate on multiple fronts to secure sustainable solutions. We are certain that the Report pioneers a new dispensation of foresight that includes anticipated challenges and resilience responses to foster a more secure and prosperous future.

A special thank you to Christopher Palm and Christelle Marais whose visionary leadership and unwavering commitment have steered this project to fruition. Your insights and guidance have been invaluable to shape a Report that reflects the complexity of South Africa's risk landscape. I also extend my heartfelt gratitude to the more than 500 collaborators, experts, and risk professionals whose nuanced perspectives have enriched the Report and underscores the critical role of risk management in our national sustainable development.

YVONNE MOTHIBI
Chief Executive
IRMSA

The extreme uncertainty and deep desire for change reflected in the 2024 election results shape our risk landscape and the opportunity to once more reconstruct our country's future.

5. Executive Summary

Our national resilience – that aspirational identity underpinned by optimistic conversations which collectively defines the 'Rainbow Nation' – seems to be nearing a catastrophic tipping point.

CHRISTOPHER PALM
Fellow
Chief Risk Advisor
IRMSA

With local, regional, and global polycrises dynamically evolving into permacrises, South Africans may struggle to remain courageous, and solutions oriented; to face the future with positive creativity and without despair. However, from the contributions to this Report an additional trend emerged: one of optimism, youthful positivity, and a willingness to effect change despite (or perhaps in the face of) our challenges.

This emerging balancing act between vulnerability and resilience, prompted a reconsideration of the future scenarios for South Africa, building on the recognition that we cannot wait for a few leaders to come to our rescue, but rather that ordinary South Africans and organisations will have to lead from where they stand.

These scenarios include the following:

- In the worst scenario, ***'Everyone is in it for themselves',*** a vulnerable South Africa continues to flounder in an increasingly vulnerable world.
- Reminiscent of the past decade, in the next scenario, ***'Will the real leaders please stand up?'*** an increasingly vulnerable South Africa lags as the world becomes more resilient.
- Driven by younger voices, the third scenario, ***'Some young leaders taking charge'*** offers hope, a future where South Africa is more resilient than a vulnerable world.
- In the best scenario, ***'Everyone leading from where they stand'***, an increasingly resilient South Africa influences its own, SADC, African, and global resilience positively.

Our national resilience – that aspirational identity underpinned by optimistic conversations which collectively defines the 'Rainbow Nation' – seems to be nearing a catastrophic tipping point.

In all scenarios, two key elements stand out: skilled resources and servant leadership. Both are available, but neither are activated in the collective interest of our country. We had to ask: 'What must change?' If nothing changes, despair may take us further into a future where 'everyone is in it for themselves'. Considering the dominant culture driving each scenario, successfully mitigating all risks, across all economic sectors, across all geographical intersections, depends on a national culture change. Positive indications are that South Africa will stop asking 'will the real leaders please stand up?' as 'some young leaders are taking charge'. It is our sincere hope that this will ignite a groundswell to a culture where 'everyone is leading from where they stand'.

CHRISTELLE MARAIS
CRM Prof
Risk Report Project Lead
IRMSA

Executive Director
Lucidum

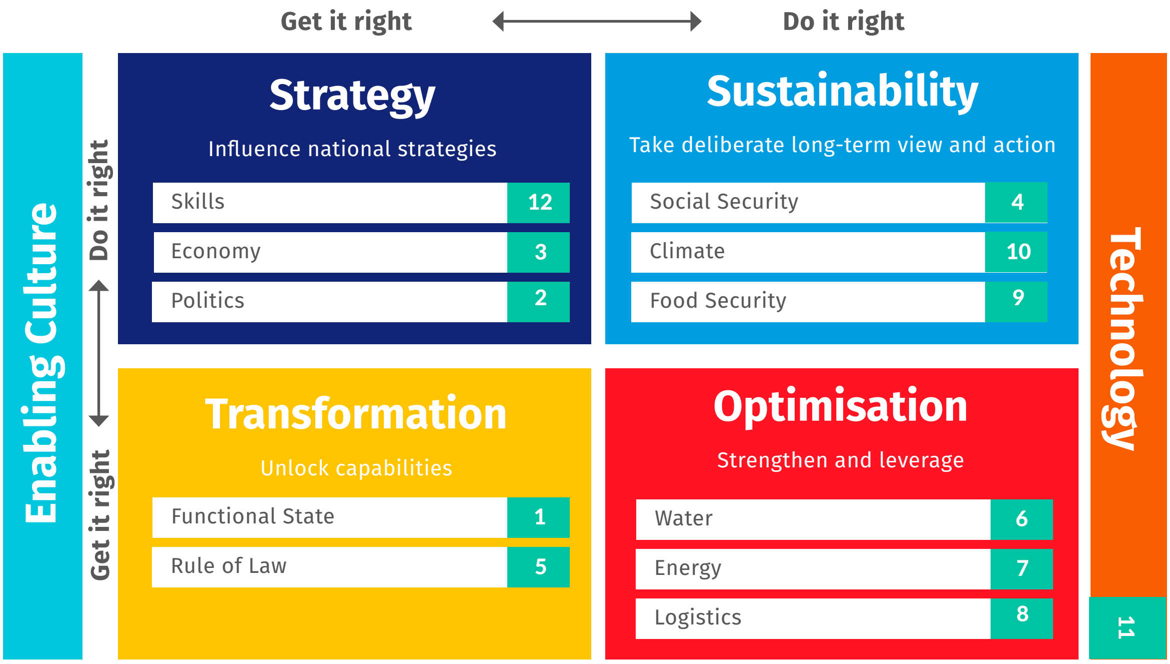
The single highest risk in South Africa is disengaged people. Considering the future from social, policy, and economic perspectives, reveals a key issue: South Africa needs skilled resources to drive the economy, and servant leadership to focus those skills.

South Africa's risk themes have changed little over 10 years of reporting. Responses to those risks have not kept pace with the increasing risk levels, so that the overall risk profile affecting ordinary citizens today, has become more critical in terms of Maslow's hierarchy of human needs: Citizens are worried about more basic needs, such as access to water, and food security appearing on the risk profile for the first time. Energy, logistics, and the skills to run a functioning economy remain high. In response, the risk themes were considered along a scale of 'get it right' (optimise and transform} and 'do it right' (to be strategic and sustainable):

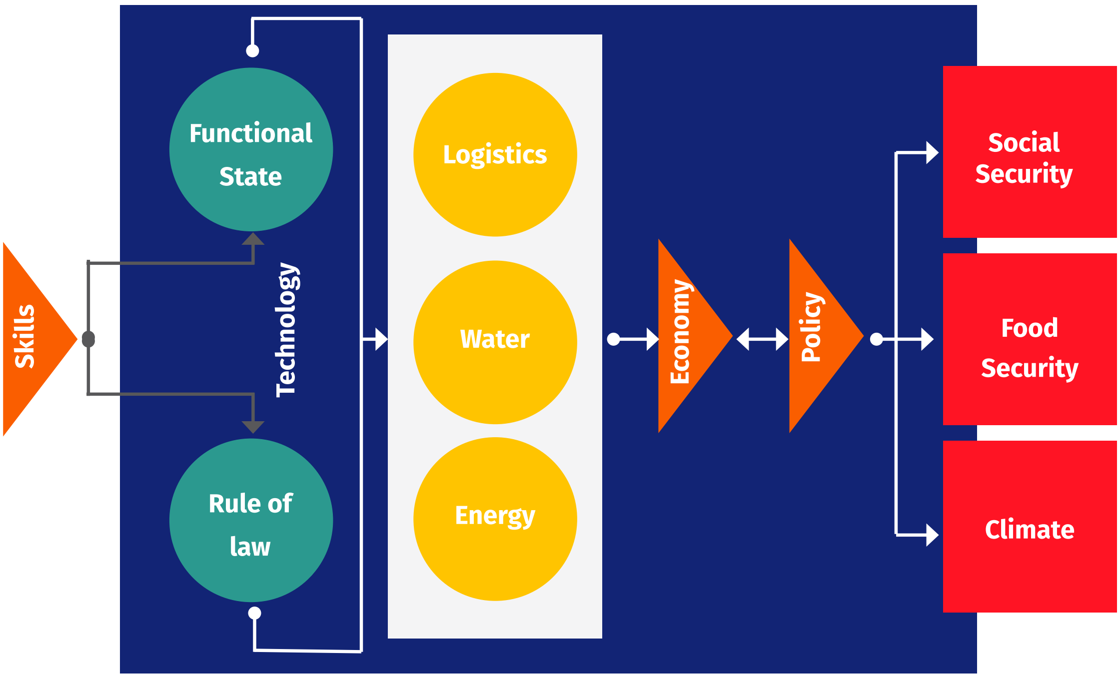
- **Optimise:** strengthen/leverage what exists
- **Transform:** unlock existing capabilities
- **Strategy:** influence national strategies
- **Sustainability:** take deliberate long-term views and action

RISK THEME	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cyber, Security, AI, Digitalisation	■	■	■	■	■	■	■	■	■	■
Rule of Law (Crime, Governance Failures)	■	■	■	■	■	■	■	■	■	■
Economy (Global, National)	■	■	■	■	■	■	■	■	■	■
Social Security, Inequality	■	■	■	■	■		■	■	■	■
Politics, National Policy, Geopolitics	■	■	■	■	■	■	■		■	■
Infrastructure	■	■	■	■	■			■	■	■
Skills, Education		■	■	■	■	■	■	■		■
Climate Change			■	■		■	■	■	■	■
Functional State		■		■	■			■	■	■
Leadership		■	■	■	■	■	■			
Energy		■	■		■	■			■	■
Innovation		■	■	■	■					
Water		■	■							■
Brand / Reputation		■		■	■					
Food Security										■
Business Interruption					■					
Risk Culture				■						
Financial Systems	■									
Urbanisation	■									

This year's storyline is that South Africa must urgently stabilise water, energy, and logistics. The rule of law and State functionality (quality and productivity) must improve speedily and drastically. Skills must be unlocked to create economic value, and leaders must govern South Africa effectively to secure food for a more equitable and secure society that thrives in a climate change affected world. Underpinning all of this, is the responsible leveraging of technology and an enabling national culture.



Activating skills is the pivotal risk upon which effective response to all other risks depends. The two most important risk drivers are building a functional State and enforcing the rule of law. Addressing these two will create a platform on which to respond to the risks to water, energy, and logistics, which will activate economic growth and enable a policy environment conducive to addressing the risks of social security, food security and climate change. Responding to the three pivotal risk themes in the short-term, is critical to be able to address the three risk drivers for medium- to long-term achievement of the NDP goals.



Risk driver

A risk driver is anything that influences the nature of a risk. Risk drivers can be positive or negative, and internal or external. One risk driver can influence more than one risk, and/or multiple risk drivers can influence one risk. Examples of risk drivers are economic conditions, regulatory changes, technological advancements, human factors, operational processes, and environmental conditions. An example of how a risk driver influences a risk is where technology changes so quickly that risk controls are outdated by the time that risk causes are addressed. In an E-commerce Company the cause for the risk of a data breach would be insufficient encryption practices. To address the cause, the Company will improve encryption, but by the time that it is done, the nature of the risk was influenced by the risk driver to the extent that the control is no longer effective and a new control must be developed.

By identifying, analysing, and understanding risk drivers, organisations can be agile, fail fast and fail forward where necessary, and be ahead of the curve when responding to their risks.

Functional State

Rule of Law

Water

Energy

Logistics

Risk Pivot

A risk pivot is anything that exponentially magnifies the effect of something. Risk pivots can have positive or negative impacts. A negative risk pivot can exacerbate other risk/s exponentially if it is not fully addressed. An example of a negative risk pivot is a breakdown in coalition government. If this happens, many other risks (e.g. service delivery, productivity) will immediately become much worse. Similarly, if well understood, a positive risk pivot can be leveraged to significantly reduce other risks. An example of a positive risk pivot is a strong risk culture. If this is in place, many other risks will be reduced as risk responses will automatically be implemented more speedily and effectively.

By identifying, analysing, and understanding risk pivots, organisations can immediately utilise the benefit of anything that can exponentially magnify their risk response efforts positively, or move away from anything that can exponentially retract from the benefit of their risk response efforts. This will help organisations to optimize the time, money, and effort spent on their risk response strategies.

Politics - change

Economy - activate

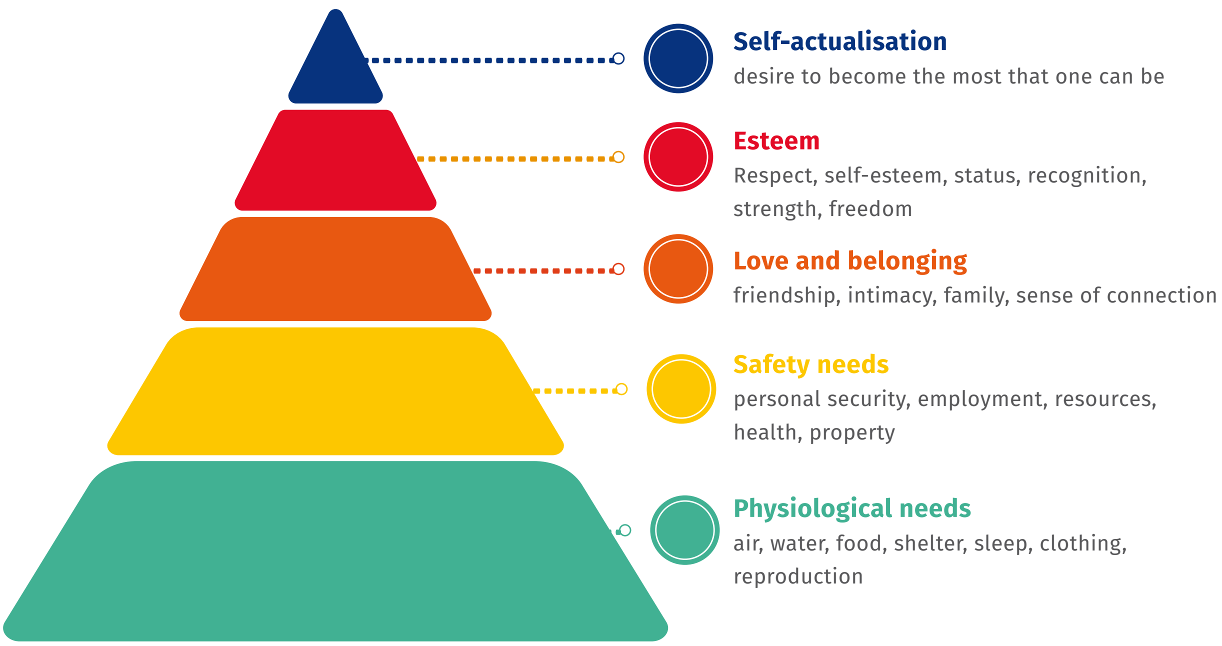
Skills - prioritise

Analyses of how South Africa's current socio-economic situation and risk profile affect the economic sectors that direcly influence people's lives, confirm that the hardest hit sectors during an economic downturn will be those where -

- new legislation is enacted;
- there are infrastructure shortages;
- industries are carbon intensive;
- industries are energy intensive; and
- industries are water intensive.

It is strongly recommended that the sector specific information included in the Report be used to encourage inclusive sector and national policy debates that will result in alleviation of immediate pressures to unlock the economy as the basis for improving the overall quality of life for South African citizens. Leveraging economic value creation from the least vulnerable and most resilient sectors could provide breathing room (time, people, and funds) to stabilise the most vulnerable and least resilient sectors.

In the absence of safety, survival instinct kicks in and ***'everyone is in it for themselves'.*** In this scenario, the only logical outcome is increasing poverty and decreasing safety. The only way to create safety, is for leaders at all levels in society to insist on the right behaviours that create safe spaces where ***'everyone is leading from where they stand'.*** If people's behaviours don't change, the risk profile won't change, and our future scenarios won't change. In reflecting on what most threatens our future, our concluding call is that we must find ways to do less bad and more good, with what we have and where we are. Our alternative is increasing acceptance of mediocrity and ultimate decline.



In the absence of physical and mental safety, South Africans will continue to live in *A Tale of Two Cities*. In fact, the Second City of exclusion and poverty will grow and swallow us all. To prevent this, all South Africans must work to create more opportunities for more people to gain access to the First City, where there is opportunity for growth and better lives.

HOW TO READ THIS REPORT

6. How to use this report

'The focus is on understanding the uncertain scenarios shaping our future through a risk lens, a geographical lens, and an economic sector lens, and then on how best to respond to them sustainably.'

This Report is intended as a national resource on risk: it reflects on possible future scenarios for South Africa, and the risk themes that influence those scenarios and achievement of the NDP 2030 goals, the country's resilience to deal with risks should they materialise, and proposed risk responses (including the national culture that determines how people respond to risk). The detailed analyses contained in previous reports remain relevant as the backdrop for the risk themes that will impact South Africa over the next three years across its economic sectors and in its geographical context.

6.1 Report Compilation Methodology

6.1.1. Future Scenarios

South Africa's future scenarios have been structured around its vulnerability or resilience versus the rest of the world's vulnerability or resilience, with a risk profile and dominant culture provided for each scenario. This demonstrates that culture influences how people respond to risks, and that South Africa's future is created by its citizens' behaviours in relation to risk.

6.1.2. Risk Context and Identification

Extensive environmental and risk scanning of internationally acknowledged sources together with surveys conducted amongst IRMSA Members (risk professionals) and non-members (not risk management decision-makers) to confirm the relevance of the risk themes determined during the environmental and risk scanning exercise. Post-graduate students from Milpark Education, Stellenbosch Business School, and UNISA completed team and individual assignments that examined risks within organisations in economic sectors from published reports, articles, and interviews. Students identified causes, risks and consequences affecting achievement of entities' strategic objectives, and reported risk responses. This information supplemented and expanded the results from the environmental risk scanning and IRMSA survey.

MARISA GRUNDLING
Head of Risk and Insurance

DR ARTHUR LINKE
Research Fellow

DR SUNÉ MARÉ
Lecturer

MILPARK EDUCATION

Stellenbosch Business School
STELLENBOSCH UNIVERSITY

university of south africa
UNISA

6.1.3. Risk and Economic Sector Analysis

Risk professionals and subject matter experts collaborated to provide the following:

- Concise summary of each risk theme.
- A scenario of how each risk could materialise and a view on how resilient the country and organisations are now.
- Short-, medium-, and long-term risk responses for each risk theme to prompt innovation and action.

6.1.4. Regional, Continental and Global View

The national view is supplemented by considering the regional, continental, and global trends that impact the country.

6.1.5. Call to Action

A national 'Call to Action' proposes a deliberate and united social culture to influence organisational, risk, and national government cultures towards managing SA's risk better, and so achieve national outcomes.

6.1.6. Expert Collaboration

Key to a risk resilient country, is competent young people to manage risk at personal, social, organisational, and national levels. IRMSA's Youth Desk (launched in 2023) promotes risk management as a career through its Youth Month initiatives, youth mentorship, increased focus at tertiary institutions, employment opportunities, as well as professional growth and empowerment initiatives among young risk management enthusiasts. A significant achievement includes a partnership with the Spencer Educational Foundation, where two South African teams reached the top eight out of 32 universities worldwide, presenting to international judges in San Diego in 2024. Out of more than 300 young IRMSA members, 65, primarily students, have actively participated in these initiatives. In this Report, these future leaders contributed to the risk and economic sector assessments, as indicated by blue-highlighted names in the report.

IRMSA's extensive member base and partnerships with experienced individuals and country leaders have enabled extensive critical reading and vetting of the Report content to ensure credibility and relevance to influence decision making across all spheres of decision-making and ensure a better future for South Africa.

"We can't always build the future for our youth, but we can build our youth for the future"

THULI MPANZA
Senior Manager Risk,
Governance and Compliance
ABSA

KAY DARBOURN
Fellow
Personal Risk Manager
FutureRisk

SIDNEY MONGALA
CRM Prof
Director Risk Management
DOC

DR LES CARLO
Fellow
Independent Risk Professional

JACQUES MARAIS
Risk Consultant
Lucidum

CHANDU KASHIRAM
Partner
Lucidum

MICHAEL JUDIN
Judin Combrinck Inc.
Attorneys

TOTYELWA DODO
Acting Director: Risk Management
Support
Office of the Accountant General

6.2 Project team

CHRISTOPHER PALM
Fellow
Project Owner

Powered by: RMSA The Institute of Risk Management South Africa

WILNA MEIRING
CRM Prof
Risk Context and Identification

Powered by: vodacom

CHRISTELLE FAUL MARAIS
CRM Prof
Project Lead and Scenarios

Powered by: LUCIDUM

LOUISA NANA

Risk Analysis

Powered by: KIRA

MICHAEL DAVIES

Resilience

Powered by: PAX RESILIENCE

VOLKER VON WIDDERN

Fellow

Risk Response

Powered by: RISKONET

PAVANA RANJITH

CRM Prof

Graphics

Powered by: RQi The RQ Institute

TOTYELWA DODO

Call To Action

Powered by: RMSA The Institute of Risk Management SOUTH AFRICA

6.3 Reading the Report

For optimal benefit, the following should be noted when navigating this report:

- The Report is an interactive e-book which allows readers to follow the storyline page by page, or to navigate to areas of interest from the table of contents and or links between risk and economic sector views (with links to additional relevant information and resources).
- In the interest of space, the following must be noted:
    - Abbreviations and acronyms are used throughout (a comprehensive list is included for reference).
    - The terms ‘short-‘, ‘medium-‘, and ‘long-term’ mean up to 3 years, 3 to 5 years, and more than 5 years, respectively.
    - The term ‘geopolitics’ includes current or future global/regional tensions that may affect risk themes as indicated.
    - The term ‘alternative energy’ includes generators, inverters, batteries, solar, et cetera.

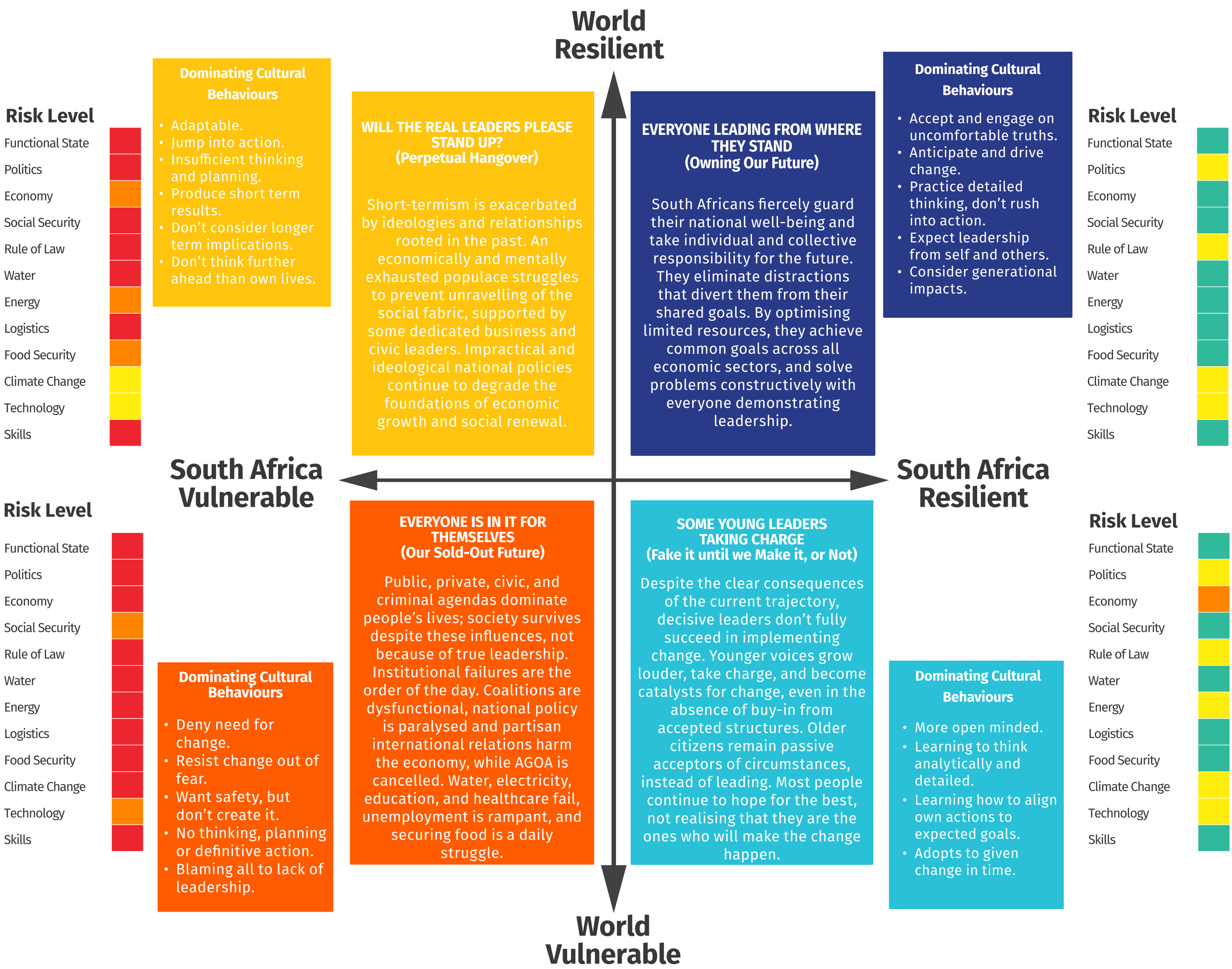
SOUTH AFRICA FUTURE SCENARIOS

7. South Africa Future Scenarios

To survive, we must sustainably create and protect value for the planet and ourselves. Successful people understand how to balance historical experiences, current conditions, and future threats with their own actions to drive different outcomes. People who don't align their own actions with scenario-based risk management to think and act proactively in the present to influence the future based on emerging trends and uncertainties, are unable to create a successful future. South Africans should become capable scenario-based risk managers in all spheres of their lives, to inform the trade-offs between scarce resources in the short-, medium-, and long-term. They should hold their leaders accountable to create and protect value sustainably, for society and the earth.

The IRMSA scenarios are summarised in the graphic below:

- Each scenario has a specific risk profile: improving the risk profile by managing the risk, will lead to a better scenario.
- The ability to improve the risk profile, is dependent on specific dominating cultural behaviours: changing the behaviours, will enable better risk response outcomes, which will lead to a better future scenario coming true.



Not holding leaders to account, is a leadership failure in itself.

South Africa has clearly stated the goals it needs to achieve for a brighter future, in the NDP Vision 2030. Individuals and corporates' ability to change their behaviours, to manage their risks, and so achieve the goals that will change the future is the single key determining factor. The table below provides a collective view from the many contributors to this Report on the most likely impact of implementation of the risk responses suggested in this report. Achievement of the NDP goals is directly dependent on a changed culture that drives different behaviours to realise a different future.

Risk Theme	Consequence for NDP Objectives and Priorities						Most likely scenario outcome 2024/25			
	Restore energy security	Growing the economy & jobs	Building better lives	Fighting corruption	Making communities safer	Making government work	Everyone is in it for themselves	Will the real leaders please stand up?	Some young leaders taking charge	Everyone leading from where they stand
Functional State							✓			
Politics							✓			
Economy							✓			
Social Security							✓			
Rule of Law							✓			
Water							✓			
Energy								✓		
Logistics							✓			
Food Security								✓		
Climate								✓		
Technology										✓
Skills							✓			

RISK LENS

8. Risk Lens

This section includes a summary of the twelve risk themes making up South Africa's risk profile. It includes a description of the risk theme, causes and consequences, followed by a potential scenario of how any risk that forms part of the theme may materialise. The scenario is followed by suggested resilience improvements to be pursued immediately and specific proposed risk responses to consider for effective impact in the short-, medium-, and long-term.

South Africa's risk themes have changed little over 10 years of reporting. Responses to those risks have not kept pace with the increasing risk levels, so that the overall risk profile affecting ordinary citizens today, has become more critical in terms of Maslow's hierarchy of human needs - citizens are worried about more basic needs, such as access to water, and food security appearing on the risk profile for the first time. Energy, logistics, and the skills to run a functioning economy remains high. In response, the risk themes were considered along a scale of 'get it right' (optimise and transform} and 'do it right' (to be strategic and sustainable):

Optimise
strengthen/leverage what exists

Transform
unlock existing capabilities

Strategy
influence national strategies

Sustainability
take deliberate long-term views and action

8.1 Functional State

A sustainable constitutional democracy requires of the State to protect citizens' fundamental rights, ensure economic development, and deliver basic services. The provision of such services relies on functional municipalities, supported by provincial and national government, and effective SOEs.

Risk to a continued functional and democratic State may be caused inter alia by the following:

- Citizens not benefitting equally from constitutional rights, affecting their economic wellbeing and social cohesion.
- Public trust in government's ability to deliver services has been eroded due to governance failures, weak leadership, unethical behaviour, lack of accountability, and poor consequence management.
- Apathy towards unethical leadership, with systemic corruption remaining in place, and service delivery reduces further.
- Slow and/or poor performance by the State in response to many challenges, including the following:
    - Prevention of unauthorised, irregular, fruitless, and wasteful expenditure.
    - Insufficient maintenance and lack of innovative investment to stimulate growth through improved infrastructure.
    - Destabilised national electricity grid that constrains economic growth, whilst increasing unemployment and inequality.
    - Insufficient climate change adaptation, and response to extreme weather events that result in displacement, loss of life, and severe infrastructure damage (requiring reprioritisation of funding from service delivery).
    - Cumbersome skills immigration requirements which accentuated supply side constraints of domestic skills.
    - Dysfunctional coalition-led local governments resulting in insufficient revenue streams and collection to fund activities, and critical decisions not being taken or implemented (e.g. appointments, budgets, critical infrastructure management).
- Continued leadership and key human resource challenges (e.g. lack of technical, project, planning, and management skills).
- Reduced national revenue during commodity booms due to policy frameworks causing delay in granting of mining licenses.

THULI MPANZA
Senior Manager Risk, Governance and Compliance
ABSA

CHANDU KASHIRAM
Partner
Lucidum

DR CHRISTOPHER WHITTLE
Head, ESG and Risk Advisory
CBS Group

PAVANA RANJITH
CRM Prof
Director
RQ Institute

If not addressed systemically and urgently, these risks will lead to the following:

- Further demise of local government capacity and critical service delivery failure in areas with high vacancy rates, and/or appointments of unqualified, unskilled and incompetent candidates in crucial technical, administrative, and management positions responsible for planning, budgeting, and infrastructure project implementation.
- Increased litigation against municipalities, with courts setting aside appointment of persons without the right skills, expertise, competencies and qualifications on grounds of unlawfulness and irrationality.
- Increased corruption, service delivery failures, public protests, social tension, increasing unemployment, low economic growth, increasing poverty, instability, and ultimately a failed State.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	8
Communication	5
Construction & Real Estate	13
Education	3
Energy	2
Healthcare	4
Financial Services	7
Manufacturing	10
Mining	11
Professional Services	14
Public Service / Government	1
Sport & Recreation	15
Tourism & Hospitality	9
Retail, Trade & Commerce	12
Transport & Logistics	6
Non-Profit / Civil Society / NGOs	16

Scenario:

What it can look like if it happens now

DHA experiences a pervasive systems failure. No identity documents, passports, or visas can be processed. Affected citizens are unable to transact or access services for which proof of identify is required (e.g. registering marriages child births to add dependants on medical aids, hospitalisation, insurance claims, social grants, contracts, and purchasing of property). Those whose passports and visas cannot be processed are trapped in foreign countries and international work travel is interrupted. Citizenship applications, refugee and asylum services are not rendered leading to concentration at borders or illegal border crossings. Deaths cannot be registered leading to insurance payout delays, fraudulent accessing of grants, deceased estates not being executed with dependants unable to access crucial funding.

Immediate resilience/emergency preparedness: Medium impact in the short term

Safety and crime prevention • Develop/preserve crime investigation resources to achieve case resolution targets and prosecution schedules. • Protect and diversify forensic/DNA facilities (refer alternative resource models in SADC region). • Improve investigation efficiencies using AI; integrate crime reporting and investigation databases to track progress and allocate resources. • Optimise prosecution resources to address full caseloads, cooperate with private prosecutors to fill gaps and address delayed cases.	**Waste management** • Cultivate waste management and recycling practices. • Build effective waste management plants (with capacity aligned to population and environmentally compliant treatment).	**Health and education** • Optimise fire, natural disasters, and other peril protection (including unrest, strikes, and business disruption) at hospitals and schools. • Protect supply chain and warehouse facilities for pharmaceutical stocks and medical equipment. • Reallocate capacity to respond to large scale perils per health and education facility location.
Infrastructure and logistics development (roads, rail, bridges, harbours, airports) • Implement medium- to long-term planning for road and rail infrastructure (response plans for storm damages to roads, railways, bridges). • Enhance emergency response plans for catastrophes at airports and harbours. • Integrate technology to increase effectiveness/capacity and reduce maintenance and operating costs.	**Communication channels** • Implement national redundancy standards and capacity for communication networks and data reinstatement. • Implement minimum resilience standards for major communication and infrastructure service providers.	**Prioritised, honest, cost-effective services from local authorities and State organisations** • Protect assets and infrastructure at local authorities. • Benchmark capacity development per location aligned to population and service requirements. • Benchmark infrastructure funding per local authority (budget, value procurement, projects).
Legal and governance frameworks that are executed consistently, timeously, and fairly • Enable multiple access for citizens to regional regulators (physical, calls, internet, email). • Implement cross regional capacity management.	**Environmental protection and rehabilitation** • Enforce limitation of major sources of air, water, and land pollution aligned to regulations. • Implement immediate response capacity for environmental disasters. • Enforce targeted environmental quality improvements at corporations and local authorities.	**Disaster support and relief** • Improve disaster management through fast and efficient classification of natural disaster areas after disasters occur. • Implement immediate capacity and personnel for disaster response. • Enable emergency fund access for basic reinstatement of natural habitats, homes and loss of personal effects.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Political instability, agendas aligned to public spend allocations.	Conduct lifestyle audits, track spend on projects, perform procurement audits, and review political party income disclosures by independent technical experts.	Medium term: High
Non-performing State departments and municipalities, poorly skilled, incapable people in key roles.	Fill vacant posts permanently with competent staff. Implement independent, merit-based senior appointments, multi-year program to upskill or replace senior roles to meet standards, audits, performance contracts, and effective Board oversight.	Medium term: High
Failing infrastructure (electricity, water, waste, roads, railways, harbours).	Publish maintenance and development plans for electricity, water, waste, roads, railways, and harbours; analyse gaps between current capacity and local, regional, and national needs; implement independent infrastructure PPPs across all sectors.	Medium term: High
Rampant crime, insufficient police capacity and leadership, delayed prosecution.	Create independent Chapter 9 police monitoring authority, enforce time limits for dockets, track exceptions for escalation, reclaim and clean up 'hijacked' properties in all cities/towns, and senior private legal resources to expedite prosecution.	Short term: High
Poorly directed development plans (e.g. traditional utility models), health, and education models not localised to communities, high digital and transport costs.	Localise water and waste treatment for informal communities and low-cost State housing (roof solar, roof water harvesting, underground water storage and septic tanks for housing blocks); enhance technology for health and education for low-cost access, mass internet rollout; effectively protect commuter rail systems. Increase fund allocation health and education infrastructure (e.g. hospitals, colleges).	Medium term: High

8.2 Politics

Changes in national and provincial governments by nature affect local governments, and cause uncertainty, declined trust and increased scepticism until stabilised.

Delays in establishing functioning coalitions (or governments of national unity) whether at national or provincial levels, or worse, collapsed government structures, will detract focus from national policy development and execution that is good for the overall country versus party political interests. Impacts of international relations decisions on the economy and business environment will affect the currency and foreign direct investment negatively.

Risk is mainly driven by the following:
- Slow pace of reforms to create an investment friendly economy.
- A historical lack of competent and ethical leadership has led to poorly performing or failed coalitions in local governments.
- Declining social confidence that elections result in benefit for the average citizen versus for political parties (as reflected in declining voter turnout for national and provincial elections over the 30 years of democracy).
- Disjointed multiparty views on foreign affairs which affects international relations.
- SA taking political stances based on historical party alignments to the detriment of the national interest.
- Indecisiveness of the incoming administration to deal with how SA's role in BRICS will play out.

Risk consequences include the following:
- Erosion of FDI, which will preclude economic growth.
- Rise in internal conflicts, insurrection and riots will destabilise economic reform efforts.
- Cancellation of AGOA legislation and/or sanctions either because of the US election outcomes or SA's international policy will affect duty free trade with the US.
- Reduced global supply to SA and restriction on SA exports to traditional markets will negatively impact the trade balance.
- Further depreciation of the Rand.

ANDREA COPLAND
Head of Business Intelligence
Purple Group

RUDZANI FUNZANI
CRM Prac
Chief Risk Officer
Government Printing Works

AMITH SUKHNANDAN
CRM Prof
Deputy Head: Corporate Entities and Transversal Auditing

- If efforts to establish a functional government fail (whether in the short- or medium-term), the following will result:
  - Power struggles between parties with differing ideologies and agendas, which can hinder decision-making and incoherent and ineffective governance.
  - Policy paralysis in the absence of consensus on policy issues, if compromise in the national interest is sacrificed.
  - Lack of accountability if responsibility for decisions is diluted among parties, resulting in decreasing transparency, increasing corruption and impunity among government officials.
  - Weakened opposition as all parties are brought into the coalition, which will reduce checks and balances in the political system, compromise the democratic process, diminish the voice of marginalised groups, and limit public debate on fundamental issues.
  - Public disillusionment may lead to a decline in public participation in democratic processes, increase voter apathy for future elections, and ultimately undermine the legitimacy of the Government of the day.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	9	Mining	8
Communication	15	Professional Services	12
Construction & Real Estate	11	Public Service / Government	7
Education	14	Sport & Recreation	13
Energy	3	Tourism & Hospitality	5
Healthcare	10	Retail, Trade & Commerce	1
Financial Services	6	Transport & Logistics	4
Manufacturing	2	Non-Profit / Civil Society / NGOs	16

Scenario:
What it can look like if it happens now

Following a breakdown in coalition or government of national unity arrangements, the national parliament, any provincial parliament, or any of the main metropolitan councils become dysfunctional, leading to a national policy paralysis on key issues, disparate international relationship signals, and uncontrolled dissipation of assets. Amongst other international reactions, the USA cancels all AGOA legislation and SA loses its duty-free trade benefits.

Immediate resilience/emergency preparedness: Medium impact in the short term

Political, policy and regulatory monitoring

- Monitor national/regional changes in State/party alignments.
- Identify change impacts from tax, labour laws, trade policies, industry regulations on the organisation.
- Evaluate impact of political instability on international partnerships, stakeholders, and commercial relationships.
- Assess exposures to loss of trade benefits and investments initiatives sponsored by foreign governments.
- Analyse dependencies on credit lines that may be curtailed following breaches of loan covenants that have political and governmental stability requirements.

Update BCPs

Update BCPs to address anticipated potential political shifts that affect key vendors or customers (e.g. government leadership, coalition dynamics, and fluctuating diplomatic relationships with key trading partners).

Open communication channels

Establish open communication channels with government officials, regulators, industry bodies, and community representatives to foster smoother relations and operations during unexpected changes; maintain a list of key political and commercial contacts in BCPs.

Diversification

Diversify raw material, component, and services sources, for if key suppliers become inaccessible following political instability or change.

Diversification

Localise operational activities in the economy, (e.g. manufacturing, supply chain, workforce development) to reduce reliance on international markets and exposure to global trade disruptions following disputes on local or foreign policies.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Unattractive SA domestic and foreign policies and investment conditions; capital flows exiting SA; high yields on long dated RSA bonds that drive up borrowing costs.	Ring fence commercial zones for targeted investments; minimise bureaucracy; ensure employment at minimum wage; open access to international work permits for targeted skills; guarantee dividend payments after provisional company tax payments; implement targeted mining/energy investment plans to address EU carbon emission 'equivalence' taxes.	May appear complex but key concepts are in place; initiatives need immediate action to impact
Unstable government structures during transition to coalition governments (national, provincial, and local) or government of national unity.	Uncompromisingly protect the national interest in the next administration, drive active progress on national policy decisions and execution, follow through on recent progress on action against perpetrators of fraud and corruption, drive parliamentary performance to deliver outputs through DPME.	Short term: Medium Medium term: High
Coalition impacts on the Rand and foreign relations, unsustainable social spending, increased debt vs GDP.	Maintain balanced perspective on impacts of decisions by coalition government on the economy and social wellbeing in the national interest.	Short term: Medium Medium term: High
Inconsistent and unstable international policies.	Strengthen relations with investor friendly governments to promote the interests of the SA economy into the future, follow balanced and consistent foreign policy that supports economic growth and social development imperatives.	Short term: Medium Medium term: High
Significant changes in external drivers of foreign political influences.	Timeous engagements with political parties and civil groups in targeted areas to ensure accurate information on which to base foreign policy decisions.	Short term: Medium Medium term: High

8.3 Economy

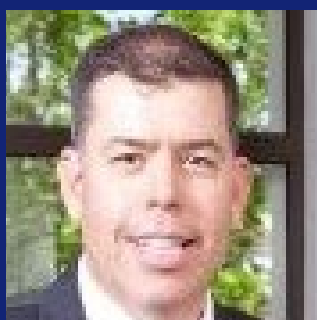
Slow economic recovery after the past years' declines will remain detrimental to all sectors.

This stems from low GDP growth, large budget deficits, and an increasing gross loan debt ratio (~73.9% of GDP in March 2024), exacerbated by infrastructure failures. If corruption and weak institutions are not addressed, recovery will be hampered. Geopolitical alignments threaten key investment and trading relationships, and tariffs or sanctions may harm the economy.

The main economic risks are as follows:
- Low potential GDP growth risk is caused by the following:
  - Uncertain policy environment (exacerbated by the 2024 election outcomes).
  - Low employment due to inadequate education, which causes socio-economic conditions and increases fiscal pressure.
  - Long-term downward trend in net foreign capital inflows, exacerbated by high crime levels and SA's inclusion in the FATF Greylist and the EU High Risk list, and generally reduced capital flows to emerging markets. Given limited domestic savings, investment must be funded by foreign capital inflows in the absence of running a large current account deficit. Domestic demand of consumption and investment must therefore be constrained.
  - Deteriorating infrastructure, notably water, electricity and logistics, accentuates the economic downturn.
  - Electricity disruptions impact mining, manufacturing, and agriculture most severely. SA is a net exporter of agricultural products, implying a degree of food security. High electricity dependent manufacturing industries include non-ferrous metals, iron, steel, chemicals, and pulp and paper.
  - A surge in road freight transport mirrors the collapse of rail freight transport due to deep-rooted rail inefficiencies.
  - Deteriorated cargo handling capability at ports with a sharp decrease in container units processed at SA harbours.
  - Underinvestment in water infrastructure affecting numerous water intensive industries in the economy.
  - The backlog in mining licence processing has precluded SA from fully participating in recent commodity booms. The appointment of a preferred bidder to develop a system to evaluate and vet mining license applications, is encouraging.
  - Skills immigration challenges accentuate domestic skills constraints. Provincial stimulation of digital creative and tourism initiatives is positive and SA's inherent tourism potential will positively support more of these opportunities.
  - Ongoing land expropriation policy uncertainty and the NHI Act being unclear on what may be covered privately in future – with prolonged implementation timelines leading to a longer period of uncertainty.

NWABISA BIXA
Risk Specialist
Johannesburg Stock Exchange

ARTHUR KAMP
Chief Economist
Sanlam Investment Group



WARREN YOUNG
CRM Prof
Chief Risk & Compliance Officer
Sanlam Investment Group

    - SA's path to a lower net carbon economy is unclear and trading partners will increasingly examine the carbon footprint of import value chains. The greener energy production drive is metals/mineral intensive with commodity opportunities. Escalating military-related capex could also boost commodity prices which will improve SA's purchasing power.
    - Operation Vulindlela is critical to increase growth and returns on capital employed to compensate for SA's perceived investment risk. Progress on a legislative framework to enable private participation in infrastructure development is positive. The State must continue to drive reform, prioritise fiscal sustainability, and maintain an independent SARB.
- Fiscal failure and its implications for financial services may be caused by the following:
    - Increasing expenditure demands and low growth leading to sustained large budget deficits and an increased gross loan debt ratio. Debt service costs may exceed 20% of revenue in 2024/25. Stabilisation of debt at 75% by 2025/26 will increase budget execution risk (given pressure to extend social grants), with no new SOE grants planned.
    - Efficient tax revenue funds public expenditure and investments. Higher tax revenues due to high commodity prices will end soon and high NHI implementation costs are anticipated in future. Modernisation of systems will improve collections, but tax reforms (with tax-to-GDP ratio reaching 25.3% by 2026/27) are contingent on higher GDP growth.
    - Consolidated spending by function may increase on average at 3.9% p.a. in the medium-term, implying decreased spending in real terms, which seems unlikely. Most State debt is in Rand, therefore Rand weakness and inflation are more likely than debt reprofiling/restructuring should the debt ratio not be stabilised, if the State pursues prescribed asset legislation (distorting bond market returns) or utilises the SARB's balance sheet (which will cause high inflation).
    - Sovereign debt rating downgrades will cause higher real borrowing costs, crowd out private sector investment, and constrain credit extension. A deteriorated fiscal policy impacts commercial banks and retirement funds (holding Government debt as assets on balance sheets) with guaranteed annuities tied to fixed interest instruments including Government bonds and will ultimately expose insurers and households' interest in pension funds.
    - Increased headline inflation remains within 3%-6% target range, with the repo rate expected to remain unchanged for 2024 and cuts being priced in by the market for early 2025. Unsustainable fiscal policy may raise inflation concerns, which may reflect in Rand weakness.
- Geopolitical fragmentation may lead to the following:
    - SA's FATF Greylisting and EU High Risk listing cause reputational damage and trade frictions, with potentially diminished net capital inflows (partly due to SA's having lost its status as the main gateway into Africa).
    - Geopolitical alignments may lead to sanctions (in the event of major disputes with key investment/trading partners) or cancellation of beneficial arrangements such as AGOA.
    - SA's globally integrated, sophisticated financial system renders sudden economic collapse unlikely (as other trade blocks would protect their relationships with SA). This incentivises prudent fiscal and monetary policies and investor relations.
    - Severe disruptions to financial flows into SA will affect economic activity and by extension, fiscal sustainability.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	2	Mining	1
Communication	8	Professional Services	13
Construction & Real Estate	10	Public Service / Government	14
Education	6	Sport & Recreation	16
Energy	7	Tourism & Hospitality	12
Healthcare	9	Retail, Trade & Commerce	11
Financial Services	4	Transport & Logistics	5
Manufacturing	3	Non-Profit / Civil Society / NGOs	15

Scenario:
What it can look like if it happens now

African trade through SA reduces sharply, with commensurate loss of direct income to organisations and tax revenues. African businesses headquartered in SA move support functions to economically stable countries (supported by technology enabling remote working).

Immediate resilience/emergency preparedness: Medium impact in the short term

Planning	Partnerships	Review and protect
Develop plans to manage cash flow, secure alternative sources of financing, and implement cost-cutting (e.g. renegotiate contracts, reduce inventory levels, or temporarily suspend non-essential projects).	Explore national and regional strategic partnerships, joint ventures, and/or alliances to (under dire conditions) collaborate for the good of the industry and its stakeholders (e.g. employees, clients, suppliers).	Review and continually improve protection strategies to safeguard physical and intellectual property assets.
Contingency Planning	**Diversiffy supply chain**	**Reputation management**
Develop contingency plans to manage employees during an economic crisis (e.g. temporary furloughs, reduced work hours, redeployment to critical operations), ensuring compliance with labour laws and maintaining employee communication.	Diversify suppliers, secure alternative sourcing options, and implement contingencies for logistics and transport disruptions.	Establish crisis communication with stakeholders (e.g. customers, suppliers, investors, authorities) to protect trust and reputation.
Identify vulnerabilities		
Review and stress test BCPs under economically strained conditions to identify vulnerabilities and refine responses.		

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Declining / negative foreign investments flows, grey listing, unattractive and restrictive regulatory environment, increasing BEE demands, concerns over the rule of law.	'Marshall Plan' for new FDI with employment and tax incentives based on value-add factory and skills development.	Medium term: High
Fiscal room for policy interventions crowded out by social relief and State employment, ultimately leading to a fiscal cliff and/or prescribed assets rules with high inflation risk.	Reallocate State and local authority spending to infrastructure and value adding processes using third party project management.	Medium term: High
Policy uncertainty (property rights, NHI), lack of fiscal discipline, currency weakness as early signal to loss of confidence and economic instability.	Privatise clinics on condition of low cost/free for unemployed models, accelerate low-cost benefit model for medical aids, guarantee property rights.	Medium term: High
Geopolitical fragmentation, contradictory alignments between key trade blocks, inconsistent international policy application.	Maximise trade and value add opportunities with regions willing to develop SA, minimise purely extractive export relationships.	Good perception, financial benefits uncertain
Loss of status as main gateway into Africa: increasing viability of other countries for trade into Africa.	Pursue new channels into Africa, partner with countries on trade and investment policies on similar principles.	Medium term: High

8.4 Social Security

Increasing poverty in SA is characterised by economic exclusion, lower education levels, and vulnerable households.

Economic policies aimed at redistribution in the social security net have resulted in SA having the highest share of GDP devoted to social security of any sub-Saharan country, yet poverty levels remain high. For a quarter (23.5%) of SA households, grants are the primary source of income (increased to 28 million beneficiaries or 44% of the population, including SRD grants at ~R260bn annually). This situation creates extreme risk of social upheaval if not alleviated urgently.

This risk is mainly driven by the following:
- Emerging evidence-based international consensus is that effective social security promotes growth and development. Although in SA, this has reduced aggregate poverty, improved school attendance, and reduced levels of stunting in children, the social security system remains fragmented, poorly coordinated, inadequate, and poorly managed. Reforms, whilst it will not be without challenges, must result in greater inclusivity and accommodation of inter alia informal and atypical workers.
- Despite this, poverty and inequality remain high due to unequal resource distribution, poor educational outcomes, and insufficient entry-level jobs. Related social and fiscal costs are immeasurable and threaten the sustainability of the system.
- Unemployment remains a pressing economic, social, and policy challenge. Unemployment increased to 7.9m (32.1%) in March 2024, driven by a growthless economy, structural mismatches in the labour market, and automation. This may lead to increased crime, deteriorating health, and social unrest. Less rigid labour practices and constant reskilling of workers are needed. Equally, the social compact between Government, private sector, and civil society to ignite the economy should be re-established and focus on the youth specifically, who are more significantly impacted by high unemployment rates.

GABRIELLE HUSSAIN
Business Manager: Group Operations & Sustainability
Johannesburg Stock Exchange

GHADILE MASHIBINI
Acting Chief Risk Officer
Free State Provincial Treasury

ALIZE LE ROUX
Senior Researcher
Institute for Security Studies

ANITA SAMAAD
CRM Prof
Chief Risk Officer
Department of Social Development

- Despite a relatively high Human Development Index score of 0.71 out of 1 SA society is characterised by a high Gini coefficient, diverse skills levels, and unequal wealth distributions, which do not support optimal human capital development. Low productivity is driven by mental health issues (according to the SA Depression and Anxiety Group, 1 in 4 citizens has depression, with employee absenteeism due to depression costing the economy R20bn annually).
- Interconnected uncertainties (e.g. geopolitical tensions, water, load shedding, corruption, unemployment) are compounded by post-election anxiety and a collective national psyche which will manifest in atypical crime incidents, social polarisation, high suicide rates, gender-based violence, substance abuse, violent community protests, and general discontentment.
- Insufficient response to address economic fundamentals and recognition of mental health issues as a critical factor for a thriving society. Social service professionals (social workers, child and youth care workers, and community development practitioners) are not strategically deployed in communities to offer psycho-social support and facilitate the care and protection of marginalised and vulnerable groups in collaboration with NPOs.
- The triple challenges of poverty, inequality, and unemployment remain the root cause of most of the country's social ills, and if not addressed through coherent policy decisions that promote economic prosperity, multi-sectoral collaboration, and inclusion, will edge SA closer to a failed state.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	12	Mining	9
Communication	13	Professional Services	15
Construction & Real Estate	11	Public Service / Government	5
Education	3	Sport & Recreation	16
Energy	4	Tourism & Hospitality	14
Healthcare	1	Retail, Trade & Commerce	6
Financial Services	7	Transport & Logistics	10
Manufacturing	8	Non-Profit / Civil Society / NGOs	2

Scenario:
What it can look like if it happens now

SASSA grant payments are interrupted for an extended period. Unable to pay bills or afford transport to work and food, vulnerable communities are exposed to increased crime. Increased levels of social ills manifest in gender-based violence, child murders, substance abuse, and dysfunctional families, leading to community upheaval. Cash-strapped NPOs are overwhelmed and cannot deliver relief.

Immediate resilience/emergency preparedness: Medium impact in the short term

Prioritise mental health Offer mental health counselling and employee assistance programs to help employees cope physically and mentally.	**Source locally** Map suppliers to source locally in affected areas if supply chains are disrupted.	**Alternative working conditions** Enable secure work-from-home or alternatives such as cloud connectivity, virtual desktops, and mobile solutions.
Cross functional accountability Designate cross-functional teams to make decisions and coordinate emergency responses.	**Communication strategies** Activate emergency communication to share updates and instructions to employees, customers, and suppliers.	**Secure funding** Maintain adequate cash reserves, lines of credit, or alternate financing to sustain operations.
Corporate social responsibility Maintain open dialogue with local communities through corporate social responsibility initiatives to foster goodwill.	**Monitoring** Consistently monitor, test, and refine BCPs.	**Professional services** Deploy social service professionals in communities to offer psycho-social services.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Ineffective access to cost effective capital and related security (land transfers, title deeds), excessive cost of debt for SMEs in the unsecured loan sector.	Accelerate property ownership on State housing, loan facilities linked to business development.	Medium term: High
Poor and declining standards of education in the public sector, skills are often not relevant to employment opportunities, unemployable youth.	Reskilling at all levels linked to experience at work as an employer offset to SETA costs with relief on minimum wage, including increasing access to entrepreneurial opportunities for the youth.	Medium term: High
Social relief programs that do not promote seeking of work and skills development, entrenched dependency on social grants, declining employability, skills regression.	Employers to become pay points for staff receiving grants with a ‘bonus’-amount offset against UIF costs.	Medium term: High
Inadequate savings culture and inappropriate use of expensive financial products (microloans, pay day loans, funeral policies, lottery, pawn shops).	Broad based financial support for targeted capital accumulation and education, standard private insured life and health benefits that accumulate savings, creating more inclusive social security systems that include provisions for informal and atypical workers.	Medium term: High
Poor economic growth, inadequate public works projects, little employment leverage from local authority spending caused by tenders and corruption.	Remove bureaucracy and excessive labour rules for small business, open economy to international skills and investment transfers.	Medium term: High

8.5 Rule of Law

SA has been plagued by corrupt activities (most notably tender corruption targeting public sector capital expenditure) that eventually led to the Commission of Inquiry into State Capture finalising its work in 2022.

The country also faces persistent crime in general (including all types of illicit activities). This situation threatens socio-economic stability and forecasts a future characterised by deteriorating service delivery, economic stagnation, declining trust in Government, strained international relations, escalating social unrest and the ultimate unravelling of society. The potential for increased internal discord and diminished global standing could affect SA's development trajectory detrimentally. The risk is deeply embedded within the socio-political and socio-economic fabric of SA, influenced by the following:

- The lack of robust institutional frameworks and effective governance allows for corrupt practices to flourish undeterred.
- Frequent leadership changes and ongoing political conflict detract from effective law enforcement, enabling the proliferation of crime.
- High unemployment and economic disparities which may push individuals and groups towards illicit means to survive.

The consequences of the risk could be devastating:

- Crime erodes foreign investor confidence and hampers economic growth. Illicit activities deplete national resources and reduce fiscal capacity for development, while severely affecting FDI for growth related initiatives. Crime increases production cost, which affects profit margins and makes SA uncompetitive globally.
- Crime leads to social distrust in institutions, diminishing public confidence in justice and governance, which is crucial for social cohesion and national progress. Additionally, this distrust can cause a lack of public cooperation in Government initiatives and difficulty in implementing policies, further affecting national development and reform efforts.

GEMMALYN ALCOBER
Senior Information Security Officer – GRC
Easy Equities

CYNTHIA MOTAUNG
CRM Prac
Independent Risk Professional

CYNTHIA STIMPEL
Executive Director
Whistleblower House

WALTER EHRLICH
CRM Prof
Director
Retlaw Fox

ADV THOKOZANI MVELASE
CEO
COMRiC

- Political instability as various corruption scandals are being dealt with may further affect governance and law enforcement.
- Ongoing crime could continue to affect SA's global standing, and diplomatic and trade relations.
- Crime may exacerbate social tensions and widen the gap between already disparate groups, causing increased unrest, and destabilising national security.
- Not rooting out deeply embedded corruption in SOEs will continue to cause billions to be lost to SOEs such as Eskom, SAA, and Transnet, undermining the fiscus, state institutions, state infrastructure, and may ultimately cause State failure.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	9	Mining	5
Communication	10	Professional Services	11
Construction & Real Estate	4	Public Service / Government	1
Education	13	Sport & Recreation	15
Energy	3	Tourism & Hospitality	16
Healthcare	6	Retail, Trade & Commerce	7
Financial Services	8	Transport & Logistics	2
Manufacturing	12	Non-Profit / Civil Society / NGOs	14

Scenario:
What it can look like if it happens now

The Construction Mafia takes over important construction sites in a province and halts all activity until their demands are met, backed by radical populist groups (with intimidation tactics, asset destruction, and loss of life). The SAPS are unable to deal with the challenge and the SANDF is deployed.

Immediate resilience/emergency preparedness: Medium impact in the short term

Governance and compliance frameworks Establish a robust governance and compliance framework, with clear policies, codes of conduct, and accountability measures.	**Ethical Culture** Foster a strong ethical culture from the top-down, promoting integrity, transparency, and zero-tolerance for misconduct.	**ERM implementation** Implement ERM processes to identify, assess, and mitigate fraud and corruption risks.
Collaboration Collaborate with industry associations, law enforcement agencies, and Government bodies to share intelligence and best practices.	**Due diligence** Conduct comprehensive due diligence on third parties (suppliers, vendors, partners) to assess risks and potential red flags.	**Whistle-blowing** Implement whistleblower hotlines and protection mechanisms to encourage reporting of suspicious activities.
Analytics and monitoring Deploy data analytics and monitoring tools to detect anomalies, red flags, and patterns indicative of fraud or illicit activities.	**Employee training** Regularly train/refresh employees on ethical conduct, anti-corruption measures, and on identifying and reporting suspicious activities.	**Incident response** Develop incident response and investigation protocols to swiftly address and remediate any identified issues.
Segregation and internal controls Segregate duties and implement robust internal controls over financial transactions, procurement processes, and asset management.	**Access control** Enforce strict access controls, both physical and logical, to sensitive areas, information systems, and data repositories.	**Audits** Conduct periodic audits (internal and external) to review compliance with policies, procedures, and regulatory requirements.
Physical Security Deploy physical security measures (CCTV, access controls, security personnel) to safeguard facilities and assets.	**Law enforcement** Collaborate with law enforcement agencies to report and investigate incidents of fraud, corruption, or other illicit activities.	**Record keeping** Maintain detailed documentation and evidence trails to support investigations and potential legal proceedings.

Review and update Consistently review and update plans based on evolving risks, incidents, and best practices.	**Accountability** Hold people who have been found to have contravened policies, procedures and codes of conduct accountable.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Inefficient State departments resulting in 'facilitation'-payments by the public.	Implement transaction service and costing benchmarks, public complaints databases with random audits.	Short term: Medium Medium term: High
Lack of professionalism in the Public Service.	Mid and high-level appointments supervised by independent specialist panels, fixed term appointments beyond election cycles, objective semi-annual performance reviews.	Short term: Low Medium term: High
Cadre deployment and activities of Politically Exposed Persons without accountability.	Cadres and PEPs to be monitored in same way as professional appointments.	Short term: Medium Medium term: High
Inadequate independence, capacity and skills in Prosecution Authority.	Chapter 9 unit for special / corruption investigations & prosecutions.	Short term: Medium Medium term: High
Corruption in Police Services.	Independent police investigations unit, lifestyle audits, communication monitoring of police and families.	Short term: Medium Medium term: High
Targeted corruption and undermining of control systems (counterfeit goods, construction mafia, illicit goods transfers).	Escalated and accelerated investigations in sectors affected by illicit goods trading.	Short term: Medium Medium term: High
Endemic corruption related to procurement and projects in SOEs, State departments and local authorities.	Independent directors on SOE Boards and lifestyle audits, performance tracking vs value add on all projects and procurement above a material, predetermined amount per supplier.	Short term: Medium Medium term: High
Vested political interests in major procurement projects (e.g. arms deals, toll roads, infrastructure, electricity, rails and ports).	Lifestyle audits, zero tolerance for inadequate financial disclosure, substantial whistleblower protection, consequence management for wrongdoing.	Short term: Medium Medium term: High

Sources:
EWN, Babalo Ndenze, 2 May 2024.
The Economic Cost of Crime in South Africa. The World Bank 2023
2024 Edelman Trust Barometer Global Report
Political_Risk_Report_2024_FullReport
Global Risk Forecast. Crisis24_2024
Accountability Now – Know Your Rights (Bills of Rights – Constitution of SA)
Paper by Judge Goldstone on the International Criminal Court

8.6 Water

SA's water risk relates to insufficient availability, pressure and distribution of quality water to meet demand where needed at affordable cost. Coherent, integrated investment, management, and conservation, underpinned by good governance is needed to address it.

Risk is driven by the following:

Insufficient water availability, pressure, and distribution to meet demand when needed:

- Rapid urban population growth causes increased demand straining infrastructure and leading to inefficient distribution networks across the water value chain (bulk water supply, water boards, municipalities).
- Deteriorated availability, reliability, and quality of electricity affects potable water supply by interrupting filling of reservoirs to capacity. Frequent plant start-ups cause equipment failures, reduced availability, increased maintenance costs, overflowing reservoirs, excessive discharge to rivers, and non-compliance to quality standards.
- Climate change induced extreme weather events require adaptation through the design and build of more resilient water infrastructure. Urgent resource capacitation is needed to convert the influx of climate related funding into meaningful water projects. Erosion of construction industry capacity suppresses the ability to implement large, technically complex capital water infrastructure projects, leading to increased reliance on foreign capacity for execution.
- Criminal intimidation and extortion of contractors and officials at construction sites (in the form of a 'protection levy' payable to 'local business forums') occur nationally, causing delays, cost increases, and abandoned projects. Attempts by the State to combat this, are reflected in new policies and legislation, inter alia the CIPA, the NIP, and the CIP.

Water quality

- Pollution and faulty treatment plants make water unsafe for consumption and increase purification costs, exacerbating the risk of water borne diseases. Sporadic incidents are likely to continue unless all at-risk water supply systems are improved.
- The Vaal and Orange River systems are becoming more saline, resulting in a new species of being reported, with new reports also from Hartbeespoort Dam. These species grow faster than existing dominant genera of blue-green algae because of its saline tolerance and produce potent toxins that are not yet fully understood. Water management agencies are forced to dilute water using more costly Lesotho Highlands Water Project water versus removal of salts at water sources.

PROF. ANTHONY TURTON
Director
Nanodyn Systems

DAWID BOSMAN
Senior Manager
Trans-Caledon Tunnel Authority

ALLARICE BOSCH
Acting General Manager
Legal & Risk
Rand Water

Pricing and financial sustainability of the water value chain:

- About 41% of municipal water does not generate revenue, and 35% is lost through leakages (~1.66bn m3 and R9,9bn p.a.), impeding universal access to water and non-conventional solutions (e.g. potable reuse, seawater desalination). This 'utility doom loop' must be arrested through improved governance, investment, and credit control/billing protocols.
- Deteriorating financial health of water users, high debt caused by non-payment and economic hardship, and changes in municipal administrations, complicate decisions to render services to cash constrained municipalities, affecting financial survival of the value chain (including water boards), and affecting bulk water treatment to potable standards. Redress includes withholding equitable allocations from non-paying municipalities, uniform credit control and debt recovery processes, bulk prepaid meters at non-paying municipalities, and rehabilitating dysfunctional water utilities.

Strategic and policy uncertainty:

- Lack of clear policy and strategy on how new water resources will be developed may result in wea market response, higher risk premia, and greater cost. A prudent market entry strategy, with a clear policy framework is urgently required.
- The accelerating rate of change in aquatic ecosystems is overwhelming SA's institutional response capacity, manifesting in an inability to correctly identify root causes and leading to inappropriate solutions to misdiagnosed problems (e.g. Vaal River system overwhelmed by water lettuce in 3 years). Technical advisory expertise to support authorities to make high-risk decisions in environments characterised by imperfect knowledge and rapid change, is urgently needed.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	2	Mining	7
Communication	9	Professional Services	16
Construction & Real Estate	6	Public Service / Government	14
Education	12	Sport & Recreation	5
Energy	10	Tourism & Hospitality	4
Healthcare	1	Retail, Trade & Commerce	8
Financial Services	15	Transport & Logistics	13
Manufacturing	3	Non-Profit / Civil Society / NGOs	11

Scenario:

What it can look like if it happens now

Cholera breaks out across a water network, the bulk water system becomes toxic, and contaminated water is distributed to communities.

Immediate resilience/emergency preparedness: Medium impact in the short term

Water resilience strategy	**Wastewater management**
Implement water resource strategy (effective allocation models and plans for drought, floods, storage, evaporation, pollution, localised water harvesting, and treatment plants).	Monitor wastewater and invest in technology to treat polluted water before discharge to drainage system or dams.
Water infrastructure Maintain water reticulation infrastructure on sites (organisations), and water plants and reticulation infrastructure (water authorities).	**Supply Security** Ensure water reservoirs are adequate for the communities they serve.
Education Educate public on water scarcity, conservation, pollution and treatment/purification (integrate indigenous methods).	**Consumption Management** Incorporate progressive water consumption limitation sanctions on excessive usage for organisations and households.
Protect and manage dams • Suspend or vary water use rights when water levels in dams are projected to be low (water restrictions). • Implement water limits per day for generally high quantity water consumers. • Protect dams, dam feeding streams/rivers/ boreholes holding water for public consumption against water pollution or alteration. • Strengthen physical security at dams and boreholes through site inspections, test water, and act sternly against perpetrators. • Mitigate water evaporation from dams	**Crisis Response and Preparedness** • Prepare and install water storage and back-up systems (e.g. above and underground storage tanks). • Implement potable water storage at work sites to augment backup tanks if main supply and backup water runs out. • Harvest rainwater, collect stormwater, and install boreholes and small-scale water purification plants on sites. • Invest in water filtration or alternative purification and desalination solutions to recycle, reuse, repurpose grey water. • Influence efficient usage (e.g. wastewater for agricultural and mining activities, mandating mining and manufacturing companies to remove waste from grey water to reduce pollution, installing water saving taps, toilets and related solutions). • Develop drought contingency plans, early warning systems, and implement water rationing

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Unstable bulk water sources due to climate change; delayed or inadequate regional water, poor dam management.	Manage evaporation in dams; invest in regional partnerships (agri/industry/consumer) to build and increase dam storage; implement shared parametric weather insurance.	Short term: Medium Medium term: High
Decaying, inadequate bulk water infrastructure (capacity, leaks, plants).	Independently assess infrastructure integrity and maintenance programs; implement gainsharing PPPs for water capacity projects.	Short term: Low Medium term: High
Decaying water distribution networks in municipalities.	Build new reservoirs and local distribution networks, separate emergency allocation of water from paid water supplementation. Enforce underground storage rules for new low-cost houses.	Short term: Low to Medium Medium term: High
Pollution of natural water (untreated waste in rivers, industrial pollution, increasing salinity).	Roll out mass septic tanks in rural areas, enforce compliance with penalties for polluters; increase recycling and investment for waste treatment (funded by PPPs, substituting for rates and billing).	Short term: Low, needs cultural change
Electricity supply dependency at pump stations.	Locate mobile high-capacity generators at bulk pump stations and metros; locally store diesel, with maximum response targets.	Short term: Medium Medium term: High
Financial mismanagement (billing); misallocation of capex to opex).	Cap opex and restore capex allocation in municipal budgets. Outsource billing and collection to independent service providers.	Short term: Medium Medium term: High
Inadequate capital to sustain ongoing water infrastructure development.	Liberalise water investment to allow PPPs for bulk and regional projects; reallocate spend from water tankers to bulk storage.	Short term: Low Medium term: High

8.7 Energy

SA's total energy mix comprises mainly electricity, fuel energy (coal, oil, gas), and renewal or green energy (e.g. wind, solar, hydro).

The risk of a national electricity grid ('grid') failure would constitute an uncontrolled, complete de-energisation of the grid due to all electricity generating plants being disconnected from the grid, and all electricity users connected to the grid being interrupted simultaneously. This could be caused by extreme weather, sabotage (e.g. intentional plant damage, cyberterrorism), transmission network failure (theft, vandalism, aging infrastructure, network capacity constraints), and severe supply constraints due to demand shortfalls, depletion of reservice capacity, or unplanned generation interruptions. Recovery after a grid collapse would be practically and economically challenging and likely damage key national infrastructure. To protect the grid from failure due to such an unforeseen sequence of events, multiple defence barriers are in place.

SANELISIWE KHOWANE
ERM & BCM Graduate
eThekwini Municipality

JOSE CORREIA
Emergency Manager
Eskom

NANCY GANGARAM
Senior Risk Advisor
Eskom

SIJU JOSEPH
Ancillary Services Manager
Eskom

MAGDALENE REDDY
CRM Prac
Risk & Resilience Manager (Distribution) Eskom

SANJAY BANA
Head Enterprise Risk & Resilience
Eskom

RAVI NAICKER
Director
Align Risk & Forensics Services

TJAART VAN DEN BERG
Partner
Lucidum

Consequences of a national grid collapse could include the following:

- Communications network interruptions within 4 hours (voice, data).
- No access to cash or EFT channels when networks are down.
- Critical infrastructure/service failures when back-up power runs out.
- Water supply interruption (potable water, and operational water for use in power stations, data centres).
- Business and supply chain interruptions, loss of stock and revenue.
- Fuel shortages as storage at refineries and ports is depleted.
- Social unrest and increased syndicate operations.

High levels of loadshedding (as Eskom balances the demand and supply of electricity), with commensurate impacts on households and organisations (business interruptions, business closure, unemployment, and increased debt) have improved recently due to increased maintenance by Eskom and the uptake of solar power reducing demand from the grid. Municipal load reduction resulting from inter alia insufficient maintenance, loadshedding, and heightened crime, will continue to have revenue consequences for the municipalities themselves, small businesses without back-up capacity, and communities.

Long-term sustainability of fuel energy supply is affected by demand and impacted by national policy decisions (e.g. closure of local refineries, demand and manufacturing of cleaner fuels, greenhouse gas management via carbon taxes and carbon budgets, environmental legislation compliance relating to minimum emission standards, waste management, and water use licences, and planning and management of energy supply). All of these are reliant on global imports, and are vulnerable to fluctuations in global markets, international supply chain disruptions due to geopolitical conflicts, theft from oil and gas pipelines, and syndicate driven operations leading to product shortages. In the medium-term, disruption of major energy-centric industries (manufacturing, mining, construction, etc.) may lead to declining investor confidence, negative sentiments of rating agencies, currency devaluation, and secondary impacts like decreased tourism and divestment.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	6	Mining	8
Communication	2	Professional Services	12
Construction & Real Estate	10	Public Service / Government	11
Education	14	Sport & Recreation	16
Energy	1	Tourism & Hospitality	13
Healthcare	3	Retail, Trade & Commerce	7
Financial Services	5	Transport & Logistics	4
Manufacturing	9	Non-Profit / Civil Society / NGOs	15

Scenario:
What it can look like if it happens now

A massive unanticipated generation breakdown or wide-scale transmission faults cause frequency in the grid to drop below minimum stable levels. The system enters alert state, load shedding, load curtailment, and automatic Under-Frequency Load controls fail, overwhelming the system and shutting it down. Eskom activates black start plants, which fire up the rest of the power stations and gradually restore them to service over multiple days/weeks, as per the National Grid Restoration Plan. Backup power is exhausted and communication networks shut down. Water supply and sewage systems shut down after 8-12 hours. After multiple weeks (if power is not restored), fuel shortages affect transport and industry. Supply chains break down, causing food shortages, criminality, and violence.

Immediate resilience/emergency preparedness: Medium impact in the short term

Diversification Diversify electricity (location and sources), grid capacity, and allocation management (with reserve capacity exceeding peak demand, and distribution of generators and fuel to key utility locations).	**Alternative Energy Sources** Evaluate reliance on Eskom power supply and explore alternatives (e.g. solar, gas, generators, batteries), adopt smart grid technologies.	**Critical Process Resilience** Identify time critical processes and adopt practical recovery plans for short term continuity.
Staff Resilience Accommodate granular staff priorities during extended power outages through workarounds (e.g. flexitime, flexi-place arrangements).	**Contingency Testing** Test contingencies for vulnerabilities in supply and distribution networks, secure priority services, and multi-source where possible.	**Communicaton** Implement alternative communication channels (satellite phones, internet connections, and high-frequency radio) with clear protocols.
Stakeholder Readiness Engage communities on disaster readiness and advocate supportive policies.	**Business Continuity Testing** Increase frequency of scenario planning exercises, risk assessments, and business continuity plan testing, gather and analyse feedback, and implement lessons learned.	**Activate BCP** During extended power outages – • deploy backups/alternatives to power critical infrastructure and communication networks; • activate emergency communication protocols and infrastructure as per business continuity plans; • activate supply chain contingencies, priority service level agreements for critical supplies; and • collaborate with law enforcement for public safety and community resilience.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Supply shortage from unplanned generation failure; inconsistent maintenance; decommissioning (carbon emission reduction requirements); financial constraints from off-grid migration and increasing non-payment by local authorities; inadequate use of carbon reduction finance incentives.	Independently validate plant maintenance; strictly match new power sources to decommissioned plants; do scenario planning for payment defaults to ensure preservation of plant capacity; implement PPPs to optimise carbon reduction finance capital.	Short term: High, from sustained short-term actions
Liquid fuel shortages (petrol, diesel) caused by disruption of refined fuel imports; failure of multi-product fuel pipelines due to damage/theft/unauthorised access.	Conduct risk and threat assessments for inbound fuels with responses; protect multi product pipeline.	Short term: High, from sustained short-term focus
Gas shortages in view of the termination of supply from Mozambique in 2026.	Implement national gas supply plan to secure gas field access and network development; implement PPPs to finance primary gas infrastructure.	Medium term: High
National grid failure caused by faults or deliberate damage to the grid; floods impacting coal supply to power plants for weeks.	Independently validate worst-case threats and responses to grid failure; do weather modelling for coal fields/stockpiled coal at power stations.	Short term: High, from sustained short-term focus
Transmission network failures and inadequacy of or delays in new transmission capacity to support renewable power plants.	Revise IPP and renewable power bids to include transmission in rates; implement mutualised regional transmission PPPs.	Medium term: High
Ineffective/inadequate migration to new sources that increase total capacity (while managing system inertia and stability requirements), e.g. mini nuclear, renewables, gas fired peaking stations (inland sites); incorrect decisions on capital allocation to transmission versus localised power generation; not opening networks to optimise private/corporate power generation.	Open access to international power utilities on 20+ year build-operate-transfer models for mini nuclear and gas power stations based inland or close to old coal power stations (switch for decommissioning) and industrial regions using existing transmission capacity.	Medium term: High

8.8 Logistics

A fully functional national transport and logistics system (air, sea, road, and rail) is crucial to the South African economy to facilitate the efficient movement of people, goods, resources, and services both domestically and internationally, supporting trade and industry – 'lubricating the wheels of the economy', so to speak.

When effective, the sector significantly contributes to employment and economic growth by creating jobs and enabling businesses to operate smoothly. Robust transport and logistics infrastructure also attracts foreign investment and enhances South Africa's competitiveness in the global market. When the sector is under pressure, as it currently is, the overall economy, and individual citizens suffer in the short-term, while medium- and long-term consequences may take years to correct.

The risk of SA's logistics capacity continuing to fail is mainly caused by the following:

- SA has lost its status as the main gateway into Africa and may continue losing business to many African countries such as Mozambique and Namibia (and beyond). Consequential impacts include movement of local head offices of multinationals to other countries, with a reduction in local skills and economically active citizens.
- Failure of, and continued efficiency challenges relating to local ports (mainly Durban) negatively impacting incoming and outgoing supply chains, with resultant revenue losses (including tax revenue to the national fiscus).
- High unemployment in SA (with the majority of unemployed younger than 35) causing high poverty and crime levels leading to public unrests, blockading of major routes and damage to transport and logistics infrastructure.
- Inadequate capacity to safeguard goods and services in transit (increasing cash in transit robberies, looting of trucks and trains, theft of rail infrastructure crippling the rail network, theft at sea by pirates, and movement of unauthorised goods and undocumented people through borders).
- Extreme weather disrupting smooth movement of goods or travel, e.g. roads washed away or infrastructure damaged by heavy rainstorms.

CAY-LOW MBEDZI
Brand Manager
EasyEquities

THAPELO MATSAPOLA
CRM Prac
Risk and Internal Control Manager

NICKY DOWNING
Chief Executive Officer and Founder
RubiQ

- Failing SOEs (e.g. Transnet, SAA, SANRAL) resulted in inadequate investment in and maintenance of transport infrastructure, compelling the State to divert funding from other needs, with low levels of return on such investments.
- Energy supply shortages leading to interruption in transport, logistics, and alternative private supply chain activities.
- Climate change induced extreme weather events and lack of investment in climate resilient infrastructure leading to a continuous decline in logistics infrastructure that remain available to facilitate economic activity.

Consequences of this risk include the following:

- Loss of revenue, rerouting of cargo ships to other ports, higher insurance premiums, and increased cost of doing business in SA and Africa (for international entities still accessing Africa through SA).
- Reduced local and foreign investment in development projects that will support a growing economy in SA.
- Increased diversion of resources to deal with the consequences of a failing transport and logistics system, e.g. emergency resources to respond to road accidents, loss of life, and damages to infrastructure and goods, reduced economic activity and resultant lower economic growth.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	4	Mining	6
Communication	10	Professional Services	12
Construction & Real Estate	8	Public Service / Government	13
Education	14	Sport & Recreation	15
Energy	9	Tourism & Hospitality	3
Healthcare	7	Retail, Trade & Commerce	2
Financial Services	11	Transport & Logistics	1
Manufacturing	5	Non-Profit / Civil Society / NGOs	16

Scenario:
What it can look like if it happens now

A major port shuts down indefinitely, with profound ripple effects on logistics, transport, and supply chains. Eventually, results include disruption in the flow of goods, raw materials, and finished products, leading to delays, shortages, increased costs, increased congestion on alternative routes, logistics bottlenecks, revenue losses, job disruptions, decreased competitiveness, local and national economic decline, international trade failures, loss of market share, contractual breaches, business closures, environmental damages, strain on local communities, and ultimately social unrest.

Immediate resilience/emergency preparedness: Medium impact in the short term

Diversification Diversify supply chains to reduce reliance on single points of entry.	**Communication** Creating and maintaining transparent communication channels with all stakeholders.
Optimisation Streamline business processes to expedite clearances and minimise delays.	**Digitalisation** Adopt digital technologies (e.g. predictive analytics) to optimise supply chain management.
Continuity Testing Conduct regular scenarios, and risk assessments, to improve business interruption responses.	

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Failure to maintain and develop rail network for goods and minerals (e.g. containers, bulk minerals, coal), restricting exports and economic growth, causing excessive use of trucks with related congestion and damage to road networks.	Independently owned and managed organisation for ownership of targeted rail networks, direct contracts with key customers / capacity reseller models with competitive logistics operators.	Short term: Low
Failure to maintain and develop SA Ports causing excessive delays and inefficiencies and reduced trade volumes.	Global best practice PPPs, international benchmarking and operating model engagement, best skills deployment directly remunerated on performance.	Medium term: High
Failure to maintain and develop rail commuter services, escalating commuter costs and traffic congestion.	Devolution of commuter rail to provinces / regions; local and international PPPs for mass transit (e.g. 'hanging carriages' along metro highways).	Short term: Medium
Failure to maintain and develop roads at national, regional and local levels.	Correct economic impact and usage charge (tolling) models for road use, community partnerships for local road maintenance using reallocated rates base	Medium term: High
Extreme weather perils: Rain / floods wash away roads and railways, damage container parks; storm winds damage port facilities.	Parametric cover in excess of '100 year'-experience, ongoing extreme weather modelling.	Short term: Low to Medium
Failure to maintain and develop security capacity and technology on rail networks to prevent theft of infrastructure.	Re-establish rail security services with world class technology, independently managed.	Medium term: High
Failure to maintain and develop tracking and security systems for container traffic, facilitating fraud and illicit goods transport.	Implement best in class tracking and monitoring technology, lifestyle audits of key officials in transport and logistics value chains.	Short term: Medium

Sources:

- Border Movement Authority Festive Season Report and Easter Report 2023/24
- https://www.gov.za/news/speeches/minister-bheki-cele-second-quarter-crime-statistics-20232024-17-nov-2023
- https://www.bma.gov.za/wp-content/uploads/2024/02/The-final-Media-statement-festive-report-28-Jan-2024-1.pdf
- (https://www.sanews.gov.za/south-africa/over-million-travellers-processed-over-easter-period).
- https://www.dailymaverick.co.za/article/2024-04-16-death-toll-climbs-to-five-after-margate-pounded-by-devastating-storm-force-winds-floods/

8.9 Food Security

Vast challenges threaten access to sufficient, safe, and nutritious food for all citizens, amidst uncertainties caused by the following drivers:

- Social degradation and declining ethical values (affecting vulnerable communities in geographical hotspots) lead to conflicts in the absence of access to basic services. Along with violent crime, extortion, civil unrest, and political instability, this disrupts food supply chains, trade routes, and markets (exacerbated by relocation of communities, destruction of infrastructure, and disruption of agricultural activities).
- Increased demand for food due to population growth and overcrowded informal settlements (vulnerable citizens and undocumented migrants), commensurate with competing land use through urbanisation.
- Increased demand adds pressure on agricultural systems and natural resources, leading to overexploitation of land, water, and biodiversity, as well as pressure on distribution and food supply networks, and increased reliance on food imports.
- Inflation and currency devaluation cause food price fluctuations, while higher interest rates reduce profitability and discourage investment in agriculture.
- The cost of irrigation systems, and backup power to run pack houses and cold storage facilities under inconsistent electricity supply conditions, reduce the amount, quality, and shelf life of food produced, and is passed on to consumers.
- Trade barriers (export restrictions, lack of multilateral trade regimes, trade disputes, and market fluctuations) oppress agricultural opportunities to market. This leads to redirection of export and import of goods through ports of neighbouring countries, and affect food availability, and prices.
- Climate change
  - Inconsistent seasonal atmospheric changes, rising temperatures, erratic weather patterns, and extreme weather events reduce production and quality, cause loss of arable land, crop failures, affect livestock health, impact fishing activities through aquatic ecosystem changes, cause price fluctuations, and ultimately disrupt food distribution networks.
  - Rising sea levels in coastal areas necessitate agricultural switches (from farming) and lead to poaching and overfishing.
  - A lack of proven technology to forecast climate outcomes to enable proactive adjustment.
  - Displacement of populations due to environmental changes, leading to increased competition for resources and food insecurity and illegal and illicit trading in poaching and overfishing.
  - Conflicting life priorities as humans turn to wildlife as a food source for economic survival

NOMONDE NDHLOVU
Risk Manager
Old Mutual Insure

ALICIA DE WET
Risk Manager
VKB

KOBUS HURTER
Managing Director
AgricultSURE

ANTONELLA DA CUNHA
CRM Prof
Head of Commercial Risk
Agrovision

- Inefficiencies in water licensing (regulating usage, allocation, and distribution) together with non-compliance by many water users cause pollution, depleted ground water levels, and affect food producers' access to water to irrigate crops.
- Water availability is further marginalised by urbanisation, degraded ecosystems, soil erosion, deforestation, destruction of wetlands, industrial/mining pollution, and poorly planned mine-rehabilitation. Due to this (and climate change), rain-fed agriculture is no longer tenable in former core production areas (like the maize triangle), and requires costly irrigation systems, especially among smallholder farmers.
- Poor pest and disease management (attempting to mitigate climate induced outbreaks) increasingly require the use of harsher products that damage crops, livestock, and fisheries, lead to environmental contamination and health risks, and will eventually cause extensive food production losses.
- Poor compliance to industrial sector codes of conduct and the lack of improved agricultural practices that will foster sustainable farming practices.
- Inefficient governance and weak leadership hinder agricultural investment, threatening SA’s status as global food producer. Lack of political structures and processes inhibit the creation of coherent policies to advance food security. Poor land reform policy implementation focusing on land acquisition, but not on maintaining productivity on the land, failing rural infrastructure, and the fact that land ownership for agricultural use is not widely promoted or supported. Insufficient government subsidies and support to fund farmers and food aid programs, especially in disadvantaged communities.
- Limited agricultural education programmes that limit adoption of improved farming techniques and technologies.
- Geopolitical conflicts affecting food security globally.

Left unattended, food security risks will result in the following:
- Further disruption of food systems, limited availability, food inflation, and escalated/fluctuating food prices.
- Exacerbated poverty in areas dependent on agricultural activity.
- Unmanageable food inflation leading to households to prioritise food purchases over healthcare and education spend.
- Malnutrition, stunted growth in children, exposure to infectious and diet related diseases, and increased healthcare costs.
- Deteriorating social cohesion and stability, exacerbated social tensions, and conflicts over scarce resources.
- In context of regional and global security implications, SA could be shut out of the of main line of food basket countries.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	1	Mining	11
Communication	4	Professional Services	16
Construction & Real Estate	13	Public Service / Government	2
Education	3	Sport & Recreation	12
Energy	10	Tourism & Hospitality	7
Healthcare	5	Retail, Trade & Commerce	4
Financial Services	15	Transport & Logistics	6
Manufacturing	8	Non-Profit / Civil Society / NGOs	9

Scenario:
What it can look like if it happens now

Food supply chains to a large metropolitan area break down due to severe weather events. Cold storage facilities are interrupted due to power interruptions. Toxic food is unwittingly distributed/consumed in large amounts. Shelves are empty and hospitals and clinics struggle to cope. Crime and unrest break out.

Immediate resilience/emergency preparedness: Medium impact in the short term

Redundancy Build a food supply redundancy network with alternative suppliers, locations, service providers to activate in multi-pronged approach pending areas of food insecurity.	**Subsistence Farming** Enable and encourage urban and rural households to participate in subsistence farming on available land (from urban gardens to small plots, to farms), e.g. fruits, vegetables, and poultry.
Enabling Policies Enhancing a conducive policy environment to promote increased agricultural production and job opportunities from farm to fork.	**Opportunity Exploitation** Identify and exploit opportunities for expansion, job creation, and bolstering domestic and regional food production.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Climate change, water shortages, flooding, insufficient arable land, farm floods.	Climate impact modelling, soil preservation plans, micro irrigation, closed water storage, appropriate mutual risk financing models.	Medium term: Good
Natural disasters (severe floods, droughts, heatwaves, sandstorms).	Multi-sectoral investment pools and planning for low cost, high impact disaster relief, ready-to-go relief packages incl. soil repair, parametric and standard risk transfer mutuals (including recovery of farmers and communities).	Short term: High
Economic, trade and market volatility, financial instability, poor viability for agri loan finance.	Multi co-op mutual risk equalisation instruments, medium term market price hedging.	Medium term: High
Political instability, crime in farming areas, farm abandonment.	Localise security/policing to communities, funding from allocations off rates bases; fractional farm ownership for empowerment.	Short-term: High Medium-term: High
Energy crisis causes increased cost of irrigation and storage.	Medium term plans to move off grid for lower costs and better reliability: subsidised solar for farmers, battery storage for cold rooms.	Medium term: High
Environmental degradation.	Soil and water testing for early warnings on changes to composition.	Short-term: High
Indiscriminate pesticide use.	Soil and water testing with tracing of pollution/ chemical sources.	Short-term: High
Population growth.	Dietary education plans, concentrated protein/vitamin supplements, home production of resilient vegetables, subsistence farming.	Short-term: High Medium-term: High

Sources:

- Overcoming Bureaucratic Resistance: An Analysis of Barriers to Climate Change Adaptation in South Africa. 2023. Nomfundo Patricia Sibiya, Dillip Kumar Das, Coleen Vogel, Sonwabo Perez Mazinyo, Leocadia Zhou, Mukalazi Ahmed Kalumba, Mikateko Sithole, Richard Kwame Adom, Mulala Danny Simatele.

8.10 Climate

Extreme weather events due to failed global, regional, and national climate change mitigation, augmented by insufficient adaptation to strengthen resilience, increasingly affect SA.

The risk is driven by the following challenges impeding domestic resilience:

- Excessive global and regional greenhouse gas emissions from anthropogenic activities.
- Rising global sea temperature supporting El Niño impacts, causing elongated dry spells, droughts, above average/rising temperatures and heatwaves.
- Inherently arid climatic conditions limiting agricultural production.
- Adverse industrial environmental practices.
- Insufficient political and investment urgency amidst priorities perceived to be more urgent (e.g. land restitution conflicts).
- Political instability and policy uncertainty thwarting a just energy transition and SA's Nationally Determined Contributions.
- Adaption delays, due to lack of political will, siloed actions, and greenwashing causing insufficient policy frameworks to –
    - expand private power producers, to reduce GHG emissions and thresholds (e.g. Climate Change Act, Carbon Tax Act), and promote the domestic voluntary carbon market;
    - further promote increased adoption of responsible investment and climate-related disclosures, such as the JSE Responsible Investment Index, CRISA, and other relevant ESG reporting frameworks (beyond regulated and listed entities); and
    - active public and private research initiatives into primary production resilience (climate-smart agriculture and forestry).

THATO SERITILI
Sustainability Associate
JSE

LEVIN MBATSANI
CRM Prac
Business Manager: Risk Management
Land and Agricultural

LEO LONG
Senior Manager
Verra

SAKHUMZI DIZA
Chief Risk Officer
Land and Agricultural Development Bank

The consequences of the risk include the following:

- Intensified extreme weather events (severe storms, floods, droughts, and wildfires), causing severe environmental damage, biodiversity loss, infrastructure damage, and loss of life.
- Primary production industries becoming severely pressured (i.e., agriculture, fisheries, forestry, etc.).
- Food insecurity due to below-average agricultural yields, harvest, and production.
- Limited economic growth due to reduced investment potential and failing infrastructure.
- Excessive food price inflation and knock-on effect on inflation and resultant high interest rates.
- Civil unrest precipitated by low economic growth, food insecurity, rampant inflation, and increasing unemployment.
- Failure to meet UN target to reduce emissions by nearly half in 2030 and net zero by 2050.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	1	Mining	7
Communication	6	Professional Services	11
Construction & Real Estate	10	Public Service / Government	2
Education	15	Sport & Recreation	14
Energy	3	Tourism & Hospitality	5
Healthcare	6	Retail, Trade & Commerce	4
Financial Services	12	Transport & Logistics	8
Manufacturing	13	Non-Profit / Civil Society / NGOs	9

Scenario:
What it can look like if it happens now

Several and severe fires break out in a densely populated metropolitan area prone to urban decay and unmanaged building occupations, and a prolonged heatwave prevents dealing with it effectively. Emergency resources are unable to recover between events, leading to loss of life, human suffering due to injury levels exceeding hospitals' ability to cope with the influx, displacement without alternative accommodation, immense asset damages, and depletion of the insurance industry's capacity to respond.

Immediate resilience/emergency preparedness: Medium impact in the short term

Threat Identification Conduct comprehensive risk assessments and business impact analyses to identify potential threats posed by extreme weather events and climate change (include mapping out locations and operations that are particularly vulnerable to events like flooding, droughts, heat waves, or severe storms).	**Physical Resilience** Evaluate and improve the resilience of facilities, equipment, and infrastructure to withstand extreme weather conditions, e.g. reinforce buildings, install backup power systems, and upgrade drainage and flood protection systems.	**Supply Chain Vulnerabilities** Assess the vulnerability of supply chains to weather-related disruptions and develop contingency plans, e.g. diversify suppliers, secure alternative transportation routes, and maintain buffer stocks of critical materials or components.
Data Resilience Protect critical business data from weather-related damage or power outages, with robust and accessible data redundancy and recovery systems, such cloud-based or off-site data centres.	**Alternative Work Spaces** Develop temporary relocation of operations or remote work arrangements to deploy in the event of disrupted access to primary business locations due to extreme weather events.	**Emergency Response and Evacuation** Establish comprehensive emergency response and evacuation plans for employees and customers (with regular drills and training sessions to ensure effective execution during emergencies).
Risk Financing Review insurance policies in context of dynamic BCPs and to cover weather-related risks, such as property damage, business interruption, and liabilities.	**Employee Support** Develop arrangements to support employees affected by extreme weather events, e.g. temporary housing, transport assistance, counselling services, access to necessary items such as meals, water, blankets, and clothing.	**Stakeholder Coordination** Collaborate with local authorities, emergency services, and community organisations to coordinate response efforts and agree to share resources during extreme weather events.
Climate Change Mitigation Implement sustainable and climate friendly practices, e.g. reduce greenhouse gas emissions, promote energy efficiency, and support renewable energy sources.	**Continuity Testing** Regularly review and test extreme weather scenarios and BCPs to identify gaps and refine responses.	**External Trend Monitoring** Collaboration with industry experts, meteorological agencies, and relevant Government authorities to stay informed on the potential impacts of climate change on operations.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Weather extremes due to global/regional warming (new areas for tropical weather, new deserts), crop failures and forced crop changes.	Global and regional weather modelling to forecast impact of weather on land use, early planning to support and stabilise land use.	Gradual benefits in medium term
Extreme winds, sandstorms, accelerated bush and forest fires, property and infrastructure damage.	Property and utility resilience reviews for extreme wind and fire, improved air-based firefighting, ground-based transmission lines in open or forested areas.	Potentially good in short term
Extreme rainfall (atmospheric rivers), regional flooding, soil displacement, property and utility damage.	Model rain/water accumulations, update and expand flood scenarios past worst historical cases, confirm that storm water drains are functioning.	Medium term: Moderate
Extreme hailstorms, destruction of assets, infrastructure, and crops.	Implement hail resilience/ice accumulation tests for commercial buildings and PV farms as part of insurance cover conditions.	Highly effective if linked to insurance
Extreme cold/snowstorms, blocked roadways, damaged infrastructure, utility/service failures.	Model extreme cold and snowstorm regional exposures, related prevention of access to have emergency plans for communities.	Short term: Reasonable
Increased severity and frequency of storms, withdrawal of insurance cover.	Increase use of parametric covers and mutual risk pools across countries and regions, also for localised farm groups.	Medium term: Effective
Ice melts and rising oceans, flooding, threats to shore-based communities, economic crises.	Model ocean surge exposures, research options to raise and protect beaches and tourism areas.	Long term planning

Sources:
- Climate Action. United Nations https://www.un.org/en/climatechange/paris-agreement [Accessed 20 April 2024]
- Steffen, W., Richardson, K., Rockström, J., Cornell, S.E., Fetzer, I., Bennett, E.M., Biggs, R., Carpenter, S.R., de Vries, W., de Wit, C.A., Folke, C., Gerten, D., Heinke, J., Mace, G.M., Persson, L.M., Ramanathan, V., Reyers, B., and Sörlin, S. (2015) Planetary boundaries: Guiding human development on a changing planet. Science, 347(6223), pp736-747.
- UNEP FI (United Nations Environment Programme). (2024) 2024 Climate Risk Landscape Report. Geneva, Switzerland: UNEP FI.
- WEF (World Economic Forum). (2024) The Global Risks Report 2024, 19th Ed. Geneva, Switzerland: WEF [Online] Available at: https://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2024.pdf [Accessed 24 April 2024]

8.11 Technology

Rapid AI, robotics, and disruptive technology advancement could improve living standards, food security, medicine, service delivery, and clean energy.

But the resultant economic and social changes, revolutionised industries, automated jobs, and altered ways to live and work pose risks. Pursuit of these opportunities also results in increased reliance on technology infrastructures with associated vulnerabilities requiring robust ICT continuity plans. Causes of the risk include the following:

- Unforeseen vulnerabilities due to rapid adoption without adequate risk assessments or preparation for potential effects.
- Increased impact of disruptions from heavy reliance on digital infrastructure for essential services and economic activities.
- Weakened cybersecurity due to outdated systems, lack of investment, and insufficient training for employees.
- More sophisticated cybercriminals, state-sponsored actors, and hacktivists, requiring constant vigilance and adaptation.
- Lack of transparency on the inner workings of AI systems complicates the anticipation and mitigation of future risks.
- Inadequate/outdated regulations leaving gaps for exploitation and insufficient protection of infrastructure and data. The recent EU AI Act's attempt at a regulatory framework could inform local trends. Some of its objectives are as follows:
  - Setting standards to ensure AI systems are safe and respect human rights (privacy, non-discrimination, dignity).
  - Fostering development of transparent, accountable AI that aligns with ethical principles, increasing public trust.
  - Establishing harmonised rules and requirements for AI systems to facilitate a single market for AI products and services.
  - Establishing risk-based AI regulation with stricter rules for high-risk areas (healthcare, transportation, law enforcement).
  - Encouraging innovation and deployment while addressing risks and challenges to support economic growth.

TANYA KRUGER
Compliance Officer
Purple Group

PEDRO MAIA
Managing Director
Endev Technologies
Development Bank

KERUSHAN GOVENDER
Chief Executive Officer
Blacfox

JONATHAN CRISP
Director
BarnOwl

If unaddressed, the risk could lead to the following:

- Inadequate preparation for disruptive technologies may lead to SA falling behind in global competitiveness, as other nations capitalise on technological advancements for economic growth and innovation.
- Cyber-attacks targeting essential services such as healthcare, utilities, and transportation could lead to disruptions with far-reaching consequences, including loss of life, economic instability, and social unrest.
- Failure to address cybersecurity vulnerabilities can result in significant data breaches, financial losses, damage to reputation, and erosion of public trust in institutions and businesses.
- Costs associated with mitigating cyber threats, recovering from cyber-attacks, and addressing disruptions to IT continuity can impose a significant financial burden on businesses, Government agencies, and the entire economy, potentially hampering growth and development efforts.
- Failure to establish robust regulatory frameworks and cybersecurity measures could compromise SA's digital sovereignty, leaving it vulnerable to external influence or control over critical infrastructure and data.
- The use of AI and big data can lead to potential infringements on privacy and civil liberties
- Increasingly capable AI systems may replace human jobs, causing instability, social unrest, and unemployment. Unlike previous technological shifts, where intellectual labour replaced physical labour, AI's impact on employment is uncertain, (e.g. advanced blockchain technology may remove the need for intermediaries like banks in financial transactions).
- Without proper access and education, AI technologies may remain accessible only to the privileged, or its benefits may be distributed unequally, exacerbating the digital divide and socio-economic disparities.
- AI's decision-making in financial markets could introduce volatility, unpredictability, and unintended consequences.
- If a balance between innovation and responsible use is not found, development of AI-powered autonomous weapons raises ethical and safety concerns.
- Deepfakes (convincing synthetic images, audio, and videos to mislead or deceive), misinformation (false information spread unintentionally) and disinformation (intentionally deceptive information). Biased AI data models, causing algorithmic responses and decisions leading to the spread of fake news, or fraud perpetration.
- Theoretically, self-aware AI could act in ways harmful to humanity, requiring robust safeguards against such scenarios.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	11	Mining	10
Communication	6	Professional Services	1
Construction & Real Estate	15	Public Service / Government	7
Education	8	Sport & Recreation	16
Energy	12	Tourism & Hospitality	13
Healthcare	2	Retail, Trade & Commerce	4
Financial Services	9	Transport & Logistics	5
Manufacturing	3	Non-Profit / Civil Society / NGOs	14

Scenario:
What it can look like if it happens now

An undersea cable to SA is interrupted for months and workarounds are ineffective. All digitally enabled services are more than 80% compromised. Many businesses are unable to operate, and critical services such as banking and telecommunications are severely affected.

Immediate resilience/emergency preparedness: Medium impact in the short term

IT DRPs Review/update IT DRPs on vulnerability and threat detection and response actions.	**Employee Training** Train employees comprehensively on generative AI risks (e.g. deepfakes, synthetic media, phishing, social engineering), and identifying and reporting suspicious activities.	**External Trend Monitoring** Collaborate with industry peers, cybersecurity organisations, and Government agencies on emerging threats and mitigation practices.
Cyber Security Vulnerability Monitor cybersecurity and AI risk posture of 3rd-party vendors, suppliers, and partners, and enforce adequate safeguards.	**Impact Analyses** Conduct regular impact analyses on the consequences of attacks on operations, financial performance, and reputation.	**Ethical Use of AI** Implement ethical AI governance framework to include principles of transparency, accountability, fairness, data privacy, algorithmic bias, and social impact.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Unrestrained technology development, discriminative selection and engagement models (recruitment, marketing, memberships).	Regulations for search and engagement criteria, audits on outcomes, consequences for abuse of technology platforms and market dominance.	Moderate, unless constantly monitored
Unauthorised harvesting of data: behavioural, location, purchasing, socialising; State security and intelligence / police abuse of monitoring.	Regulations for all public behaviour monitoring (location, visual and sound), monitoring and testing of public data gathering.	
Intended and unintended logic loops, no moral choice in AI logic parameters (self-driving car misses large object & hits people).	Technical validation of automated systems, global pools of tests and situational responses.	
Elimination of transactional services and related work opportunities; automate basic production tasks; switch to self-service eliminates many sales functions incl. big ticket items (cars, houses, equipment).	Substantially increase IT / coding / maths training, create transaction support portals where humans support self-service transactions and response needs; commit to update skills for increasingly IT use.	
Cyber extortion, ransomware, denial of service, data theft, international hack attacks, utility operational shutdowns.	Ongoing / enhanced technical resilience & testing; protection of data and best available system access controls.	
Malicious and technical failure at major IT platforms; deliberate corruption of data.	Security and lifestyle audits on IT service providers; ongoing validation of back up data and systems.	

Sources:

- Kerushan Govender. Age of Agency: Rise with AI. Productivity Press 2023

8.12 Skills

The NDP envisions a transformative educational system to achieve economic growth and social equality, by providing all learners and students with quality education to equip them to thrive in a rapidly changing world of work.

Risk to educational outcomes that will drive the economy is caused by the following:
- Disruptions in educational program and quality mix caused by weak governance structures and political interference leading to instability in policies and funding inconsistencies, result in misalignment between market needs, educational programs, and skills outputs. Inadequate organisational development and change management fosters resistance and inefficient implementation of changes to deliver quality education frameworks and curriculums. Failure to adapt curriculums to technological advancements and industry needs produces graduates lacking essential skills which reduces their employability. Insufficient consideration of inclusivity principles (not limited to language barriers) in curriculum design perpetuates inequalities and marginalises under-represented groups.
- Demographic shifts affecting educational systems through changing generational dynamics and population growth, which necessitate adaptations in teaching and learning methodologies to accommodate diverse learner needs, placing significant strain on pedagogical and andragogical resources. Resulting pressure can adversely affect the effectiveness of educational design and resource allocation, potentially compromising the quality of instruction and learning outcomes.
- Political and economic uncertainties threaten educational systems, as they may lead to political influence exacerbated by economic downturns, resulting in budget constraints. These constraints hamper investment in essential resources, including skills development and educational infrastructure, heightening the risk of reduced funding for educational agendas, leading to cuts in core educational budgets and reduced investment in physical and technological educational infrastructure. The result is compromised quality of education and skills development, reduced long-term prospects of the workforce, and economic decline.
- Ineffective feeder structures to higher education causes ambiguity in educational pathways. Unclear channels from primary and high schools to colleges, universities, and informal learning environments such as churches, families, social spaces, and workplaces hinder the efficacy of educational development. This is aggravated by limited subject choices (especially in rural schools, where subjects are bundled into streams).

GRATITUDE MOSEHLA
Financial Analyst
Microsoft

MARISA GRUNDLING
Head of Risk and Insurance
Milpark Education

MMABOTSE MOOKE
CRM Prac
Risk Practitioner
TUT

CAMEEL CHETTY
CRM Prof
Head of Risk and Compliance
CCMA

- The absence of a clear educational organogram obstructs the smooth transition to the next level of education, exacerbated by assessment mechanisms that are overly generic for current learners.
- Insufficient structure, guidance, and/or financial support for young people who wish to start businesses directly after matric without following a conventional tertiary education route.
- Inequality and readiness of learners may be insufficient, due to inappropriate preparatory methods of learners into each stream as many learners come from disadvantaged backgrounds without exposure to certain educational materials and infrastructure. Individuals pushed through tertiary and managerial qualification programs without any experience of the activities to manage, coupled with deficiencies in basic language and computer skills, severely hamper academic and workforce success.

If unaddressed, the risk consequences include the following:

- Pursuit of graduate number targets without real educational impact, resulting in financial resource wastage, growing youth unemployment, economic decline, and perpetuating poverty.
- Flooding of the market with a workforce lacking in skills, knowledge, workplace etiquette, and confidence, all of which compromise productive value creation and diminish SA's global competitiveness.
- Graduates who are unable to withstand corporate pressure, due to not being well-prepared when they step into careers that differ from their expectations (in the absence of practical exposure while studying); resigning to "pursue their passion".
- Inability to create sustainable jobs and resultant emigration of critical skills and knowledge.

Risk Impact on Economic Sectors

Agriculture, Forestry & Fisheries	5	Mining	8
Communication	7	Professional Services	11
Construction & Real Estate	12	Public Service / Government	10
Education	4	Sport & Recreation	14
Energy	1	Tourism & Hospitality	15
Healthcare	6	Retail, Trade & Commerce	3
Financial Services	9	Transport & Logistics	13
Manufacturing	2	Non-Profit / Civil Society / NGOs	16

Scenario:
What it can look like if it happens now

More than one institution is deregistered and/or classes are dysfunctional after independent reports into allegations of non-compliance to regulations, maladministration, and tender irregularities. Qualifications from these entities are declared under investigation, leading to inadmissibility of new matriculants to other universities and unemployability of new entrants into the job-market until investigations are concluded. Learners demand State intervention to protect their fundamental right to education.

Immediate resilience/emergency preparedness: Medium impact in the short term

Quality Assurance Quality assure educational institutions for program completeness and rectify.	**Role Segregation** Limit political interference in institutions.
Compliance Management Improve supervision to avoid non-compliance, deregistration, and compromise to the basic right of education (availability and quality).	**Early Warning Alerts** Strengthen resilience and communication to share early warning alerts.

Longer-term response to address risk sustainably

Risk drivers	Response strategies	Impact
Poor work culture and behaviour	Support work readiness programmes for young people (e.g. gap year for civil services could develop responsible future citizens, who are ready to study).	Short term: medium Medium term: high
Teachers are often underqualified for the subjects they teach	Qualification and experience adequacy assessments, gap analyses, 5-10 skills improvement programs, benchmarking of learner progress against teacher skill levels.	Short term: high Medium term: high
Misalignment between skills needed and skills developed at learning institutions	Robust collaboration (between parents, high schools, tertiary institutions, and future employers), current vs future skills maps, targeted profiles for school exits (subjects and grades), targets for tertiary graduation profiles, bursary priorities in targeted skills, SETA and industry incentives for targeted skills, upskilling of matriculants and graduates aligned to targeted recruitment, flow of information from labour market into education system.	Short term: medium Medium term: high
Curtailment of teacher training colleges, lack of continuing professional development	‘Teachers of the Future’ programs, retooled teacher and learner models to achieve targeted skills at schools and tertiary institutions, twinning of retooled schools with regional education networks.	Short term: medium Medium term: high
Poor teacher performance measurement, influence of unions limiting performance management	Zero tolerance for avoiding critical tests (e.g. reading for meaning for all learners), investigation of excessive learner ‘hold backs’ to inflate pass rates, new independent Directorate of Education Quality and Complaints Boards, include diversity principles into curriculum planning processes, improve governance and change management in the system.	Short term: medium Medium term: high
Inefficient resource allocation usage (highest national budget share), e.g. use of digital learning and support	Benchmark cost per learner in emerging regions, apply efficiency learnings, combine teacher delivery model with technology at villages, roving teachers’ assistants (unemployed matriculants and graduates) at villages.	Short term: medium Medium term: high
Demographic changes, high birth rates, population migration	Predictive models for school and tertiary education needs per skill sector, national budget allocation based on population and efficiency ratings, relocation incentives for unemployed teachers.	Short term: medium Medium term: high

ECONOMIC LENS

9. Economic Lens

This section contains a reflection from key sector role players or experts on how South Africa's risk profile affects various economic sectors.

Analyses of how South Africa's current socio-economic situation and risk profile affect the economic sectors that directly influence people's lives, confirm that the hardest hit sectors during an economic downturn will be those where -

- new legislation is enacted;
- there are infrastructure shortages;
- industries are carbon intensive;
- industries are energy intensive; and
- industries are water intensive.

It is strongly recommended that the sector specific information included in the Report be used to encourage inclusive sector and national policy debates that will result in alleviation of immediate pressures to unlock the economy as the basis for improving the overall quality of life for South African citizens. Leveraging economic value creation from the least vulnerable and most resilient sectors could provide breathing room (time, people, and funds) to stabilise the most vulnerable and least resilient sectors.

9.1 Agriculture, Forestry, and Fisheries

THANDEKA NYONI
Risk & Compliance Practitioner

PC BOTHA
Manager Internal Audit VKB

FRANCOIS FRONEMAN
Managing Director VKB Grain & Corporate Services

CHRISTELLE MARAIS
CRM Prof
Executive Director Lucidum

Ranking of Risk Impacts on Sector

Functional State	7	Energy	3
Politics	9	Logistics	4
Economy	5	Food Security	10
Social Security	12	Climate	2
Rule of Law	6	Technology	8
Water	1	Skills	11

1. Functional State

The sector operates mostly in rural areas where local government's service delivery is often poor and impacts business continuity and the cost of doing business. Communities heavily rely on sector players (particularly forestry companies) to provide basic services (such as water and road networks), with increased cost and budget pressures. Basic services must be self-served in some cases despite municipal tariffs for such services, to satisfy minimum industry and quality standards, as well as minimum client requirements (often for the export market). Local electricity network volatility often leads to downtime and equipment damage, with additional cost. This additional cost reduces profitability as commodity prices are set internationally in some cases or must be competed against with cheap imports. Investment in infrastructure is difficult and expensive due to long bureaucratic approval processes hampered by dysfunctional or inept authorities.

2. Politics

The effects of the State's alignment with anti-western allies create an uncertain outlook for the sector. If the AGOA agreement is cancelled (which will effectively close the US market for agriculture exports) producers will be immediately and directly impacted. Dependence on imported inputs like fertilisers, seeds, and equipment that could become less accessible or more expensive should western countries implement measures against SA. Not implementing anti-dumping legislation impacts producers as well as manufacturing in the long-term, which could include total loss of production and ultimately, negatively impacting food security. The situation is further exacerbated by political influence on labour relations, putting additional pressure on producers and manufacturers, leading to business interruption and increased cost.

3. Economy

Pressures on FDI continue to increase. African countries have substantially eased the burden of entry, cut red tape, and incentivised investment through policy and legislative reform. SA's greylisting, national land ownership policy uncertainty, increased B-BBEE requirements, high taxes, failing infrastructure and lack of services cause investors to look elsewhere in Africa. Long-term effects include less representation of existing multinationals in the inputs side, with new infrastructure programs being rolled out outside SA. Importing these services and products will become necessary, creating opportunities for local investors to supply these products/services, should the political will be there. Local economic growth worsened significantly relative to budget expectations due to intensified loadshedding in 2023, freight and port logistical constraints, and geopolitical tensions, resulting in low demand, high cost, and low revenue. The local forestry sector, especially the sawmilling, mining timber, and pole treating industries took strain, resulting in lower volumes being taken by customers.

4. Social Security

As the cost of doing business is constantly affected by various root causes (polycrises), the agri sector is experiencing the brunt of the burden due to operating in remote geographical locations. Employees stem from the rural areas where social security, quality of life, unemployment, and inequality are the most affected. The sector is compelled to help solve these situations to maintain a willing local workforce of skilled, semi-skilled, unskilled employees. As a key employer in most of the remote areas where sector entities operate, these entities incur excessive costs to provide training and job opportunities to people who would often not be employable in other industries.

5. Rule of Law

Unethical behaviour mostly impacts the sector via procurement syndicates. Illegal immigration, syndicate driven illicit activities on provincial and national scale, difficulties securing hundreds of hectares, and 10-to-30-year production cycles make commercial forestry especially vulnerable to crime. With little success to investigate and prosecute cases, the sector invests heavily in private security, investigation capabilities, and preventative measures, the cost of which is exacerbated by investment in alternative energy due to unreliable electricity supply from Eskom. Insurance on crime-related losses has substantially increased, and in some cases, risks have become uninsurable, forcing the sector to absorb losses.

6. Water

Despite a key economic contributor in rural areas, the forestry sector is often blamed for water scarcity in these areas. Although water management of SA's main reservoirs is generally done well, the water quality of various water systems is of concern. Such polluted water cannot be safely used to grow crops. Enforcement of NEMA legislation is poor, with some industries, but mostly failing local government infrastructure being the main contributors to pollution. The sector invests heavily in being self-sufficient in the storage and cleaning of water, due to water dependencies of manufacturing and irrigation.

7. Energy

The sector is largely energy-dependent, with a very quick effect on food availability when energy is unavailable for manufacturing and irrigation. On manufacturing specifically, production losses at the beginning of the COVID-19 pandemic and the time it took to catch up and distribute products to the market, particularly demonstrated this vulnerability. Producers constantly investigate alternative energy sources to minimise this impact, but due to the scale of energy needs and low profit margins, these investments are mostly not financially viable.

8. Logistics

Unreliable roads, railways, and ports hamper sector businesses, with most products being transported at greater cost by road. Although trucks are quicker and more reliable, criminal targeting of trucks on major routes is becoming more prevalent leading to losses. Poor road infrastructure and crime make it difficult for the sector to deliver goods to customers. Cargo insurance is of key importance and the costs of insurance has increased due to an increase in truck high jacking. The impact of unreliable ports includes breach of export contracts, resulting in contract cancellations and reduced chances of new contracts. Alternative ports like Maputo are more expensive, increasing cost to consumers and reducing profitability.

9. Food Security

Grain harvests as the country's staple food, are generally stable on a year-to-year basis because of the mixture of irrigation and dry land cultivation, but adverse climate conditions such as drought and wet conditions impact quality and quantity of harvests. Although grains can relatively easily be imported cost-effectively, they influence and affect farmer profitability and the ability to service debt. With rising input costs across the board further impacting profitability, there is uncertainty in the longer term with regards to maintaining the country's food basket.

10. Climate Change

Extreme weather impacts the quantity and quality of crops as well as infrastructure directly, while indirectly affecting the same through logistics and supply chain impacts. Much is being done to develop cultivars more resilient to a changing climate, and alternative crops. In forestry, groundwater levels drop due to climate change, which reduces the hectarage available for commercial forestry. Fires caused by volatile weather patterns, often lead to the extension of the fire season for forestry companies, causing increased costs and resources required to fight fires. These factors directly influence the serviceability of contracts, often with monetary consequences. Adapting to ESG-supportive business practices and minimum standards set by credit providers to reach climate goals, leads to increased cost of compliance and reporting on achievement of such minimum standards.

11. Technology

There is potentially more upside than downside for the sector, specifically on cultivation and monitoring. The sector should be proactive to stay ahead of the curve in a rapidly changing environment, as the catch-up process would not be desirable. Unfortunately, cyberattacks have been steadily increasing as the sector becomes more digitised and reliant on the internet. Although larger enterprises have adapted and invested in proper cybersecurity systems, the interconnectivity of technology is creating opportunities for criminals to exploit users. The industry must invest to mature the users as a key defence mechanism.

12. Skills

The sector involves every skill available and must attract scarce top talent to less desirable geographical areas. Although higher compensation is a strong motivator, other factors play a role, such as proximity to good schools, safe neighbourhoods, and work opportunities for spouses. Remote working options have brought some relief, but in most cases, this is not an option in this sector. The sector invests heavily to develop local talent and build a talent pipeline in the areas where it operates, building and funding schools, as well as giving bursaries. Training and upskilling existing workforces are critical and broadly done well.

9.2 Communication

MIGHTY MHLANGA
CRM Prac
ERM and BCM Manager
Telkom

PRINCE SHONHIWA
CRM Prac
Business Risk Manager
Vodacom

ADV THOKOZANI MVELASE
Chief Executive Officer
COMRiC

ALKESH PATEL
CRM Prof
Senior Manager: ERM
MTN

Ranking of Risk Impacts on Sector

Functional State	2	Energy	3
Politics	4	Logistics	8
Economy	1	Food Security	12
Social Security	9	Climate	10
Rule of Law	7	Technology	5
Water	11	Skills	6

1. Functional State

Governance and service delivery failures, such as inefficient, unreliable infrastructure, security, energy, and transportation, increase communication services failures, maintenance costs, and key asset security cost, compelling the sector to partner with private security and industry players. The sector depends on a functional State to facilitate deployment of infrastructure and access facilities that enable growth (e.g. wayleave and tower site approvals require predictable processes and timeframes to inform investment decisions). Dysfunctional State processes cause delayed applications, corrupt processes, and unreasonable cost demands. Ineffective security, safety, and law enforcement cause large scale theft and vandalism of infrastructure, whilst State governance failures lead to inefficient spectrum allocation, unfair competition, inadequate regulation, limited access for many, entrenching the digital divide. The net result is that SA is less competitive due to lower technology adoption and internet usage penetration. In response, communications companies globally adopt delayering strategies, where each delayered entity (e.g. fibre or tower providers) develops the specialisation to manage its business, stakeholders, and risks.

2. Politics

Complex and evolving regulations (with a related compliance burden) and slow national policy response to spectrum requirements lead to delayed development of advanced services to meet market demand. Coalition politics may cause policy volatility, adoption of populist policies (e.g., free data), and increased regulatory intrusion, affecting the viability of sector business models. Internationally, hostile geopolitics significantly affect crucial equipment sourcing, and partnerships to advance network infrastructure and technology. Western powers increasingly deploy economic policy, sanctions, and trade barriers, which have impacted semiconductor supply and could restrict SA companies from sourcing from certain vendors or countries (e.g. Huawei or China). West vs East technological rivalry will continue to intensify, which may cause more aggressive restrictions with wider global trade implications, disrupting global supply chains. Geopolitical conflicts could escalate regionally with economic impacts that will disrupt ICT operations and increase costs. Supplier diversification will be key to ensure business resilience and minimise dependence on a few high-risk suppliers.

3. Economy

Volatile economic conditions such as low GDP growth, sovereign debt, increasing inflation, high interest rates, forex fluctuations, Rand devaluation, result in weakening consumer and enterprise spending power. The resultant revenue pressures on sector entities (as consumers choose between essential and non-essential services) diminishes the sector's infrastructure investment ability. Governments in fiscal crises may resort to increased taxation and regulatory enforcement with high fines on mobile operators. With sector entities strengthening their balance sheets, increasing financial resilience, and hedging forex exposures, whilst applying risk-based capital allocation, the high costs of business will be passed on to consumers. The sector responds by aggressively developing high-value-affordable services and implements cost-savings strategies.

4. Social Security

Adverse socio-economic conditions caused by service delivery failures and unemployment lead to increased social unrest, infrastructure damage, and business interruptions. Community unrest impairs access to sites for repairs and maintenance, affecting customer experience, exacerbated by equipment theft and vandalism. The sector heightened its focus on social development to improve social security and reduce inequality. The sector increasingly solicits community support to protect communications infrastructure.

5. Rule of Law

Increasing theft, vandalism, and fraud erode public confidence in the sector and discourage investment. Fraud primarily manifests in identity theft, phishing scams, and subscription fraud (one of the highest contributors to revenue losses), while theft of batteries and diesel particularly affect base stations. Sophisticated syndicates execute cell phone robberies at stores, warehouses, or enroute during last-mile delivery, requiring increased cost and effort to mitigate. Subscription fraud is one of the highest contributors to revenue losses for the sector, requiring costly risk transfer (insurance). Social unrest mainly leads to vandalism at retail channels. The sector increasingly collaborates with the SAPS and other sectoral bodies (i.e. ESCI, SAFPS, SABRIC, COMRiC) to share intelligence, increase risk awareness, and combat criminality. Local 'business forums' present an increasing challenge to roll out and maintain tower infrastructure, either preventing new tower or fibre installations or denying access to tower sites. These all result in service interruption, reduced network reliability, increased replacement/repair costs, high security costs and poor customer satisfaction.

6. Water

Water shortages affect fire suppression and cooling systems, as well as network maintenance to keep data and switch centres equipment working optimally, apart from usual water requirements for employees in workplaces. Water interruptions that could cause equipment damage and service interruptions are mitigated through rainwater harvesting and backup tanks at offices and data/switch centres, or alternative air-cooling systems, while water efficiency plans are incorporated into ESG strategies.

7. Energy

Volatile energy supply cripples the sector through large-scale communication services outages, degraded service quality, increased maintenance cost, and reduced voice and data revenue, with a knock-on effect on other sectors relying on communication and digital services. The sector invests in backup generators, additional batteries, alarm systems, physical deterrents, renewable energy solutions, and innovative private-public energy partnerships, at a heavy cost burden and additional exposure to theft in the absence of high-voltage protection. The aforementioned diverts resources away from business expansion projects to grow the economy.

8. Logistics

Geopolitical tensions and trade-wars affect sourcing of critical infrastructure and input materials (e.g. chipsets), limit the flow of best-of-breed technology into the region, impact competitive pricing, and create international compliance risks. The sector continues to enhance internal compliance programs, adopt multi-vendor strategies, increase local sourcing, diversify suppliers, and monitor supply chain threats, such as vendor quality and concentration.

9. Food Security

While indirectly impacting the sector, disruptions in food security affect employees' well-being, and ultimately social ills like increased healthcare costs, reduced productivity, and slowed economic growth. Indirect impacts include reduced discretionary consumer spend on communication services.

10. Climate Change

Climate change induced extreme weather events damage infrastructure, property, retail stock, and network equipment, and cause service outages. Adaptation efforts and resources are likely to be overstretched by the scale and intensity of climate related events and insurers are likely to be overwhelmed, leading to withdrawal of certain covers for the sector. Sector responses include region-specific climate/weather forecasting for infrastructure locations, climate friendly power to reduce emissions at data and switch centres, increasing energy efficiencies across networks, net-zero target setting, and developing more robust disaster recovery plans.

11. Technology

Faster and more complex AI-driven cybersecurity threats, increasing organised illicit acts, and rapidly developing emerging disruptive technologies (AI, metaverse, blockchain) all represent risks and opportunities for the sector. However, the sector is hampered by a lack of resources and skills to manage and leverage them for operational efficiencies and to enhance customer value propositions on a mass scale. Increased investment in security infrastructure, heavy focus on development of future fit skills, and digitalisation will enable the sector to meet the demand created by penetration of function-rich smartphones, AI powered solutions, IoT, and fintech. A potential disruptor into the next decade is low earth orbit satellites and the promise of ubiquitous connectivity, requiring partnerships with low earth orbit satellite companies to explore potential use cases. Technology innovations will also increase cyber and information privacy risks, while powerful generative-AI solutions will challenge current data governance frameworks, based on a pre-AI world. The sector will be greatly challenged to protect personal data and secure their operations against disruption, unauthorised access and interference.

12. Skills

Technical (science, technology, engineering, and mathematics) and leadership talent shortages, skills migration to more attractive regions, an aging skilled workforce, and large-scale youth unemployment affect the sector's ability to drive complex strategies to respond to 5G, IoT, cloud computing, machine learning, AI, and fintech developments and opportunities. Globalisation of the workforce, enabled by remote working technologies, resulted in SA Telcos competing against offshore companies for SA based technical skills. Sector responses include partnering with educational institutions, enhancing employee value propositions, and outsourcing of certain skills. However, to remain sustainable, Telcos will need to develop internal future fit technical talent. Competition for talent in the sector will continue to intensify while the talent pool shrinks.

9.3 Construction and Real Estate

JACQUES MARAIS
Chief Executive Officer
Meister Haus

LOUISA NANA
Owner / Founder
Kira Investments

JONATHAN BIGHAM
Chief Financial Officer
Balwin Properties

DR GUSTAV PISTORIUS
Fellow
Founder
Gustoprod

Ranking of Risk Impacts on Sector

Functional State	1	Energy	4
Politics	5	Logistics	8
Economy	3	Food Security	12
Social Security	11	Climate	9
Rule of Law	7	Technology	10
Water	2	Skills	6

1. Functional State

The sector relies on a robust, functional state, where State-funded infrastructure and maintenance projects catalyse business opportunities and job creation. Service delivery failures (mainly water and electricity) impact construction projects through stoppages, delays, and increased costs. Sector entities invest in water recycling and alternative power supplies at higher project costs to clients, construction companies, and the overall economy. Client expectations have evolved, expecting property developers to provide uninterrupted essential services where the State fails to do so.

2. Politics

Geopolitical tension, political unrest, riots, strikes, and disruptive events create a climate of uncertainty, with the SA election outcome having added another layer of unpredictability. Key risks are that current town planning and local authority approval delays will be exacerbated with the change in government and that disruptive events will cause project delays. Changes in Government policies, laws and regulations relating to land use, zoning, urban planning, and the environment will impact the industry and disrupt construction projects.

3. Economy

Due to eroded investor confidence and market volatility triggered by local and international uncertainties described above, businesses are delaying major decisions, and customers are altering their spending patterns, impacting economic growth. Construction companies focus on agility to adapt to changing market conditions, reduce the impact on staff, improve resilience (through comprehensive insurance coverage against unexpected events), and financial management (to ensure healthy cash flow, mitigate delays and infrastructure shortcomings), while addressing client and investor concerns to maintain trust and stability.

4. Social Security

Domestic uncertainty is compounded by declining political, social, and economic conditions, which may cause construction companies to restructure their businesses with resultant impacts on staff wellbeing and increased unemployment.

5. Rule of Law

Construction mafias (colloquially 'business forums') and corrupt officials extort money from contractors, subcontractors, and developers, causing project delays or abandonment, and increased costs. Tender fraud, corruption, and bid rigging affect sector entities who rely on State-issued tenders. Collusion between all role players in the sector necessitates increased investment in security measures and legal actions to protect staff, contractors, and assets. Industry has called on Government to act against criminal extortion and corruption, and to dismantle these networks to safeguard the integrity of construction projects and protect the interest of legitimate stakeholders.

6. Water

Uncertainty is compounded by water interruptions (often planned for by contractors and included in project costs). Deteriorating water infrastructure due to the lack of maintenance forces construction companies and property developers to build the required infrastructure on behalf of Government to ensure adequate water supply to their developments or projects. Construction companies could work with Government to find solutions to build water preservation, water recycling, water purification solutions together with innovative solutions to reduce water pollution.

7. Energy

Further uncertainty is caused by loadshedding which is planned for by contractors and included in project costs. The energy crisis within South Africa has enabled diversification through the creation of opportunities within the renewable energy space.

8. Logistics

Transport and logistics mafias, railway infrastructure sabotage, import and export corruption, hijackings, vehicle compliance/roadworthy corruption, unofficial transport of illegal cargo for syndicates, and road safety result in project delays, confiscations of cargo and vehicles, and increased project costs. Supply chain is reliant on a well-functioning transport system (ports, rail) and infrastructure (roads). The construction companies can work with Government through PPP to maintain and improve the transport infrastructure.

9. Food Security

A severe shortage of food will impact the sector through the impact on its workforce and the rest of society. Sector entities can work with Government to reduce the risk of food security. Food security will also have a future impact on town and real estate planning and the construction of low income and high-density housing.

10. Climate Change

More frequent extreme weather events and rising temperatures cause operational challenges, increasing project costs, project stoppages, evacuations, restricted access to sites, and damages to property and equipment. Mitigation strategies include continuous weather monitoring, emergency preparedness, prioritisation of sustainable material selection, regulatory compliance, and building of resilient structures capable of withstanding extreme conditions. The construction industry needs to work to reduce emissions.

11. Technology

As the sector embraces technology and AI, cybersecurity risks become more pronounced and can compromise data security, lead to unauthorised disclosure, and result in financial losses and reputational damage. Robust cybersecurity measures to safeguard sensitive information and maintain trust with stakeholders are increasingly costly and not always effective.

12. Skills

Persistent challenges to attract and retain skilled resources require of construction companies to invest in training, upskilling, internships, and mentorship programs. By creating a positive work environment and fostering a culture of learning and innovation, entities can improve productivity, quality workmanship, and overall competitiveness. The sector should prioritise collaborative partnerships with educational institutions to develop and align existing curricula and qualifications with the sector's evolving requirements.

9.4 Education

MARISA GRUNDLING
Head of Risk and Insurance
Milpark Education

KEDIBONE THANTSHA
CRM Prac
Risk Specialist
UNISA

BHEKI GUTSHWA
CRM Prof
Managing Director
Risk Eyes Solutions

SIKHUTHALI NYANGINTSIMBI
Chief Risk Officer
Durban University of Technology

Ranking of Risk Impacts on Sector

Functional State	2
Politics	8
Economy	1
Social Security	3
Rule of Law	6
Water	10
Energy	5
Logistics	9
Food Security	11
Climate	12
Technology	7
Skills	4

1. Functional State

Service delivery failures impede education delivery. The sector also depends on a functional State for strategic projects, research publications, and State-funded students. Because the registration and accreditation of qualifications and enrolment targets are endorsed by the Council of Higher Education, DHET, and SAQA, changes in the State's governance and decision-making processes may hinder delivery of accessible high-quality education. Governance standards should be clear, easy to interpret and practically enforceable (refer instances where decisions to place Institutions under administration were overturned in Court). The quality of graduates and workplace skills balance will continue to suffer until NSFAS is stabilised (fee-free education led to increased debt, compounded by administrative failures at NSFAS). Councils' size, constitution and duties must improve to eliminate conflicts of interest (e.g. proximity to procurement decisions), and to promote appetite for intellectual exploration and contrarian views. The sector can benefit from entrepreneurship to increase additional revenues.

2. Politics

Escalating geopolitical conflicts disrupt international student mobility, research collaboration, and transnational education programs. Changes in national policies by coalition government may impact the sector's operations and decision-making (potentially challenging their autonomy to make independent decisions to fulfil their mandates). Political changes could threaten education funding (with institutions largely subsidised by the State subject to conditions, while student fees as a main source of revenue are capped).

3. Economy

Economic decline, exacerbated by the lingering effects of COVID-19, drives student headcount decreases, donor revenue reductions, growing debt, increased operational costs, and uncertainty on investments and cash flows. These exacerbate reduced funding by DHET and institutions' ability to be financially independent and sustainable. Having lost its status as the main gateway into Africa status limits SA's opportunities for research collaboration, and student exchange programs to realise the African Union 2063 agenda goals. This curtails SA's ability to contribute to the Continent's education despite the highest internationally ranked African universities being in SA.

4. Social Security

Increasing cost of living, high unemployment rates, increased debt, increased inequality, lack of access to good healthcare, swelling mental well-being challenges, and insufficient social services complicate access to higher education, reducing diversity in the education system. These factors limit the job prospects of graduates, impacting the attractiveness of pursuing education. Institutions carry additional financial burdens in the attempt to combat these challenges through support for students unable to raise minimum registration fees, bursaries (if not funded privately), internship programs to expose graduates to workplaces, counselling services, and mentorship campaigns. This uneven access to education and persistently high unemployment collectively threatens SA's spirit of optimistic conversations and aspirational identity – the Zeitgeist that distinguishes our Rainbow Nation. The sector must prioritise impactful community initiatives, e.g. rural and township schools' ablution facilities (impacting human dignity), sports facilities (enhancing competitiveness between learners), and university-industry-government partnerships to boost employment.

5. Rule of Law

Fraud, collusion, and over-expenditure (often by entrenched syndicates) cause operational inefficiencies, financial losses, damage to reputation, contract cheating, and hindered academic performance. Failure to report crime inhibits effective prevention and response. Fraud and corruption mainly occur in student accommodation (where the allocation of student residences is engulfed in extortion), physical infrastructure projects (where construction mafia type extortion affects upgrading of ageing infrastructure at HEIs), and in buying/selling/falsification of qualifications. Closer collaboration between the sector and law enforcement agencies is needed, while cleansing law enforcement agencies themselves of corrupt elements, to prosecute perpetrators. Ethics Offices, and Ethics and Whistle-blowing Hotlines to mitigate threats of unethical conduct should be in place.

6. Water

Water supply interruptions may lead to interrupted classes and increased costs to procure water tankers. Institutions are forced to invest in water recycling, alternative water sources, and water-saving measures where possible. There are opportunities for institutions to strengthen water management efforts, e.g. research into wastewater management, water conservation.

7. Energy

Ongoing energy challenges disrupt critical education functions (e.g. computer labs where students access learning materials, service points for students' inquiries, call centres, laboratories used for experiments, and sensitive equipment). Prolonged blackouts may disrupt campus facilities such as air conditioning, security systems, and emergency services which threaten the safety of staff and students. Institutions invest in costly backup generators and solar panels, compelling the redirection of resources for critical functions. Online registrations require learners to have access to power supply, failing which completion of the process could be delayed or enrolment targets may not be met. Online learning, and research (critical to the pursuit of innovation-driven solutions to national challenges) require laboratory testing, with the cost of running experiments escalating due to loadshedding.

8. Logistics

Institutions rely on supply chains for equipment, student food, events, project materials, and study materials to students across the country. Central to the competitive edge of institutions, procurement functions tend to impede operational efficiencies rather than enhance them. HEIs continue to grapple with delivery of appropriate global SCM skills to elevate competitiveness. Broader benchmarking of institutional policies and procedures to strengthen 'outside-in' and 'inside-out' orientation in support of HEIs and their stakeholders are needed. Internal service level agreements and performance management must be matured.

9. Food Security

The enormous food security challenges in SA are compounded by increasing unemployment and deepening poverty. There is constrained capacity to impact on food system governance, technological innovation, health and safety. Spearheading food security are the Universities of Pretoria and Western Cape who in partnership with the DSI and NRF, are building onto the continental work through the Association of African Universities with other continental HEIs. Sector risk managers must adopt a more strategic outlook on their institutions' contribution towards broader national and global challenges such as food security.

10. Climate Change

Extreme weather events affect education facilities and infrastructure, and research assets, and disrupt education operations. Remote working options are not always conducive to optimal education outcomes. Resilience and continuity programs are hindered by limited investment capacity. The State's Infrastructure and Efficiency Grant aims to enable HEIs to refurbish existing physical infrastructure and/or build new structures but has limitations (such as increased project costs due to project delays). The uptake of innovative climate change, decarbonisation, and just energy transition related teaching and research remains low compared to global peers. Tapping into international collaboration with countries that have progressed along the maturity curve is paramount to optimise national and social impact.

11. Technology

Cybersecurity for online, distance, and/or eLearning institutions is critical to deliver education outcomes. Online confidential information is prone to cybersecurity threats, which could cause delivery disruptions. Non-compliance with regulatory requirements can have serious POPIA consequences and reputational damage. Sector responses include DNS security, firewall penetration monitoring, and cyber and information security awareness programs. There is a growing demand for to on-line education platforms, with increased risk exposure. Students write examinations online and may use AI compromising the integrity of qualifications, employability of graduates, and stakeholder trust. Institutions need to embrace AI and incorporate it with good guidance to students on the use. Proctoring solutions (i.e. invigilator app, IRIS, and Turnitin) aim to control the use of AI supported by disciplinary processes. Despite global strides in technology-focused academic qualifications at undergraduate and postgraduate levels, SA lags. Similarly, whilst the sector appreciates the impact of technology on competitiveness, most institutions continue to operate with archaic, disparate systems that impede efficiencies. Embracing Council/Board responsibility for IT governance could strengthen agility in response to cybersecurity and technology opportunities to generate educational research revenue for the same purpose.

12. Skills

The inability to attract skilled academic human capital negatively impacts research innovation and academic performance and decreases student enrolment. Improved professionalism in the Human Capital functions supporting succession planning and merit-based appointments is desperately needed to combat mediocrity and drive high performance cultures. High turnover (low retention), exacerbated by high administrative workloads, further compromises student/staff-ratios and the quality of education. To promote higher-performing institutions, postdoctoral fellowships and scholarships should be increased. Performance management should be improved. Institutions should continuously assess and monitor their workload model as part of the tools to assist with a balanced approach to work distribution with an intention to ensure effective teaching and learning. Short-term implications of deliberate transformation efforts to align with the demographics of the country should be balanced to build capacity over the medium- to long-term future.

9.5 Energy

TEBOGO MAPAILA
Enterprise Risk Officer
JSE

KAY DARBOURN
Fellow
Personal Risk Manager
FutureRisk

RAVI NAICKER
Director
Align Risk & Forensic Services

WENDY POULTON
Board Member and Secretary General
SANEA

TJAART VAN DEN BERG
Partner
Lucidum

Ranking of Risk Impacts on Sector

Functional State	3
Politics	1
Economy	8
Social Security	7
Rule of Law	2
Water	5
Energy	10
Logistics	9
Food Security	11
Climate	4
Technology	6
Skills	12

1. Functional State

Blurring of governance lines between the State (as shareholder influenced by the ruling party), and Eskom's management is a cause of the energy risk, exacerbated by organised and socio-economic related crime (network equipment theft and sabotage), which impacts the ability to consistently supply electricity. Policy decisions have a long-term impact on future electricity and energy supply. Energy infrastructure such as power lines, underground gas pipes, switching stations, and distribution networks, are extremely vulnerable, while lack of maintenance and aging infrastructure lead to failures. Non-payment/collection for energy by municipalities impacts the financial sustainability of utilities, and robust collection methods often lead to civil unrest. Loadshedding and other energy disruptions such as breakdowns, contribute to consumers becoming prosumers (generating and using their own energy) which exacerbates the financial sustainability risks to energy players.

2. Politics

On-going, long-term energy provision depends on clear energy policy, as well as balancing of future needs with climate change impacts. Inter-Africa relations might be viewed separately from other international aspects, although international water and energy investments in Africa may preclude SA from pursuing some of its planned opportunities, if not adequately understood. Geopolitical volatility and uncertainty impact energy in the short-, medium- and long-term. In the shorter term, projects already proposed should be expedited and maintenance of existing energy supplies must be prioritised. Wars, political unrest, riots, strikes, and disruptive events impact commodity prices, and the availability of strategic spares (especially for the energy sector) which cause price increases and volatility. SA's energy policy is developed in silos, often playing out in the public domain, thus increasing fragmentation in the sector. Key risks include untaken opportunities (e.g. green hydrogen). Policy changes, should political shifts occur and energy affordability decline, will continue to impact the vulnerable in society.

3. Economy

Africa is rather important in SA's energy mix from the importing and exporting of electricity to the oil, water, and gas aspects both for current and future supply. SA's ability to manage International Relations and investment opportunities will be key and could impact inter-Africa relations. Energy is directly linked to economic growth and is traded regionally. Thus, a severe economic decline would severely impact energy supply and demand, the ability to pay for services, and affect the entire SADC region. Loadshedding is already impacting economic growth, with severe knock-on impacts on other areas in society, such as unemployment, and should it deteriorate, would further slow economic growth and associated risks will materialise.

4. Social Security

Many small business and individuals have made costly alternative arrangements for the supply of power to continue working – this has impacted their cost of production and has not necessarily been offset by increasing margins. As the cost of grid power and alternative power options increases, the overall impact on such entities will be more severe. Increasing utilisation of solar power and generators has led to a reduced demand for supply of energy from the national provider but the impact on peak hour consumption is still a challenge, which may be cushioned to only some extent by battery power, as this technology is still in its infancy. Climate change aspects will impact quality of life specifically around water supply, emissions, and extreme weather. Energy provision has the potential to improve quality of life, provide employment and stimulate economic growth.

5. Rule of Law

Crime impacts energy supply at many levels from strategic planning to purchasing and contract manipulation at supply stations to localised power theft and cable theft. Illegally tapping into power supplies leads to overloading and failure of infrastructure and non-payment for services further increases the cost of supply. High crime levels hamper law enforcement agencies to effectively focus on all categories of crime. The inter-relationship between failing SOEs and a lack of political will to set policy across entities and integrate the various needs of our country rather than to support select areas or individuals remains a significant risk. Fraud and corruption are major drivers of this uncertain environment. This, together with parochial interests in decision making, is closely linked to the lack of implementation capability and political stability. This impacts on investor confidence, national competitiveness, and economic growth.

6. Water

Water is required for energy production in many energy technologies and thus a lack of water will have significant impacts on operations and/or efficiency of energy supply. The amount of water necessary to run many power stations is significant and balancing the need to supply energy with the need to supply for individual consumption may become a challenge. Infrastructure maintenance to manage water supply and storage and to avoid leakage is critical in the short term.

7. Energy

Total grid failure (if it occurs) would considerably impact individuals and companies, and crime is likely to increase – particularly when solar or back-up systems run out. Insufficient understanding of energy supply and production and incorrect, inadequate, and even deliberate misinformation lead to incorrect risk identification and business continuity planning. One big uncertainty is whether the transmission grid can be upgraded and strengthened to allow the connection of new plant, in particular renewables. Loadshedding is having significant impact with 2023 having the highest number of days of loadshedding since it started in 2008. Policy interventions to allow private power generation have enabled some market resilience.

8. Logistics

The interactive impact of the coal mining industry on electricity supply in SA is often underestimated. Coal power stations utilise considerable coal volumes, and inadequate Government policy on the export and pricing of coal has resulted in poor quality of coal being supplied to meet power stations design. Eskom and mining firms have progressed in managing wet coal related risks however, the controls cannot be fully effective. Coal transportation by road and failure of Government to manage the shift from road to rail, significantly impacts the cost of coal, safety, and security, and creates a lucrative market for criminal syndicates. The considerable increase in road transportation of coal, gas and other energy related substances has severely impacted roads and the safety of smaller vehicle users and local communities. Changes in technologies in the energy sector are causing value and supply chains to adjust. Ports are needed to facilitate increased imports of renewable energy components, or exports of green hydrogen or related products such as green ammonia. Operations require water and should gas use increase, more pipelines, with skills and reskilling for a just energy transition.

9. Food Security

Increasing cost of energy for production and storage remains a significant input cost for businesses which is passed on to the consumer; many have already made alternative energy support arrangements. Food production can be impacted by the competition for water and energy, as these resources are critical components for agriculture and agri-processing e.g. water pumping, processing of food and cooking etc. This energy-water-food nexus is impacted by changes to the climate. Food security is also exacerbated by geopolitical tensions.

10. Climate Change

Extreme weather impacts power infrastructure, generally causing short-term power failures. Future planning of transmission, distribution, and pipeline placement and protection to address this, will be extremely costly. However, if not done, this will have medium- to long-term impacts on supply of key basic services (such as the water challenges in KZN). Balancing energy production, water use, and emissions remains a significant long-term challenge. Decarbonisation and extreme weather are key uncertainties but are becoming more certain as global and national policies develop and mature. For SA's carbon intensive economy it is a risk for trade and cost of production as measures such as the carbon tax are rolled out. Changing weather patterns not only impact on operations and plant reliability but also on customer energy needs and location. A just transition away from fossil fuels will lead to declining jobs in some sectors, necessitating novel policy approaches and interventions.

11. Technology

Too much information, biased and negative reporting, and a lack of interest from many individuals has led to an unbalanced population relying on headline comments and advice from many purporting to be experts. Where any new technology allows for increased incorrect and fake information, it remains critical to support those who do not have the learning or ability to decide for themselves. Cybersecurity is a critical issue for electrical infrastructure that requires constant vigilance. New and emerging technologies such as AI, robotics, automation, and biotechnology are impacting energy operations, use, and generation and require new skills and knowledge to manage. Smart grid technology to integrate battery storage, wind turbines, and other energy sources into the national grid offer opportunities to reduce outages.

12. Skills

The energy sector has skilled personnel available, but many are in posts that they either are unable to shine, or they fail to perform, this leads to a request for more resources whereas repositioning and retraining might be a better option. Challenges around political and family related appointments remain a key area of concern. The changes in technology occurring due to the energy transition necessitate the development of some new skills and upskilling and retraining as well as addressing job losses. To ensure that we have the right skills at the right time and in the right volume will require a coherent vision for the energy sector that is integrated into the skills system. The JET IP starts to give some recommendations on how this can be achieved in a coordinated and integrated manner.

9.6 Financial Services

KRISTEN FOURIE
Sustainability Graduate Intern
Sanlam

BERNARD LOUW
CRM Prac
Senior Risk Officer
FSCA

CLAUDE HAMMAN
CRM Prof
Head: Risk & Advisory
Simah

DR FRANCOIS VAN DYK
Independent International Finance,
Risk, and Strategy Advisor

Ranking of Risk Impacts on Sector

Functional State	2	Energy	4
Politics	3	Logistics	5
Economy	1	Food Security	12
Social Security	8	Climate	10
Rule of Law	9	Technology	7
Water	11	Skills	6

1. Functional State

A functional, well-governed State is imperative: institutional credit ratings are linked to and constrained by the sovereign rating; negative sovereign rating action (e.g. from State inefficiencies stymying economic growth), will reflect in sector institutions' ratings. Loadshedding curtails economic activity causing asset quality pressures, loss of investor confidence, and reduced lending and investment activities. Bureaucratic inefficiency, crime, inadequate policy implementation, and regulatory unpredictability, adversely affect institutions' operational and strategic frameworks, delay policy enactment/enforcement, complicate compliance efforts, increase operations costs, and ultimately affect the sector's stability. Service delivery failures reduce small financial service providers' resilience (as they don't have resources to secure operational redundancy), exacerbate financial exclusion and potential financial exploitation of vulnerable groups, and hinder economic empowerment.

2. Politics

Election outcomes and slow reform could affect portfolio flow, including increased capital outflows. An increase in the compliance burden (due to legislative and regulatory changes) may affect long-term investment decisions, adoption of new technologies, and operational stability, hindering entities' competitiveness and financial viability. Financial, pension, and NHI reforms pose risks to the asset management and the insurance segments. Fragmented decision-making and inconsistent policies inherent to coalition politics and the risk of political violence remain local and international investor concerns. Political uncertainty, geopolitical risks, and policy developments influence consumer sentiments, confidence, and spending patterns, as well as investment decisions. SA is less exposed to external financing risks yet remains vulnerable to global investor sentiment and external financing conditions (which are tied to US interest rates). Higher interest rates and inflation will affect households and small businesses, weighing on asset quality indicators in 2024 on the back of subdued loan growth. There is an opportunity to position SA as 'The Lion of Africa' by implementing strategic reforms and leveraging its unique strengths.

3. Economy

Macroeconomic factors potentially threaten the sector's growth, profitability and stability. Higher inflation levels and interest rates may lead to declining asset prices, while continued rising in borrowing costs may result in increased loan delinquencies, which may impact balance sheets negatively. Credit impairment charges have increased, together with credit impairments (on a combined basis) as credit models reacted to low growth, consumer pressure, and the economic effects of loadshedding. Severe economic decline would reduce consumer spending, and lead to higher loan default rates. SA's continued greylisting deters foreign investment, increases financing costs, and imposes increased scrutiny and restrictions, leading to strained global financial relationships, higher cost of capital, reduced operational scope, and widespread financial distress. Such a situation could lead to reduced access to credit and capital for financial service providers, potentially resulting in liquidity shortages and insolvencies. In such a scenario, rigorous internal reforms and engagement with international regulatory bodies would be needed to restore confidence and stability in the sector. Challenging fiscal positions and sovereign risks intensified in several African territories in which major SA banks operate, generating higher sovereign-related risk costs. The banking system's dependence on wholesale funding represents a risk. SA's lost status as main gateway into Africa has diminished its attractiveness as an investment destination and regional financial hub, impacting the sector's competitiveness and growth prospects.

4. Social Security

Lower income levels and unemployment presents as credit risk (e.g. loans defaults and reduced savings). Broader social responsibilities (e.g. board and executive remuneration, diversity), are coming under increased scrutiny. High unemployment and inequality limit the sector's expansion by reducing economic activity, disposable income, limited access to credit, increasing fraud and physical security, and increasing financial exclusion. Responses include robust risk management strategies, adapted lending practices, and inclusive financial products. Social instability and insecurity can disrupt business operations, deter investment, and erode consumer confidence, negatively affecting the demand for financial products and services.

5. Rule of Law

Crime remains a key source of risk and negatively impacts financial inclusion. Heightened crime levels disrupt operations, compromise data security, increase costs, and cause reputational damage. The prevalence of fraud undermines trust in the financial system and deters consumer participation in formal banking channels. The recent high incidence of illicit activity across commercial crime, and directors' and officers' insurance may lead to increased claims, which reduces capacity, increases retention requirements, raises premiums, and tightens underwriting criteria, in the face of increased demand as organisational leaders face greater risks of litigation for alleged misconduct, including failure to prevent corruption. Mitigation includes robust anti-fraud and anti-money laundering measures, enhanced security, and collaboration between sector players and regulators.

6. Water

The water-energy-food nexus affects the sector due to SA's economic reliance on agriculture and energy-intensive industries that are large-scale consumers of financial products. Smaller sector players (who do not have resources to implement redundancies in their operations) can suffer business interruptions during water supply failures.

7. Energy

Power supply failures would disrupt businesses (downtime, transaction delays, data loss), increase operating costs (including alternative power sources), and affect customer satisfaction; all negatively affecting bottom-line revenue and margins. Asset quality risks/pressures from load shedding on economic activity have a delayed effect on banks' earnings and asset quality. Users of financial services may experience difficulties accessing banking services, conducting transactions, and managing their finances during power outages, exacerbating financial exclusion and vulnerability.

8. Logistics

The sector requires digital supply chain resilience more so than physical logistics. Third party physical risk remain for institutions who transport currency (with insurers that underwrite cash in transit exposed to theft and robberies). Customers' business interruption due to failing supply chains or transport interruptions impacts the sector by increasing credit risk, particularly for retailers and manufacturers. Disruptions can also lead to increased cargo damage and business interruption claims.

9. Food Security

Food insecurity can lead to increased food prices, reduced consumer spending, and heightened financial insecurity. Lending institutions may face credit risk management challenges as borrowers struggle with cash flow and contractual repayments. Users of financial services may experience reduced purchasing power, and reliance on credit to meet basic needs, leading to higher debt levels and financial vulnerability. The risk impacts economic stability, as agriculture is a crucial part of the real economy, contributing to employment and GDP. Financial institutions face higher incidences of loan defaults and insurance claims as farmers and agribusinesses struggle with increased costs and reduced outputs caused by water and energy issues.

10. Climate Change

ESG-related criteria increasingly influence client and investor decisions. The sector is increasingly challenged by ESG regulations with tougher disclosure and reporting rules. Inadequate incorporation of disclosure of ESG information, greenwashing, and immature ESG practices have negative consequences for sector entities, including investigations, fines, penalties, and reputation damage. Increasing extreme weather and climate change claim frequencies and severities strain insurers' capital and require recalibration of risk models and premium structures, while widening the protection gap, as more assets become uninsurable or challenging to cover, leaving policyholders more vulnerable. Extreme weather events disrupt business operations, infrastructure, and supply chains, leading to financial losses. Transitioning to a low-carbon economy and implementing climate mitigation policies require entities to adapt business models, invest in renewable energy, and navigate regulatory changes, which impact profitability and competition. Financial services users may face higher insurance premiums and more costly financial services, exacerbating financial vulnerability and social inequality.

11. Technology

The risk of disruption to digital supply chains and cloud platforms due to cyber incidents remains material for the sector. Digital and innovative service delivery increases customer service speed and decreases paperwork (whilst slow response times create an artificial barrier for accessing financial products). Business interruption, albeit insurable, represents material financial and business risks for insurers. Digitalisation has deepened interconnections and dependencies within the sector and with 3rd party infrastructure and service providers. IT outages can result in significant business interruption costs and greater operating expenses to deal with data breaches, customer redress, consultancy costs, loss of income, regulatory fines, reputational damage, share price impacts, and liabilities. AI and disruptive technologies, while driving innovation, introduce complexities in data management, model risks, decision biases, and ethical concerns. Smaller financial service providers may lack the resources and expertise to mitigate cyber threats, leaving them exposed to the same consequences, but at a higher comparative impact.

12. Skills

The sector remains exposed to talent shortages (especially for digital technologies and big data) exacerbated by an education system that fails to equip people with skills to deal with Industry 4.0, thus impacting the sector's growth. The skills gap hinders innovation, adaptation to market changes, regulatory compliance, operational efficiency, and defences against fraud and cyber risks, limiting the adoption of new technologies and global competitiveness. Furthermore, failing to educate customers on the use of digital banking technologies to access quality financial products and services, understand a large array of complex financial products, and make informed financial decisions, will impact firm performance and hamper financial inclusion. The sector must partner with education bodies to update curricula, invest in education, and support STEM education.

9.7 Healthcare

DR AVANI KASHIRAM
Paediatrician

DEAN VAN DER MERWE
CRM Prof
Senior Manager: Risk Management
GEMS

ANDRE COWLEY
CRM Prof
Chief Compliance Officer
GEMS

Ranking of Risk Impacts on Sector

Functional State	1
Politics	5
Economy	2
Social Security	8
Rule of Law	7
Water	11
Energy	6
Logistics	9
Food Security	10
Climate	12
Technology	4
Skills	3

1. Functional State

The healthcare sector is substantially impacted by service delivery failures and is particularly vulnerable to water and energy supply. Healthcare providers' costs are directly affected, which directly translates into higher healthcare cost inflation. Service delivery failures impact severely on the quality of living, which in turn impacts on health. The dysfunctionality of many State hospitals exacerbates the consequences at individual and social levels. Unfavourable healthcare-worker-patient ratios at State facilities (mainly due to budget and resource constraints) adversely impact patient care, staff retention, and overall healthcare utilisation in the sector. Universal health coverage requires substantial strengthening of public and private healthcare infrastructure supported by a functional State, strong governance and service delivery.

2. Politics

The 2024 election brings about uncertainty in terms of national policy and priorities. In this sector the key policy matter relates to the NHI Act signed into law in May 2024 and which significantly impacts the sector (public and private), affecting healthcare providers, funders, and consumers. The NHI initiative has been described as a massive reconfiguration of the sector and is aimed at providing universal health coverage to all citizens. In its current form, there is significant uncertainty as to how it its implementation will play out, with the result that individuals and sector entities are unable to make strategic decisions to ensure the sector's sustainability.

3. Economy

Continued slow economic growth has plagued SA for several years. Sub-optimal economic growth stifles employment and adds to poverty, inequality and high inflation, with healthcare inflation being one of the highest of all inflation components. This puts strain on citizens and sector entities such as Medical Schemes who must balance benefit richness against healthcare costs. Should the economy not respond positively in the medium-term this may increase the burden on consumers, who may ultimately buy-down to less expensive cover and services, potentially impacting the state burden. Private healthcare funders respond by negotiating better healthcare rates, reducing cost of medicine and devices, improving member health, and reducing fraud, waste and abuse.

4. Social Security

The sector is indirectly impacted through high unemployment (including scarce medical skills such as doctors and available positions for them). This contributes to the skills exodus from the sector to other territories. This brain drain impacts the overall quality of life – more so in the healthcare sector as most of the services are essential and not optional.

5. Rule of Law

Sector fraud and abuse is estimated to be as high as 30% of healthcare spend p.a. (including all role players in the sector while organised crime syndicates are on the increase). These costs place pressure on the fiscus and impact medical aid member contributions in the private sector. Increased healthcare costs also negatively impact inflation and interest rates. The sector works with authorities to bring criminals to book. Initiatives such as Whistleblower hotlines assist to identify corrupt activities, but whistleblower protection is a major challenge.

6. Water

Frequently failing water infrastructure presents healthcare risks such as water-borne diseases (e.g. cholera) which could spread quickly and impact large parts of the population (as people rely more on water than electricity as a basic need). Water is also a major part of hygiene and prevention of disease (e.g. listeriosis), and shortages at healthcare facilities exacerbates the related risk. Lack of suitable drinking water impacts overall health and could affect the general burden of disease which the sector has to respond to. Water conservation awareness should start with employees and be extended to customers, service providers, and the greater public, but is largely out of the control of the sector.

7. Energy

Whilst energy related shortcomings have improved, impacts such as reduced economic output, higher running costs absorbed into product/service pricing, and reduced investor confidence remain. The risk of total grid failure appears unlikely compared to 18-24 months ago. Because of the criticality of reliable power supply in the sector, healthcare facilities have moved to sustainable energy sources, such as solar.

8. Logistics

A significant portion of medication and healthcare related equipment is imported and thus reliant on efficient transport infrastructure. Inefficiencies at ports result in delays impacting supply and demand. Access to decent roads hampers adequate healthcare access for those living in remote areas. A reliable railway network will improve patient and goods movement and reduce the number of road injuries and fatalities. Vandalism and theft of railway infrastructure present complex challenges, and innovative logistics solutions such as pharmacy networks and other providers are being used to reach citizens.

9. Food Security

Food security challenges and insufficient access to balanced diets impact the overall health of citizens. Healthier food options are not as easily available as less healthy food (e.g. takeaways, starches, sugar- and carb-heavy foods). Diet related lifestyle diseases (such as diabetes and cardiovascular diseases) impact the burden of disease – some medical schemes and insurers attempt to influence behaviour to lessen this burden, but this is difficult when unemployment and poverty limit access to healthier food choices. Malnutrition in childhood impairs brain development, reducing long-term employment potential by limiting cognitive abilities and skills.

10. Climate Change

Direct climate related impacts on the sector are related to resources to effectively respond to extreme weather events. Lack of adequate trauma units to respond to incidents such as fires or floods as well as the inability to minimise the outbreak of related communicable diseases are major challenges. Service providers in areas prone to extreme weather events must conduct resilience assessments and implement continuity controls. The move towards sustainability and ESG impacts the sector, especially larger institutions – ESG related skillsets, governance, reporting and activities are required. Investors and other stakeholders require concerted efforts to implement and account for ESG initiatives, even though the impact may not be as visible or direct yet.

11. Technology

AI presents significant opportunities, as the sector is heavily reliant on data and the processing thereof. AI may ultimately lead to improved access to healthcare, improved health outcomes and reduced cost to clients. AI and new technologies come with increased cyber risk, as the data held in the sector is highly confidential and very valuable to criminals. Data privacy regulations (e.g. POPIA) compliance comes at additional cost. Institutions must find innovative and sustainable ways to balance effective controls with the cost of compliance. Continuity in many instances has a 'life-or-death' impact on the sector. Service disruptions from cyber-attacks, energy or water failure amongst others, receive high focus (lessons learnt from COVID-19 remain helpful).

12. Skills

Highly specialised skillsets are required in the sector. Inadequate local supply, attraction, and retention of healthcare providers are major challenges which are exacerbated by poor leadership and management of resources, as well as scarce skills emigrating. A quality and adequately capacitated healthcare system is essential on the journey to Universal Health Coverage, which in turn will positively impact the economy, job creation and equality.

9.8 Manufacturing

NOMA CRISTOVAO
Risk Specialist
Sasol

WILLIE NEL
Chief Financial Officer
White River Sawmills

ALEXANDRA RUSSELL
Independent Governance
Professional

Ranking of Risk Impacts on Sector

Functional State	1
Politics	2
Economy	3
Social Security	4
Rule of Law	9
Water	6

Energy	12
Logistics	5
Food Security	11
Climate	10
Technology	8
Skills	7

1. Functional State

Significant challenges persist, including structural limitations like water and electricity availability and tariff increases, logistical infrastructure, crime, and inflationary pressure on food and transport. Manufacturers continue to be impacted by the volatile operating environment. Business disruptions due to electricity and rail challenges can lead to reduced consumer spending. As a result, demand for manufactured goods could then decrease, negatively impacting the sector. Given global and local supply chain disruptions, continuing existing logistical challenges require innovative solutions. Foreign direct investment should be monitored closely. Mulilo (ready to deliver massive renewable energy generation) is an exciting solution to electricity challenges.

2. Politics

The current global macroeconomic environment emphasises free movement of goods and capital, rule-based fiscal policies, independent central banks targeting inflation, public institutions that prioritise maintaining financial stability, and enhanced international financial supervision and cooperation. Geopolitical tensions raise concerns of escalating violence in some regions, which could affect vital trade routes and freight insurance costs with resultant inflationary pressures. While many of the global elections will be driven by internal factors, their outcomes could have global repercussions such as commodity price fluctuations, erratic market performance, the rising of new nationalism, protectionism, undermining multilateralism, and fostering geopolitical rivalries. Addressing these challenges will require efforts to promote dialogue, co-operation, and inclusive economic development on a global scale. Despite the significant business risks and planning uncertainty global and local political tensions also provide opportunities for arbitrage (depending on factors such as location, timing, and market demand).

3. Economy

The loss of SA's status as the main gateway into Africa has ramifications for manufacturers. A decline in SA's regional influence jeopardises the sector’s competitive edge, hampers trade and expansion prospects, and impedes access to vital networks and partnerships. Moreover, geopolitical uncertainties can exacerbate operational risks and investor concerns, further clouding a growth trajectory. Reclaiming SA’s status as main gateway into Africa is crucially important for the sector’s future viability and global relevance.

4. Social Security

In the current challenging socio-economic environment skills retention and development strategies remain a focus for the sector to ensure skills in critical operational environments with priority being placed on strategic capabilities such as engineering and technical skills. In SA, significant challenges persist, including structural limitations like water and electricity availability and tariff increases, logistical infrastructure, crime, and food and transport inflationary pressure, all impacting employee wellbeing. Electricity tariffs have been increased by 12.74%, coming at a time when many households are struggling to survive on tight budgets compounded by the cost of transport which increases the cost of living. Employee wellbeing levels are also negatively impacted by the ongoing electricity loadshedding.

5. Rule of Law

Crime exacerbates existing challenges such as unemployment, poverty, and inequality. It cuts across all sectors with both public and private sectors being affected, and hindering the delivery of essential services like healthcare, education, and housing. Sustained efforts across multiple fronts are needed with the involvement of all stakeholders, including government, civil society, the private sector, and the public to drive a comprehensive strategy, while strengthening institutions like the National Prosecuting Authority and the Special Investigations Unit to bolster their efficacy and autonomy. Success hinges not only on legal reforms but also on political will, unwavering leadership integrity, transparency, open procurement processes, and robust whistleblower protection.

6. Water

SA must invest in water infrastructure, improve water management practices, promote water conservation and efficiency measures, and enhance drought preparedness and response strategies. For manufacturers, efforts to address climate change and its impacts are crucial for building resilience to water-related challenges in the long term.

7. Energy

The National Energy Crisis Committee has made progress to implement the Energy Action Plan, to end load shedding, expand generation, and reform the energy sector. Eskom's Operational Recovery Plan reduced unplanned losses by 3GW and increased planned maintenance by 12%. Medupi Unit 4 is set to return in September 2024, and Kusile Unit 6 in October 2024, further bolstering supply. Progress has been made to build significant new generation capacity. The Eskom Kenhardt Solar Project is operational, adding 540 MW of solar capacity and 225 MW of battery capacity. The establishment of the National Transmission Company of South Africa (NTCSA) has occurred, and the ERA Amendment Bill remains on schedule for tabling in the current Parliament. This paves the way for a market allowing for the buying and selling of electricity. Eskom launched Market Codes in April 2024, to govern this market, with plans to submit them to NERSA for approval alongside the NTCSA trading licence application post ERA Amendment Bill enactment. All of this will alleviate the extensive pressure on manufacturers, which in turn will alleviate economic growth pressures.

8. Logistics

Private sector partnerships are an important option, e.g. Sasol and Transnet Freight Rail (TFR) have formed a pioneering public-private partnership to enhance rail transport reliability. Over a five-year period, Transnet will transport product from Sasol's facilities to customers using a dedicated fleet of tankers, aiming to minimise disruptions in product and materials transportation. Transnet has also appointed new leadership and finalised a partnership with a port operator from the Philippines. Additionally, positive developments include Transnet National Ports Authority's commitment to develop KwaZulu-Natal Logistics Hub, featuring new container terminals, upgraded roads and port security, and the relocation of the SA Navy base from Salisbury Island to Richards Bay's Naval and Pelican Islands by 2030. Transnet withdrew a request for quotes for an operating lease on a freight-rail artery linking Durban to Johannesburg due to changes in national transport policy, including separating rail operations from infrastructure. Transnet needs to reassess its process for introducing private partners. Investors are exploring building a Botswana rail line to bypass SA and Transnet inefficiencies, as regional countries seek better global market access. Transnet aims to increase its main coal export corridor's capacity by adding fourteen extra trains per week, though challenges persist in moving coal to ports for export despite more locomotives becoming available.

9. Food Security

A severe shortage of food will impact the sector through the impact on its workforce and the rest of society. Food manufacturers, cold storage providers, and food transporters are impacted by all the risks in this report.

10. Climate Change

Climate risks to manufacturing businesses include meeting anticipated legislative and policy requirements, increasing operational costs to reduce emissions, and adapting to physical impacts. Identifying appropriate responses that drive sustainability through economic development, job creation, energy security and environmental efforts is a pivotal task within this sector. The Climate Change Bill has been approved by the NCOP. When the bill is enacted, carbon budget regulations will be implemented, making it mandatory to comply with an allocated carbon budget. Global carbon emissions (together with the related financial and credit risks) continue to rise. To meet global goals, investment is required in climate change adaptation and resilience as well.

11. Technology

Business interruption resulting from a successful cyberattack, will be damaging in the extreme to large manufacturers.

12. Skills

Persistent challenges to attract and retain skilled resources require of manufacturing companies to invest in training, upskilling, and mentorship programs to develop a competent workforce. By creating a positive work environment and fostering a culture of learning and innovation, companies can improve productivity, quality workmanship, and overall competitiveness.

9.9 Mining

KATLEGO KEKANA
Enterprise Risk Manager
Implats

LEBURU MAHUMAPELO
CRM Prof
Head of ERM
Harmony

MARIAN VAN DER WALT
Senior Group Executive ERM and IR
Harmony

BRENDAN MASETI
Executive Risk, Insurance & Compliance
Implats

Ranking of Risk Impacts on Sector

Functional State	2
Politics	10
Economy	3
Social Security	9
Rule of Law	8
Water	4
Energy	1
Logistics	5
Food Security	12
Climate	11
Technology	6
Skills	7

1. Functional State

Local service delivery failures close to mining communities cause community frustration (protests, civil unrest, disruption of mining operations) and expose mining firms to increasing demands to provide such services, over and above what they already provide through their social and labour plans. Mining companies formally engage with communities through recognised community leadership structures on planned community projects (included in social and labour plans) and key infrastructure. Firms also engage with municipal leadership to clarify their obligations and identify opportunities for further assistance.

2. Politics

Geopolitical tensions resulted in further supply chain shortages, consumable price increases, global economic impacts, and further tightening of monetary policies. This negatively impacted the pricing environment for certain mining commodities. In SA ongoing policy uncertainty has resulted in a decline in foreign investment, leading to the departure of some international companies from the country. National coalition government in SA between parties with differing manifestos brings investment policy uncertainty and will affect investor confidence. Mining companies are closely monitoring the political land scape to adapt where needed, while enhancing government and community engagement, collaborating closely with suppliers to secure supply chains, and managing inflationary impacts. As regards shareholders, some mining companies have been able to turn the risks into opportunities – increasing margins alongside investment in its local stakeholders.

3. Economy

The sector in SA, as a key hub for regional mining investment and operations, is severely affected by any national economic downturn. The sector faces several challenges, including reduced investor confidence, decreased access to financing, and disruptions to supply chains and infrastructure. The loss of SA's status as main gateway into Africa has diminished the sector's competitive advantage in attracting FDI and accessing regional markets. Collaboration, innovation, and strategic planning are key to navigating this risk and maintaining global competitiveness. Sound and timeous decisions require integration of strategy, risk and resilience to improve efficiencies, agility, adaptiveness and ability to learn. The Government has recently established initiatives to support junior mining and exploration activities, to explore new opportunities.

4. Social Security

Social security, quality of life, unemployment, and inequality are interrelated and can significantly impact the sector. Mitigation requires a holistic approach that considers the economic aspects of mining as well as its social and environmental implications. In terms of health, progressive response by the sector to combat diseases such as HIV and Tuberculosis in mining communities has led to improvement. The sector is a significant source of employment, particularly in rural areas. However, commodity price fluctuations or demand shifts can lead to job losses, exacerbate unemployment and potentially fuel social unrest. Sustainable and responsible mining practices and proactive engagement with local communities and stakeholders, are essential to ensure the sector's long-term viability.

5. Rule of Law

Organised criminal syndicates have significantly increased and have targeted both high value products/metals and bulk commodities. The modus operandi has often included 'recruiting' company employees and contractors which on their part avail key information on transport routes/nodes and storage information. Criminals have also attempted to infiltrate formally recognised procurement processes to promote their illicit intentions, and where this is not recognised by mining companies, targeted criminality ensues. In response, mining companies, in conjunction with law enforcement authorities and the Minerals Council, have had to improve their intelligence gathering and security response capabilities to ensure proactive measures remain in place to mitigate this scourge. Continued awareness programs regarding ethical conduct are shared within the various mining companies. Fraud risk assessments are assisting most mining companies to understand exposures and strengthen the control environment.

6. Water

Water is a vital resource for mining operations in South Africa, particularly in areas where water scarcity is prevalent. However, increased demand from residential, agricultural, and commercial developments in these regions has created competition for water resources, often prioritising community needs over mining activities. Additionally, prolonged droughts and aging municipal infrastructure further exacerbate water supply challenges for mining operations. Mining companies recognise the critical importance of water in their operations and for local communities. They actively manage water usage to prevent degradation of water quality and ensure sustainable water availability. Initiatives include implementing water treatment plants to reduce reliance on external water sources or utilities and promote water recycling. Overall, mining companies are implementing measures to monitor, reduce, and optimise water usage in response to these challenges, supporting both their operational needs and the water requirements of host communities.

7. Energy

Mining, mineral processing, and refining operations are energy intensive and require a reliable electricity supply. Erratic electricity supply due to Eskom's challenges, may potentially have devastating impacts on the sector in terms of safety, production, current and future project interruption, and shortened life of mines (especially in the event of a national grid collapse). Increased electricity costs may impact overall production costs, and project costs – resulting in lower free cash flow margins. An unreliable power supply also has an ongoing impact on the economy, with further indirect potential increases in operational costs. Most mining firms maintain structured routine engagements with Eskom to receive grid status updates and energy security forecasts. They have devised tailored energy security strategies and tactical plans specific to their operations, encompassing proactive assessments of future energy demands aligned with operational needs, coupled with exploration of diverse energy technology options such as solar, wind, and hydropower. Given the critical nature of uninterrupted power supply, particularly for underground operations, firms conduct comprehensive grid collapse simulations utilising backup power systems as part of holistic BCPs covering all facets of the organisation, including underground, surface, and service areas, to manage potential impacts of a national grid failure.

8. Logistics

The sector relies heavily on efficient rail operations, particularly for bulk commodities, and failures of this service have forced a shift to road transport, which have amplified syndicate activities, and security threats to commodities. The sector must continually update security protocols, including routes, escort processes, and storage facilities. Through the Minerals Council, mining companies have assisted in addressing some of the challenges.

9. Food Security

The sector may face production challenges, due to limitations on access to food (whether resulting from economic or logistical constraints), and broader socio-economic impacts on local communities. This prompts many mining companies to address food security concerns as part of their CSI efforts, including practical programs to support agriculture ventures, promote subsistence farming, and contribute to sustainable food systems. These efforts not only help to mitigate the potential consequences of food insecurity but also contribute to the broader socio-economic development of local communities.

10. Climate Change

Climate change, GHG emissions, and access to secure and sustainable green energy are material risks to sustainable mining. Climate change affects many aspects of mine closure design and costs (e.g. wetter conditions, increases in extreme weather events, increased risk of land erosion and base-flow conditions). Higher temperatures and drier conditions can affect water balances, efficiency of cooling systems, increased fire risks, and potential degradation of vegetation and biodiversity. Further resultant risks to mining operations include overtopping of tailings dams and other water storage areas during extreme rainfall events, and post-closure landscape design. The efficiency of habitat restoration and rehabilitation are also affected by extreme climate variation post mine closure, and reduced water availability due to extreme temperatures (higher evaporation) and water stress, as well as increased risk of flooding. In response, the sector must understand the impact of climate change on its various operations and implement climate decarbonisation and climate change targets.

11. Technology

Continually evolving cyber risks for the sector include 3rd party attacks via the internet using various attack vectors to exploit human or technical vulnerabilities (e.g. malicious intent to harm information or operational technology infrastructure, reputational damage, and operational disruption for monetary gain or competitive advantage). Proactive cyber risk assessments and continuous control effectiveness and monitoring are critically important to inform disaster recovery plans. On the opportunity side, technology developments in mechatronics, instrumentation and metallurgy have enabled exploitation of mineral that were previously unprofitable and unsafe. The industry is seeing an increase in mechanisation and digitisation to improve productivity and safety.

12. Skills

Amid a global shortage in mining skills, international mining groups increasingly poach highly skilled SA mining employees. The sector also faces an aging workforce with youth not being interested in conventional mining. Implementation of labour rationalisation processes in certain mining sectors require cost curtailment, and cash preservation measures which will increase the loss of critical skills. In response, mining companies have implemented skills retention programs, including training, mentorship, flexible working hours, competitive rewards, etc.

9.10 Professional Services

KATLEGO MAJOLA
CRM Prof
Independent Risk Professional

PATRICK MEYER
Director / Consultant
Vortex Strategy Alignment

SHARON CARSON
Partner
Lucidum

Ranking of Risk Impacts on Sector

Functional State	2	Energy	10
Politics	1	Logistics	8
Economy	5	Food Security	9
Social Security	7	Climate	12
Rule of Law	4	Technology	6
Water	11	Skills	3

1. Functional State

Prioritisation of transformation criteria over skills and competencies, cadre deployment, and poor vetting lead to a lack of expertise, ineffective leadership and lack of strategic direction in many organisations. Personal and political interests often overshadow institutional mandates, resulting in misaligned plans. Leadership challenges are often exacerbated by budget constraints and inefficient resource use, which lead to investor flight, project delays, and price competition. Public institutions often struggle to translate legislation into citizen-centric strategies and actions while dealing with entities on the verge of collapse. Professional service providers are often used to respond to these challenges at high cost, with their ability to add sustainable developmental value hampered by these impacts.

2. Politics

Geopolitical conflicts, political unrest, riots, strikes, and disruptive events create a climate of uncertainty, with coalition national and provincial governments adding another layer of unpredictability, volatility, and policy uncertainty. This could impact medium-term development planning and hinder realisation of the NDP Vision 2030. Sector entities tainted by fraud and corruption during the years of state capture may find it difficult to participate credibly in new coalition structures. Strategic use of key offerings by the sector (e.g. political contingency and research) will free up resources in organisations to focus on delivery of their core mandates and result in greater efficiencies in terms of skilled resources across the economy.

3. Economy

Government must develop and support small enterprises to create employment and significantly drive output growth. The sector lags other developing nations, requiring Government to create enabling conditions for small businesses to thrive, including reduced red tape, an entrepreneurial culture, and supporting informal businesses to formalise and build their asset bases. Highly skilled resources are still available to the economy but may not be employed by sector firms. Finding innovative ways to leverage these professionals will alleviate the skills shortages and cash constraints preventing the appointment of permanent inhouse resources. Large companies dominate productive sectors – interventions are needed to incorporate capable small businesses in the supply chains of large firms, particularly in the emerging sectors such as renewable energy, cannabis, and information technology. Appropriate operating models are needed to leverage SA's competitive advantage in key sectors and rebuild capabilities to export.

4. Social Security

Semigration (people migrating from one province to another seeking a better quality of life) together with the influx of migrants from other countries continues to place a strain on the economies, infrastructure and service delivery of provinces seen to offer better opportunities, like Gauteng and the Western Cape. This leads to misaligned perceptions of wealth creation (as revenue may not be earned in the same location as where it is physically delivered), which could disrupt economic activity unexpectedly. Leveraging 'knowledge' workers more effectively through enabling technology may also support professional skills development in the sector.

5. Rule of Law

Many entities face internal and external prevalence of fraud and corruption, often coordinated between each other and with clients. One of the most notable manifestations is the construction mafias, which affect the delivery of infrastructure, and crime syndicates causing dysfunction in the rail and energy sectors where use of the sector's services are high. Service delivery protests damage/destroy much needed social infrastructure, and theft of assets directly impact service delivery. Resources are thus directed at fraud and corruption prevention, costly investigations, and security measures to protect infrastructure, assets, and people as opposed to professional services that will ensure long-term sustainability. The resource base for service provision is thus eroded, directly affecting those in need of the services, particularly, the poor and underserved communities. Opportunities exist for sector entities to contribute to a more transparent and efficient business environment by developing strategies, data analytics tools, capacity building, and support of oversight bodies.

6. Water

Slow implementation of large water supply projects such as the Lesotho Highlands Project Phase II has set water supply, particularly, in Gauteng, back by 10 years. Highly skilled sector professionals that are able to operate in the SA context often move to countries or regions where their skills can be utilised more profitably. Silo approaches to water reliant infrastructure development projects have had a knock-on impact so that there is a general scarcity of these skills available in South Africa.

7. Energy

Loadshedding is costing the economy billions, and the private sector has responded through mass installations of off-grid solutions. Government continues to lag, and service delivery continues to be affected by power outages. The Energy Action Plan is in place, requiring concerted effort for rapid implementation. The Ministry of Electricity seems to have had a positive effect on loadshedding, however, its continued existence is unknown. The sector itself (through use of remote work technology) is often better able to adjust than its clients, which lead to delayed project delivery and cost overruns.

8. Logistics

Logistical failures continue to hamper economic development and growth, with agriculture, mining and manufacturing particularly hard hit. For professional services firms with clients heavily reliant on a functioning supply chain, the impact is even higher. Investments in ports and the transport network require that those SOEs responsible for these activities be fixed. The sector must deal with ongoing project delays, cost overruns, and client reputation damage, exacerbated by global trade issues, natural disasters, and technological disruptions. Understanding clients' supply chains, conducting scenario planning, and exploring technology solutions may mitigate the immediate risk while long-term supply chain mapping, advocating for infrastructure development, and promoting international trade efficiency is needed. For construction services (i.e. architects, quantity surveyors, and engineering professionals) the impact is higher due to reliance on materials and equipment delivery.

9. Food Security

Food shortages will impact the sector through the impact on its workforce and the rest of society (including sector clients). Opportunities exist for large companies to support communities with food production while Government must address challenges around access to land and productive agricultural resources and capabilities.

10. Climate Change

More frequent extreme weather events, rising temperatures, and environmental degradation must compel Government to implement climate mitigation and adaptation plans. The Just Transition Plan includes all of society, but needs leadership to ensure its implementation and coordination with clear roles and responsibilities delegated to the public institutions with the capabilities in weather monitoring, emergency preparedness, regulatory compliance, infrastructure, etc. There is significant opportunity for the sector to contribute to solutions for climate and just transition related risks. The sector should increase skills in business continuity management (climate change response and adaptation), sustainability (climate change mitigation), just transition, and decarbonisation consulting to support high demand in the coming years.

11. Technology

Cybersecurity risks have become more pronounced, placing at risk the ability of sector entities to deliver uninterrupted services. Data breaches, reputational damage, operational disruptions, and even job displacement due to automation and AI are all potential consequences. As more cyber incidents are recorded across various sectors, firms need to adapt by upskilling their workforce, leveraging AI for innovative security solutions, and continuously investing in cybersecurity measures. Robust cybersecurity measures to safeguard sensitive information and maintain stakeholders' trust are increasingly costly and not always effective. Business continuity and disaster management plans require specialised skills and resource allocations. The rapid uptake of AI is reducing the dependence on professional services but brings with it additional risks created by unethical use of AI, the uptake by criminals of AI increasing the level of cyber risk in all spheres of business in the sector. Embracing a culture of adaptation and positioning itself as a leader in technology utilisation will be crucial for navigating this complex landscape.

12. Skills

The sector struggles to attract and retain skilled professionals amidst large skills gaps and evolving social needs, impacting service delivery. This is exacerbated by the rise of remote work and fierce competition for talent in a global pool. The sector must also keep pace with evolving client needs amidst a landscape increasingly shaped by AI, ESG factors, and stricter regulations. Compounding the challenge are SA's unique demographic trends: an aging workforce and high youth unemployment. Building local capacity and addressing the uneven distribution of skills are crucial to overcoming this 'quadruple threat.' Recruitment processes, continuous learning and training, technology adoption and development efforts need strengthening. Building a high-performance culture and addressing productivity issues require collaboration between public and private sectors, and academia.

9.11 Public Service

MTHOBISI NTSHANGASE
ERM & BCM Intern
eThekwini Municipality

KATLEGO MAJOLA
CRM Prof
Independent Risk Professional

RAVEN PILLAY
Deputy Director ERM
Dept of Science & Innovation

D'SHORNE HUMAN
Group Chief Financial Officer
SAFCOL

Ranking of Risk Impacts on Sector

Functional State	1
Politics	2
Economy	3
Social Security	5
Rule of Law	4
Water	7
Energy	6
Logistics	12
Food Security	11
Climate	9
Technology	10
Skills	8

1. Functional State

Public sector entities are directly owned by Government, with a result that State dysfunctionality affects them through shareholding decisions that may reflect such dysfunctionality. Changes in Government send ripples through the sector where alignment to national strategy and priorities informs entities' objectives. Most of the sector, even with guidance from the State, demonstrates limited resilience to navigate uncharted waters and appear to be rife with governance failures. It is imperative that adequate skills and experience are embedded to enable the sector to be run on similar principles to the private sector. Governance failures and poor service delivery directly affect the State's ability to function effectively, impacting everything from healthcare and education to security. The failure of Government or coalition governments to effectively collaborate or prioritise national interests can lead to a dysfunctional State. This in turn can worsen critical issues like unemployment, and the water and electricity crises.

2. Politics

Changes in national policy, whether arising from coalition politics or not, has the possibility of moving public sector goalposts. If this change has little alignment to the previous policy, it can easily result in a loss of strategic direction and in some cases even undoing good work or progress. State-owned companies should start to be weaned off national policy as far as it is practically possible. By incorporating best practice business principles, implemented by a competent and experienced workforce, the direction of these entities should remain on course with less exposure to political volatility. The complexity of coalition politics, especially in an election year can lead to unstable governance structures. This instability can hinder both domestic and international confidence, affecting foreign investment and international relations.

3. Economy

Economic decline could severely damage the market for State-owned entities' products and services, affecting their ability to continue operating as going concerns. Mitigating this risk include adequate diversification into export markets to hedge against downturns in the SA economy and currency. In the public sector, the focus is traditionally more on domestic activity and creating value nationally, than to use SA as a springboard into Africa. Expansion into SADC is the easiest, but a global reach could be more beneficial to weather economic storms in the interest of citizens. Despite current challenges, SA has the biggest economy in Africa characterised by having the continent's highest GDP. Governance failures and poor service delivery impacts are detrimental as they create an unstable business environment, discourage foreign investment and reduce economic growth. Service delivery failures, such as those seen in the ongoing struggles with electricity and water infrastructure directly impact economic productivity and reduce the quality of life eroding the economic stability essential for economic development.

4. Social Security

The high unemployment rate dovetails into inequality and adversely impacts quality of life for unemployed and employed alike. This often manifests as social unrest which exacerbates conditions in an already fragile society. The resultant increased risk of vandalism could be fatal for some State-owned entities with limited capital available to rebuild. The intentional development of small businesses must be accelerated and barriers to entry removed to stimulate growth, thereby fostering ownership in the local economy through incubation and entrepreneurship. High unemployment and inequality can directly threaten social stability and quality of life. High unemployment, especially among the youth, fosters social unrest and crime. From a public sector perspective, addressing these issues involves investing in education and training to equip citizens with the skills needed in a developing economy and improving labour market policies to ensure they support economic development.

5. Rule of Law

In some entities corruption is pervasive to the culture. These illicit activities could drain the sector of its already-depleted resources to a point where collapse is probable without further bailouts. This undermines investor confidence to the extent that foreign direct investments may all but disappear. Zero tolerance should be unwavering, and justice should be swift and severe. Internally, entities should improve awareness of the impact of crime and the avenues available to whistleblowers. Persistent crime affects all levels of government, business and society reducing SA's ability to address other risks like economic instability and service delivery.

6. Water

Despite having been flagged many years ago as the next infrastructure collapse after electricity and rail, SA is approaching such collapse. No access to water would fuel unrest and instability at the expense of business and society. Water infrastructure maintenance and improvement should be prioritised, and appropriate deregulation explored. Addressing the water crisis from a public sector perspective is urgent as it often has a more severe impact than the electricity crisis. Water supply and infrastructure challenges threaten food security, economic activity and sanitation. Given the increasing frequency of droughts and floods due to climate change, the public sector must enhance its emergency response strategies. This includes improving early warning systems, creating additional water reserves and planning for emergency water distribution to ensure that the most vulnerable have access to water during crises. The public sector needs to develop and enforce policies that reduce water wastage. Additionally, introducing incentives for water-saving technologies and practices can improve water efficiency across sectors.

7. Energy

Loadshedding adds significantly to losses in public sector manufacturing. Unreliable energy supply stifles industrial growth and consequently the tax base and the greater economy. SMMEs are likely to close their doors first due to lower liquidity buffers to absorb these losses. This is the exact opposite of how and where the economy should be growing. With the tax breaks available in the Income Tax Act, decentralisation of power generation is moving in the right direction to mitigate the risk of a national grid failure. Even in the public sector the answer may lie in securing independent energy supply. SA's struggle with energy supply, notably its dependency on Eskom and frequent power outages poses significant risks to all sectors of the economy. Investment in infrastructure and diversification of energy sources are essential to mitigate these risks and ensure the stability of the grid.

8. Logistics

The collapse of the rail infrastructure makes SA less competitive globally and less attractive to exporters due to increased costs of inefficient transport to harbours. The risk that, barring a few commodities, exports may dry up could deprive SA of the foreign trade and currency needed to compete globally. SA must streamline and improve its infrastructure network to offer competitive solutions to reliably service export customers globally, through public-private partnerships if needed. Efficient logistics and supply chains are vital for economic stability and access to goods. Disruptions in these areas can have immediate effects on daily life and long-term impacts on economic recovery and growth.

9. Food Security

While food insecurity might not have a direct financial impact initially, social unrest, health problems, and population displacement caused by food shortages can have significant indirect costs for the public sector. The public sector plays a critical role in shaping food security through policies and programs, which require a comprehensive national food security strategy. Government should increase investment in initiatives that promote sustainable food production and access to affordable food and collaborate with private sector, civil society, and farmers' organisations to strengthen the food system.

10. Climate Change

The existential risks associated with climate change and extreme weather pose a global threat. The more near-term cost impacts of these events culminate quickly and disrupt supply chains, adding to existing economic challenges. If business and the public sector is to remain competitive, the drive for initiatives like Just Energy Transition and real sustainability over the long term should be prioritised.

11. Technology

AI offers vast opportunities for the country for innovation and growth. The public sector must facilitate the expansion of broadband access, improve digital literacy, and build advanced computing resources to support AI development and deployment across the economy. As reliance on AI and digital technologies increases, so does vulnerability to cyber-attacks. AI systems can be targets for malicious attacks that manipulate or compromise their functionality. Furthermore, the public sector faces challenges due to legacy technology systems and a potential lack of skilled personnel to manage complex technologies. SA's readiness to manage these risks while harnessing the benefits of AI is critical. The public sector can ensure it utilises technology to improve service delivery, enhance efficiency, and drive innovation for the benefit of all citizens by modernising infrastructure, building a skilled workforce, and developing comprehensive AI strategies to address opportunities and risks.

12. Skills

Government departments drove the national job creation agenda by inflating workforces in the sector, leading to unsustainable wage bills. The risk for the sector is not so much the availability of human resources or even educated employees, the challenge lies in finding resources with the requisite skills, experience, work ethic, and integrity to enable SOEs. It transcends qualifications and speaks to aspects of culture and dedication. The public sector should seek to retain and reward quality employees. A cross-pollination from the private sector could also assist in driving the appropriate culture and bring in much needed expertise. The lack of skilled labour and effective education systems can limit economic growth and innovation. To prevent the emigration of skilled professionals, the public sector must ensure that there are attractive job opportunities within the country for all its citizens. With respect to AI, the public sector must lead in reforming educational systems and workforce training programs to prepare citizens for future jobs.

9.12 Sport and Recreation

DANIELLE VAN DEN BERG
Primary Education Student
ECD Tutor

JANIE MARAIS
HR, Compliance, Risk Manager
Titans Cricket

PROF. JACQUES FAUL
Chief Executive Officer
Titans Cricket

Ranking of Risk Impacts on Sector

Functional State	1
Politics	3
Economy	2
Social Security	6
Rule of Law	5
Water	8
Energy	4
Logistics	11
Food Security	12
Climate	7
Technology	10
Skills	9

1. Functional State

Challenges around an ineffective Government system, structures and frameworks, poor service delivery, and a lack of transparent practices significantly impact the sector. Fiscal misappropriation and malfeasance in sports entities result in a decline in public confidence and ultimately hamper the sector's evolution. Service delivery deficiencies, typified by inadequate infrastructure and security measures, hamper much-needed investments, impacting the hosting of sporting events. These deter the expansion of competitive viability and underscore the need for overarching systemic reforms and strategic investments for sustainable growth. Local governments inability to maintain the sporting facilities that they own dramatically affects sports on community level and may impact stadiums hosting national and international events.

2. Politics

Inefficiencies in national policies related to sports governance, infrastructure development and funding allocation could directly impact resource availability and the trajectory of the sector. Changes in Government structures may result in altering decision-making processes and uncertainty in the allocation of resources, which could impact long-term planning and stability of the sector. This could further impact SA's involvement in international competitions. Inadequate funding and poor infrastructure can compromise the country's ability to train elite athletes and host international events, diminishing its competitive edge on the global stage. Geopolitics and international relations would also affect foreign investments and collaboration opportunities. Such factors institute several complexities and uncertainties, which require adaptive strategies and robust risk management practices in the sector.

3. Economy

Economic decline impacts the sector through tapering of sports program funding, reduced consumer spending on sports-related events and activities, and the withdrawal of sponsorships. The weak Rand challenges the retention of top SA athletes and hosting of international events that have a Rand-based income. SA also has a crucial role in attracting international events and investments into Africa. Economic turmoil could result in declining international interest in hosting events in SA. This means that the revenue streams and opportunities for growth in the sector are limited. An economic downturn could also negatively affect grassroots sports development, as funding for community and youth programs is typically the first to be reduced. This hinders the country's long-term growth and talent pipelines in sport. As a result, revenue streams and growth opportunities in the sector are significantly restricted, affecting entities from local clubs to national sports federations.

4. Social Security

As a result of social security issues like crime and violence, people are often discouraged from attending sports events or participating in sports activities. This affects spectatorship and impacts grassroots development. Moreover, low quality of life, caused by inadequate healthcare and education, especially in marginalised communities, causes restricted access to sports facilities and opportunities. High unemployment and inequality rates often exacerbate disparities in access to resources and sports participation, impacting potential fan base growth and talent development. Such interrelated socioeconomic challenges pose significant risks to the inclusion, growth, and sustainability of the sector. High unemployment results in many people not having access to participation in sports, especially sporting codes that need significant investment by the individual.

5. Rule of Law

Fraud and corruption pose significant risks, hamper investments and tarnish public trust. Fraud in Government and Industry negatively impacts sports development due to decreased funding programs. Illicit activities, such as illegal betting, doping, and match-fixing, further impact the credibility of the sport and the reputation of the industry. Vandalism, violence, and crime further impose safety challenges for sports facilities, spectators, and athletes. Such general crimes negatively influence sports participation and event attendance. Robust governance frameworks, regulatory oversight and increased collaborative efforts between city role players, law enforcement, and sports organisations are required to safeguard the integrity and security of the sector. Top SA athletes may relocate abroad due to safety concerns. Sports tourism is negatively affected by the perception that SA is not safe to visit. Despite a weak SA currency, offering affordable training in SA for international teams is influenced by the perception that the country is unsafe. If the sporting code is seen as an extension of Government and the Government is viewed as not adhering to corporate governance principles, sponsors and investors may not invest in sport.

6. Water

A water crisis poses a significant risk to the sports industry in terms of venue operations and event planning. The maintenance of sports facilities, including irrigation systems for playing fields, could be significantly impacted by water scarcity, leading to deteriorating conditions. Such conditions could become significant safety hazards for athletes. The limitation of water restrictions will also compromise hygiene and sanitation during events, putting the health and well-being of participants and spectators in great danger. The economic ramifications of water shortages will further create unwanted and unexpected costs related to maintaining sports fields and increased water-intensive sports such as swimming pools. Organisations in the sector need to formulate proactive water management strategies to mitigate risks posed by the water crisis. Failure to develop conservation measures and alternative water sources would impact the sustainability and functionality of the sector.

7. Energy

Energy risks (including national grid failure) significantly impact venue operations, event logistics, and broadcasting. Power outages during events not only cause issues with ticketing systems and broadcasting failure but also lead to potential safety challenges for athletes and spectators. Furthermore, unreliable energy supply affects the quality of events as it impacts the fan experience through issues such as operating systems, lighting, cooling, and heating systems. Loss of power in terms of broadcasting live events results in loss of income to rights holders and sponsors. Contingency planning is required to mitigate such risks, although backup power systems often require further financial investments. Coordinating with energy authorities is critical to ensure resilience against power outages and failures. The renting of generators will increase the cost of sporting events. The supply and demand during stage 6 load shedding further increases cost and the risk of having generators available. The international visitor experience during sporting events is negatively impacted by loadshedding.

8. Logistics

8. Logistics

Risks associated with industry, logistics, and transport supply chain resilience can disrupt events, competitions, and operations. Profit and loss margins have substantially increased due to exponential increases in transportation costs. Furthermore, increased costs and event cancellations are linked to consequences associated with risks such as unreliable transportation networks and unexpected disruptions, including strikes and natural disasters. Moreover, port inefficiencies increase transport time and cost and the lead time to procure resources and equipment. It is already a financial burden due to the weak Rand, and the added lead time to import critical infrastructure from abroad does not help infrastructure development and maintenance. To mitigate these risks, key stakeholders must invest in contingency plans.

9. Food Security

There is no direct impact on the sports industry in terms of food security. However, an indirect risk associated with land and water could cause the sports industry to compete with agricultural needs. Socioeconomic impacts such as income and access to opportunities could intensify food insecurity. The sports industry could mitigate such risks by adopting sustainable practices. Collaborations between sports organisations and food security initiatives could promote awareness around food insecurity, social responsibility, and community development.

10. Climate Change

Weather can significantly impact the hosting of events, especially outdoor sporting events. Climate change, heat waves and severe storms could damage infrastructure and endanger athletes, participants, and spectators. The sports industry further contributes to carbon emissions through travel, event logistics, and venue operations, which contribute to climate change. Renewable energy use, carbon offsetting, and waste reduction initiatives are all mitigating actions that the sports industry could invest in.

11. Technology

The increase in data collection for player performance augmentation and fan engagement poses a significant risk to the sports industry as it introduces vulnerability in terms of data privacy and security breaches. Challenges associated with real-time interaction with live events further create an easy avenue for illegal betting during sporting events. Furthermore, the interconnected digital platforms and sports infrastructures increase the possibility of cyber-attacks. This could compromise sensitive data and disrupt operations. Such risks could be mitigated by conducting regular risk assessments and by prioritising cybersecurity measures by investing in a robust data protection framework.

12. Skills

Disparities in the SA educational system often create knowledge gaps, increasing a need for more expertise in critical areas. Skill shortages in the sports medical and management fields impact the industry's ability to compete nationally and globally. These challenges should be addressed by increasing efforts in talent development programs. Partnerships with educational institutions offering specialised courses are critical to the further development of athletes and administrators. To ensure competitiveness and sustainability, it would be crucial for Government support and private sector investments to provide skills development and further education to those in the sports industry. SA sporting codes have a strong transformation focus on all levels within the sporting organisation. It is of the utmost importance that those employed within the organisation must have a suitable skill set.

9.13 Tourism and Hospitality

SHEENA O'BRIEN-TERLUNEN
CRM Prac
Group Risk Manager
Sun International

RITESH NARSAI
Chief Executive Officer
GRIPP Advisory

RYAN MARSDEN
Owner: Rosewell Spa
Founder: Magalies
Development Initiative

Ranking of Risk Impacts on Sector

Functional State	3
Politics	6
Economy	1
Social Security	4
Rule of Law	7
Water	2
Energy	5
Logistics	9
Food Security	11
Climate	10
Technology	8
Skills	12

1. Functional State

Poor governance and service delivery failures directly impact the sector through reduced revenue, increased cost, and eroding margins. Resilience requires of sector entities to maintain own operations and infrastructure to provide quality services to customers. The sector collaborates with Government for better outcomes (e.g. investment in private sector-led initiatives and community-based tourism). As SA increasingly becomes a degraded State that is less and less attractive to international and local tourists, the sector lobbies locally and nationally for focused attention whilst operators are caught in a spiral of investing in privatised services to supplement the State's shortfalls. For smaller establishments, the cost of compliance and grading standards are comparatively high, which excludes them from growth opportunities and the ability to create employment.

2. Politics

Generally, geopolitics poses no immediate threat to the sector, although international travellers are impacted. SA's approach to international relations pose a greater risk to the harmonious relationships with countries that house major SA tourism markets. Instability and poor relations affect the predictable environment that the sector requires to thrive. Sector entities advocate for supportive policies, while diversifying source markets and investment sources in specific tourism regions. Political unrest, riots, strikes, disruptive events, and increased regulations affecting inbound tourism (e.g. visa requirements) create uncertainty, increase cost to do business, and reduce the attractiveness of SA as an international tourist destination. How SA deals with the 2024 election results will determine how long the sector will be subject to consumers' 'wait and see' approach.

3. Economy

The sector experiences significant headwinds during economic downturns as travel is mostly a discretionary expense. Prolonged economic instability causes reduced consumer spending, revenue generation, and profitability for entities that rely on local tourism. The weak Rand makes SA an attractive tourist destination for foreigners, but crime is a deterring factor. Focusing on cost optimisation, diversifying target markets, offering competitive pricing, and promoting value-added experiences to attract visitors during economic downturns will alleviate some of the impacts. Other African countries are becoming more attractive travel and trade routes and key access points into the African market. Businesses delay decisions on key investment projects, consumers alter travel patterns, corporates embrace virtual meetings, and businesses reduce travel costs to mitigate economic pressures. Continued emphasis placed on tourism indabas and marketing and branding initiatives remain important.

4. Social Security

Declining social security, poverty, unemployment, and social uprisings impact the average citizen, reduce consumer confidence and discretionary spend, and increase crime. Loss of tourism is instantaneous after such events in key tourist areas, impacting the sector through increased cost, reduced revenue and profitability, and ultimately increased unemployment. Private security, business interruption insurance covers, and business continuity and emergency procedures mitigate the risk to a limited extent (but often excessively expensive for smaller players). Apart from sound financial management and diversified source markets, the sector contributes to social development through job creation, enterprise and supplier development, and skills development. Well thought-through CSI investment creates social leveraging opportunities to develop communities and improve social security. Random and poorly integrated or unstructured CSI-funded projects, however, may disrupt social development and security. By investing responsibly in local communities and promoting responsible tourism, the sector addresses social challenges whilst enhancing its resilience.

5. Rule of Law

Crime results in increased cost, reputational damage, safety concerns, and declined attractiveness, which deter tourists and new development investment. Poor public infrastructure (roads and access to remote destinations) is vulnerable to illicit activity and opportunistic crime, while internal fraud and theft increase due to social-economic hardship. The sector prioritises staff training, security technologies, and collaboration with law enforcement agencies. Transparency, ethical business practices, and CSI mitigate the risk. In small towns, smaller establishments are compelled to integrate business development initiatives beyond hospitality to create social cohesion, conducive tourism environments, and sustainable communities.

6. Water

Water unavailability due to failing infrastructure or droughts significantly affects the sector, which is heavily water reliant. In addition pollution due to failing waste water management at key tourism destinations affects the attractiveness of establishments at these locations. SA's failure to plan and ensure access to clean water may lead to business interruptions and increased costs to procure water tankers. Sector players are forced to invest in water recycling (e.g. reverse osmosis plants, and grey water irrigation), alternative water sources (e.g. boreholes, and rainwater harvesting), and water-saving measures (e.g. low flow taps, water saving shower heads, and water wise plants in landscaping), where possible. Further innovative ways are needed to conserve water, and to collaborate with local communities and authorities to address water management challenges. These innovative programs increase the cost of doing business which cannot always be passed on to the consumer.

7. Energy

Frequent power outages disrupt operations and increase costs, as businesses invest in alternative energy and backup systems at significant expense (particularly in diesel consumption) which cannot be readily transferred to the consumer. These investments contribute toward sustainability and improved marketing capabilities, with a view to contribute back to the national grid in future.

8. Logistics

The sector relies on reliable transport and logistics nodes, services, and infrastructure to function, making it vulnerable to disruptions. Any compromise in the transport and travel system could halt operations. Although most operational goods and services can be locally procured, imported goods (e.g. electronics, chips, and generator spare parts) are often delayed due to geopolitical tensions and the failure of SAs ports. Many businesses stockpile spare parts and high demand goods in response. The sector diversifies transport options and collaborates with service providers and Government to improve resilience.

9. Food Security

The risk impacts the sector financially through price increases and inaccessibility but opens opportunities for experimentation with local cuisine and food systems, promoting culinary tourism experiences, and ensuring food safety standards. Collaboration with local farmers, food producers, and Government addresses food security challenges. Restriction of locally produced food and goods will reduce trading sustainability for food and drink establishments by affecting operating hours, temporary and/or permanent closures, with resultant unemployment consequences, and reduced revenue contribution to the national fiscus.

10. Climate Change

Climate change induced extreme weather deters tourists, and is catastrophic, particularly for smaller entities and those isolated or located in flood or drought prone areas. Hotels and restaurants suffer damage or restrictive access to property, or guests that are 'locked-in' during emergencies. Emergency preparedness and BCPs are essential to respond and recover (including partnering with local authorities and disaster management services). Transitioning to a low-carbon economy requires significant changes in the sector. Investors in larger entities increasingly focus on ESG and prioritise sustainable business solutions. Entities invest in mitigation and adaptation (e.g. greenhouse gas emission reduction and climate-resilience), which increase attractiveness as eco-friendly tourism destinations, and collaborate with local communities, environmental organisations, and Government.

11. Technology

Cyber security affects the sector as technology becomes more integrated into tourism operations, especially with regards to personal information breaches, ransom demands, POPIA non-compliance, business interruptions, financial losses, and reputation damage. AI is a significant opportunity, particularly for personalisation of the hospitality experience, but the risks are not yet understood sufficiently to implement ethically. The sector invests in costly employee training, internal control improvements, cybersecurity, innovative technologies, insurance (offering limited protection), and contingencies to mitigate the risk, while collaborating with technology providers, cyber experts, and Government agencies to enhance resilience.

12. Skills

The sector is attractive for first time employment seekers, relying heavily on lower skilled and labour-intensive resources, with operators upskilling staff. While not a major risk yet, attraction and retention of staff is a priority, and the labour market is increasingly competitive, particularly for highly specialised skills. The regular amendments to the Sectoral Determination for the hospitality sector have direct implications for staff benefits at small hospitality businesses, especially affecting skills development in rural areas with limited access to external training opportunities. The sector invests in skills development and collaboration with educational institutions, vocational training centres, and government agencies to mitigate the risk. Economic growth and improving SA's attractiveness as a destination will unlock the sector's contribution to employment and social security.

9.14 Retail, Trade, and Commerce

ELCHONON GOLDFEIN
Finance and BI Intern
Purple Group

ANDRE HAVENGA
Group Risk and Audit Executive
Cashbuild

DR ARTHUR LINKE
Research Fellow
Stellenbosch Business School

PAVANA RANJITH
CRM Prof
Director
RQ Institute

Ranking of Risk Impacts on Sector

Functional State	2	Energy	4
Politics	7	Logistics	3
Economy	1	Food Security	11
Social Security	6	Climate	12
Rule of Law	8	Technology	9
Water	10	Skills	5

1. Functional State

Service delivery failures and a lack of the rule of law make retailers constant targets, with spiralling response costs exacerbated by socio-economic woes. Supply chains rely on well-functioning, secure logistics and infrastructure. Providing uninterrupted goods and services while investing in security, water recycling, and alternative energy from production to shelf, increase costs to consumers and the economy. Food security, safety, and hygiene specifically affect operational, financial, and consumer behaviour leading to stock level misalignments and wastage. The mood, wellbeing and welfare of consumers depend on basic services, failing which their ability to work, generate income, and consume reduce, which in turn constrains retail profits. This increases competition in the sector excessively to an unhealthy state (by reducing quality of products and service delivery in order to survive as opposed to maintaining sustainable profits with integrity).

2. Politics

Most sector players are invested in international markets or source from them, which impacts local supply chains. Geopolitical tensions, unrest, strikes, and coalition politics create uncertainty. As a key growth opportunity, increased African regulatory requirements need continued focus. Instability caused by well-designed but poorly executed policy, inefficiencies, and international relations breeding poor investor confidence, hampers international supply chains, affecting the ability to trade for the best products at lowest costs with dependable supply – all of which require international investment. Retailers respond by building strong local supply bases, and increasing security, insurance, and continuity.

3. Economy

During economic hardship, crime and supply vulnerabilities increase, and long-term retail sustainability prospects suffer. Retailers are further affected by increased rental, municipal services, supply, security, legislative, and infrastructure maintenance costs which cannot be recovered fully from an already constrained consumer base. Due to eroded investor confidence, market volatility, rising costs, inflation, and interest rate fluctuations, businesses delay major decisions, and consumers alter spend behaviour. Retailers adapt to manage the impact on staff, optimise the value chain, reduce cost, manage cash flows, modernise through technology, and develop innovative products and services, while addressing customer and investor concerns to maintain trust.

4. Social Security

Robust consumer spending is the cornerstone of the sector, which is also a primary employer with significant effort to skill resources to meet demand. Lack of consumer spending power is a direct consequence of poor social security, quality of life, unemployment and inequality and breeds general dissatisfaction which leads to unrest, destruction, violence, damage of already poor infrastructure, thereby disrupting the ability to trade consistently, safely, and securely. Preventing losses incurred through domestic violence and unrest, and investment in reactive repairs and maintenance increase cost, which is not covered by increased sales, but by stricter cost management, reduced product quality, and increased unemployment (i.e. do more work with less people). This domino effect continues with poor service delivery by an overworked and poorly paid workforce. These challenges cannot be overcome by increased investment and reduced profitability within the sector alone.

5. Rule of Law

Crime is pervasive and ultimately increase costs for the consumer, thus compounding other socio-economic woes. Robberies, burglaries, and shrinkage impact store security, while fraud and corruption require resources to build a risk culture that includes anti-bribery and -corruption policies and processes, staff awareness, and consequence management. Shrinkage can only be curtailed through strengthened internal controls to safeguard receipt, storage, display, sale, and distribution of stock (such as monitoring, verification, spot checks, auditing, and discipline). Planned or opportunistic robberies threaten the safety of staff and customers, increase fear amongst consumers, reduce the shopping experience, and affect spend patterns. This must be managed through reducing the economic benefit to be derived by perpetrators through reducing access to cash and safeguarding high value movable items at high cost. Burglaries occurring after hours are mitigated by increased physical preventative security measures and timely reactive response to events.

6. Water

Deteriorating water infrastructure forces the sector to build alternate infrastructure to ensure adequate water supply along the value chain. Water is required to meet production, sanitary, and hygiene requirements, with some sub-sectors such as beverage and produce most strongly impacted. The concept of 'eco-co-opetition' allows for water infrastructure solutions to be shared within the sector and reduce consumption in support of the SDGs.

7. Energy

Energy issues impact operations, points of sale, security, lighting, temperature-controlled storage, changing consumer behaviour, and ultimately increase cost, compounding socio-economic risks for historically disadvantaged communities. This includes the costs of maintenance of generators, diesel costs (further exacerbated by rising diesel costs), equipment failures, and increased insurance claims due to loss of fresh produce. Opportunities include modernising energy infrastructure to produce green solutions, with larger scale distribution centres developing self-sufficient solar capacity. Food security is a key risk as a direct consequence of a potential national grid failure and requires a deliberate and coordinated plan. Energy back-up or standard supply replacement solutions come at a high cost which cannot be transferred in full to consumers, eroding margins and often lead to the demise of low turnover retailers. Retailers refrain from investment in national grid failure recovery as the cost is economically not viable, and the risk should be transferred to Government. Mitigating the risk of frequent energy supply disruptions should however be managed optimally at a level that enables profitable business continuity.

8. Logistics

Hijackings, crime syndicates, deteriorating roads, and safety threats impact supply chains. Global issues impact the import and export of goods on which the sector depends. Port delays and congestion, rising shipping costs and delays impact raw material availability and products into stores, with seasonal product delays resulting in unrecoverable financial loss. Mitigation includes investment in local suppliers. Alternative transport solutions are extremely limited, and require improved logistics planning and execution to retain, and where possible reduce cost (or minimise cost increases). Opportunities include modernisation and utilising technology to optimise the flow of goods.

9. Food Security

Significant inflation in the cost of staple goods in recent years drives other socio-economic risks. Retailers partner with food suppliers and insurers to promote long-term financial viability of the value chain. Availability of quality raw materials, increasing risk of diseases, operational costs of production, and infrastructure failures all impact food production and availability. Food security is also impacted by rising socio-political risk (access and availability challenges due to riots, logistics disruptions). The sector invests heavily against disruptions and to ensure that products meet safety and hygiene requirements. Lack of food increases the risk of theft, shrinkage, and overall poor customer service delivery, which is alleviated by proper working conditions and consistent work environments which enable staff to maintain decent living standards.

10. Climate Change

Climate change and extreme weather events hamper production, trading conditions, and sales amongst other operational challenges, with more informed investors and society demanding transparency on ESG and SDGs across the retail value chain. Mitigation includes sustainability initiatives, regulatory compliance, communication, appropriate procurement, stock management, and supply chain optimisation. Decarbonisation and just transition affect business viability and sustainability with continuous but realistic improvement expectations remaining high priority.

11. Technology

The sector depends on technology, which brings challenges and opportunities for competitive advantage to the value chain. Storing critical consumer data and many points of sale leave the sector vulnerable to cyber risk, resulting in compromised data, unauthorised disclosure, operational disruptions, financial losses and reputational damage. Evolving consumer behaviour requires accelerated online capabilities and a seamless customer experience across multiple channels. The sector has accelerated digital/data analytics, AI capabilities, and technology architecture support to meet customer demands. Mitigation of the risk requires prevention and detection measures at manageable cost with appropriate insurance coverage to fund recovery and damages. Leveraging technology opportunities requires research and investment to capitalise on attracting and serving customers better and beat competitors.

12. Skills

Retail human resources are a cornerstone of the economy, and their wellbeing addresses numerous socio-economic risks. An unengaged and ineffective workforce is the cause of the most underestimated risk in the SA economy. Retailers must attract and retain skilled resources, from artisans working with food products, to experts in supply chain and financial management with the right attitudes and aptitudes. Securing skilled workers in rapidly globalised economy, exacerbated by poor education outcomes, and the ease of 'semigration'. The sector invests heavily to train and upskill resources, provide positive work environments, foster learning and innovation, emphasise product knowledge, and customer facing service delivery skills, to increase end user satisfaction (which increases sales and profitability).

9.15 Transport and Logistics

SBUSISO DLAMINI
Independent Risk Analyst

PRISCILLA MATETA
Independent Risk Specialist
Transport and Logistics

COBUS ROSSOUW
Independent Logistics Advisor

Ranking of Risk Impacts on Sector

Functional State	1	Energy	4
Politics	10	Logistics	12
Economy	3	Food Security	11
Social Security	7	Climate	8
Rule of Law	6	Technology	5
Water	9	Skills	2

1. Functional State

Transport infrastructure is crucial for a functional SA economy, as a large portion of people and product movement depend on State monopolised port, rail, or pipeline services. Poorly maintained infrastructure causes increased costs, delivery delays, and inefficiencies and inadequate maintenance results in congestion, accidents, and disrupted supply chains. Insufficient modernisation and technological advancement hinder the sector's ability to keep up with growing demand, e.g. outdated traffic management systems lead to traffic jams and inefficient cargo handling. Alternative air, road transport and ports used in lieu of reliable public services are not sustainable in the long-term. Private entities support SOEs to become more customer-centric and cost-competitive in new PPP models freed from corruption. Diversified supply chains (for raw materials, components, and finished goods), supported by collaborative communication channels, spread risk across various suppliers and locations and reduce dependencies, especially in areas of political instability or erratic weather that can disrupt supply chains.

2. Politics

Political uncertainties influence trade volumes and flows in import and export logistics. Sector adaptation is limited by inadequate investment. Policies related to sustainable transport practices, infrastructure development, trade regulations, taxation, and investment incentives (in road, rail, air, and port infrastructure) can improve the efficiency and cost-effectiveness of transport networks. In coalition governments, decision-making can cause delays or policy implementation changes affecting infrastructure projects and trade agreements. Disharmonised international relations affecting bilateral or multilateral agreements can hamper cross-border movement through inconsistent customs procedures. Geopolitical tensions and sanctions can disrupt supply chains, necessitate rerouting to avoid high-risk/conflict areas, and impact the flow of goods through key transportation hubs. National policies should prioritise risk assessment, regulatory frameworks, investment in resilience, and PPPs. Coalition politics should focus on speedy decision-making, cross-border cooperation, and policy coordination. Diplomacy, multilateral agreements, and cooperation should primarily aim to resolve geopolitical impacts.

3. Economy

Economic challenges adversely impact international trade, and local and international customers. Supply chain disruptions, inventory buildups, production slowdowns, increased costs, lost revenue, job losses, and bankruptcies can limit access to markets, countries, and regions, and severely harm the economy. Challenges in the sector contributed to SA having lost its status as main gateway into Africa, which will continue to affect foreign earnings for African countries relying on primary commodity exports, reducing spend on development areas (e.g. healthcare, education) and foreign investment. Economic challenges (e.g. high inflation, currency fluctuations) affect prices of goods and services, lead to altering spend pattens and affect the earnings of sector players. The sector must implement advanced technology, improve payment systems, diversify supply chains, and explore alternative trade routes to avoid bottlenecks, improve efficiencies, and reduce costs. Automated stacking cranes and real-time tracking systems can streamline operations and reduce manual labour. Digitalisation of documentation processes can reduce paperwork and speed up customs clearance. Collaboration between governments, private players, international organisations (such as UNCTAD), and PPPs can finance infrastructure projects to resolve common challenges. Resilience measures (e.g. stockpiling, redundant capacity) can mitigate disruptions caused by economic decline.

4. Social Security

Thousands of employees (and their extended families) are subjected to domestic realities, with increased pressure on their employers in the sector. Although the sector has traditionally paid attractive wages, increasing costs and decreasing productivity pressure wages and employment. The sector actively drives economic transformation, but structural deterioration (e.g. unemployment, underemployment, low wages, fragile contracts, erosion of worker rights) remains problematic and ultimately leads to reduced buying power impacting the demand of goods to be transported, with an adverse ripple impact on sustainable employment in the sector.

5. Rule of Law

Crime is prevalent in the sector and impacts it severely, including services provided to its customers. Vandalism, cargo theft (during transport and when in storage), cybercrime, invoice fraud, corruption, bribery, kickbacks, embezzlement, and organised syndicates targeting logistics hubs and routes result in increased costs, financial losses, reputation damage, legal consequences, and operational disruptions. Vandalism of vehicles or facilities disrupt operations and incur repair costs. Cybercrime targeting systems or databases compromise sensitive information leading to data breaches or operational disruptions. The sector invests heavily in physical security measures such as surveillance systems, secure parking facilities for trucks carrying valuable cargo, cybersecurity protocols to safeguard digital assets, and employee training on security awareness practices.

6. Water

Escalating water shortages caused by drought and poorly maintained infrastructure impact operational efficiencies and infrastructure projects negatively, with sector employees severely affected. Where sector operations are dependent on water supply, own infrastructure and services have been established at increased cost, while alternative water sources such as desalination and boreholes are being pursued. Water awareness programs (for use and conservation) may have some benefits.

7. Energy

The sector is resilient against the energy crises to date but will have real difficulty to cope with a grid failure, which will impact storage of most products, especially perishables. Transport will be less affected unless diesel supply is restricted. Alternative energies (being introduced) are likely to take many years to become adequate. Ongoing electricity challenges and rising fuel costs impact operational cost and threaten the sector's ability to move freight safely and reliably while further exposing the sector to continuing theft of assets.

8. Logistics

Prevailing theft and infrastructure vandalism compromise the sector's service continuity and require partnerships with other State organs and communities to resolve. In addition, contingency plans must address natural disasters, cyber-attacks, labour disputes, and political instability. Such plans should include alternative routes or modes (e.g. air versus sea), backup power supplies for data centres and warehouses, emergency communication protocols for employees and customers, and procedures for handling customer complaints or refunds.

9. Food Security

Food Security has no direct impact on the Transport and Logistics Sector (apart from the logical employee wellbeing impact, which will disrupt the sector, if severe), but the sector has a direct impact on national food security, should it fail.

10. Climate Change

A major emitter, the sector has made significant technological advances towards carbon efficiencies. Insufficient implementation leaves the sector exposed, as carbon taxes driving decarbonisation and just transition will impact potential regulatory action and trade flows, while extreme weather events will increasingly cause interruptions, especially in context of social equity and inclusivity. Sustainable transport modes (e.g. rail, waterways, electric vehicles, biofuels, renewable energy sources, cycling, and walking) can reduce emissions, while climate smart practices can improve responsiveness to disruptions caused by extreme weather. Collaboration among governments, businesses, communities, and civil society organisations must address environmental sustainability and social equity concerns.

11. Technology

Technology (AI, blockchain, IoT, Digital Twins, Machine Learning) revolutionises the sector through higher efficiencies, optimised routes, predictive vehicle maintenance, real-time shipment tracking, autonomous vehicles, improved safety, and reduced costs. Risks are managed by advancing cybersecurity and continuity practices with a focus on leveraging opportunities. AI analyse vast amounts of data to predict demand and traffic patterns, automate processes, optimise delivery routes, and reduce fuel consumption. Blockchain improves transparency by securely recording transactions and tracking goods. IoT devices enable real-time asset and inventory monitoring, and predictive vehicle maintenance. Autonomous vehicles disrupt traditional transport models through cost-effective freight solutions. Some players leverage technology to match shippers with carriers, reduce empty miles, and optimise trucking operations. The sector is vulnerable to cyber threats (e.g. ransomware attacks, data breaches) as it relies on interconnected systems and digital platforms. It needs robust measures (e.g. encryption protocols, network monitoring tools, employee training programs, cybersecurity audits, incident response plans, and investment in advanced security technologies like cloud-based data storage and recovery) to safeguard against cyber risks.

12. Skills

The sector depends on knowledge workers. The failed education system and inefficient skills development regime pose major risks for competitive transport, warehousing, and other logistics services, impacting everything from strategic decision-making, operational efficiency, problem solving, adapting to change, to meeting customer demand. Adequate fleet management resources and well-maintained vehicles are essential for timely deliveries. Properly equipped warehouses with efficient storage systems contribute to streamlined inventory management and faster order fulfilment. Advanced technology solutions (e.g. GPS tracking, inventory management software, and route optimisers) enhance efficiency and visibility across supply chains. Experienced supply chain management professionals optimise processes, reduce costs, and improve supply chain performance. Skilled logistics coordinators manage complex logistics networks, coordinate shipments, and resolve logistical challenges. With increasing digitisation of logistics processes, employees with tech-savvy skills must leverage digital tools. The sector develops skills despite institutional constraints through ongoing education programs on areas like managerial leadership, international trade regulations, warehouse management, industry practices, and technological advances to equip its workforce.

9.16 Non-Profit Entities

CAY-LOW MBEDZI
Brand Manager
EasyEquities

SIMILE NDLOVU
Board Chair
OUTA

WAYNE DUVENAGE
Chief Executive Officer
OUTA

STEFANIE FICK
Executive Director
OUTA

KERRY DE JONGE
HR Executive
OUTA

LIEZL GROENEWALD
Chief Executive Officer
The Ethics Institute

RIANNE POTGIETER
Chief Executive Officer
Compliance Institute SA

Ranking of Risk Impacts on Sector

Functional State	1
Politics	2
Economy	4
Social Security	6
Rule of Law	3
Water	5

Energy	7
Logistics	9
Food Security	10
Climate	11
Technology	12
Skills	8

1. Functional State

The sector's survival (especially NGOs relying on State grants) and its contribution to service delivery is intrinsically linked to a functional State. Where the State fails, the sector meets unmet social demands. Bureaucratic hurdles, delayed decisions, and inadequate transparency and accountability hinder the sector's ability to engage the State, mobilise support, engage volunteers, and attract partnerships. State failures cause mismanaged public resources, corruption, and less transparency. Consequently, limited local and international funding is available, limiting the sector in carrying out initiatives, and delivering its mandate. Where the State functions sufficiently, there is a change in focus by the sector to address new unmet needs. The dichotomy of this is that a failed state indicates economic woes and donors' hesitancy to fund the sector. The sector must remain informed on new trends, disseminate information publicly and engage directly with the State to address shortcomings.

2. Politics

Frameworks like the NDP aim to resolve socio-economic-political issues and align SA with similar international goals (e.g. the SDGs). Global dynamics impact their success, causing local policy implementation failure. National policy changes create opportunities or impose restrictions for the sector, who may advocate for its constituents' interests during policymaking (including aligning with foreign counterparts to amplify impacts on transnational issues like climate change, human rights violations, and global health crises). Geopolitical tensions, SA's stance on these, and changing foreign politics impact funding priorities, the building of an ethical society, and alleviation of social ills. SA's internal political landscape has similar geopolitical fault lines that shift in line with global trends, evident in the diversity of political parties' stances on international matters. Further uncertainty and instability follow in the absence of experience in coalition politics. Dysfunction, political gridlock, or policy confusion cause reduced international funding, bureaucratic hurdles, and legal non-compliance. While important to guard against being used as a vehicle for illicit activity, some policies impede NGOs' ability to hold the State accountable.

3. Economy

The sector relies mostly on voluntary income from donors and is affected by eroded investor confidence and market volatility. Unfavourable economic conditions, diminished project funding, and increased operational costs, threaten NGOS' financial sustainability. Potential clients may view NGOs' services as grudge purchases that are not essential to their business success. NGOs therefore must position services convincingly as essential investments for clients' bottom line. NGOs must reduce the economic impact on staff, improve resilience (through mitigation and insurance coverage), and manage finances (e.g. healthy cash flow, diversified investors, crowd funding, recurring revenue streams, investments), while maintaining trust and stability.

4. Social Security

Domestic uncertainty limits discretionary spend and impacts NGOs' funding. Social factors impacting stakeholders must inform NGOs' adaptation of products, services, and marketing strategies. These include social values, attitudes to work, and wellness consciousness. Social insecurity, quality of life, inequality, and increased uncertainty around personal autonomy could cause low morale and productivity in NGOs, leading to disengagement, frustration, disillusionment, decreased job satisfaction, increased stress, and demotivation. Personal economic status greatly impacts charitable giving, usually guided by altruism or personal connection to the cause. Impeding individuals' ability to care for themselves makes them unlikely to provide for others. NGOs must align with the motivations of their donors, via communication and metrics, and devise new ways to meet their needs.

5. Rule of Law

SA's FATF grey listing highlighted the risk of NGOs being abused for financial irregularities. Endemic corruption creates risky operational environments for NGOs. NGOs must understand anti-money laundering legislation and assist society through preventive services and products, and rehabilitation of those tainted by corruption. Effective implementation of SA's comprehensive legal and regulatory framework often leaves room for error when attempting to address crime. Public sector corruption often does the most damage, as it takes from taxation, affecting service delivery. Unchallenged, corruption leaves citizens disenfranchised and at risk of various social woes. Mitigation includes challenging perpetrators in law, training on ethics, protecting whistleblowers, and promoting value-based leadership.

6. Water

Water interruption and scarcity impacts depend on NGOs offerings, but often exacerbates existing resource constraints. NGOs must prioritise solutions for long-term sustainability and resilience (e.g. capacity building, community-led approaches, and investments in water-efficient technology and infrastructure). In general, NGOs' donors feel the social and financial impact of water insecurity, which is passed down to the sector in reduced donations and volunteering. Mitigation includes legal challenges of the State failing in its duty to deliver, education on water security and cooperation with communities and officials.

7. Energy

Like water supply failures, electricity uncertainty is compounded by loadshedding. Sector entities must consider alternative energy sources for BCPs to be effective. Loadshedding and grid failure disrupt communication channels, affecting coordination with staff, partners, and beneficiaries. This impedes decision-making, hinders collaboration, delays dissemination of critical information, and raises operational costs to secure alternatives such as generators. NGOs must ensure that employees are sufficiently resourced to be available online when working from home during loadshedding.

8. Logistics

Efficient logistics and supply chains are key to the sector's success, as failure of one element can cause delays impacting costs, product viability, and storage. Increased costs overburden the financially constrained sector, and lead to massive, incremental increases on basic services and goods for its beneficiaries. Impact on the sector's constituencies could be lessened by providing necessities, diversifying sector players' supplier bases and legally challenging inefficiencies. Depending on the specific entity's offerings, the supply chain resilience enables NGOs to adapt to changes such as demand shifts, regulatory requirements, or environmental factors. Flexible supply chains allow NGOs to respond to evolving needs and challenges and ensure continuity.

9. Food Security

Many NGOs operate solely in this space and therefore any impact on food security would greatly impact their ability to serve their communities. Mitigation requires education on food waste and insecurity, supporting at-risk communities, and increasing advocacy and local and international activism.

10. Climate Change

The risk, as a social justice issue, is acutely felt by the most vulnerable in society via floods, heatwaves, food shortages, and rising sea levels which in turn result in displacement, increased poverty, and diseases – with tremendous pressure on entities in the sector. Environmental factors encompass the sector's impact on nature, its carbon footprint, waste management practices, and natural resource conservation. Due to its global scale, the risk is mitigated locally and internally by non-profits, depending on their size and reach. Mitigation includes internal and community education programs, collaboration with other partners, and providing platforms for those affected. NGOs must be cognitive of and inform their staff proactively of environmental hazards that could impact the safety of staff, their productivity and availability in operational locations.

11. Technology

New technology transforms the sector through enhanced efficiency, automating repetitive tasks, and enabling data-driven decision-making for improved productivity, innovative products and services, and competitive advantages. While offering benefits, technology introduces cyber risks. NGOs must adapt their technology infrastructure, security, and response strategies. A major risk is data privacy and use, as it affects the trust relationship between a donor and their chosen NGO to deliver on their word to carry out agreed upon services. Any suspicion of privacy or ethical concerns around personal data immediately breaks the trust and support would be discontinued. AI generated communication to donors must be carefully reviewed to prevent perceived manipulation or mistrust. Response includes investing in information security and ensuring compliance with information privacy laws. Staff and volunteers must be trained on appropriate procedures.

12. Skills

Resources challenges are persistent in the sector (especially affected by geographical location), and in the face of technology and geopolitical developments, often ill-equipped persons may become irrelevant. For many sector clients upskilling of their staff through NGOs (e.g. professional bodies) is non-essential, usually volunteer based, and subject to time donation. Mitigation includes social media enabled volunteer networks, remote working opportunities, and voluntary selection for project programs and timelines. The sector invests in education and staff development in an effort to maintain relevant skills, and supportive work environments that promote collaboration, creativity, productivity and well-being. A healthy ethical organisational culture also contributes to higher job satisfaction, staff morale and retention.

GEOGRAPHICAL LENS

10.1 Global, African, And SADC Economic Performance, Outlook, And Risks

SA is part of SADC, SSA, and Africa. As a leading African country, SA affects other African countries, but it is arguably also affected by developments, issues and risks in Africa and the regions and communities that it is part of – hence upside and downside risks remain an in-play reality with potential impact. These risks are summarised on tne next page:

ECONOMIC PERFORMANCE, OUTLOOK AND RISKS

GLOBAL

Global economic growth slowed from 3.4% in 2022 to 3.1% in 2023, and (according to the OECD), is projected to remain steady at 3.1% for 2024, followed by a slight pick-up to 3.2% in 2025. The decline in 2023/2024 was due to subdued economic activity, central bank interest rate hikes and the impact of geopolitical conflicts. The latter resulted in disruptions in the production and trading of commodities in which affected countries are key exporters, including energy, grains, and fertiliser. This triggered high inflation, high cost-of-living and capital outflows from emerging markets, and tighter monetary and financial conditions. The impact of tight monetary conditions continues to be felt, particularly in housing and credit markets, but global activity is proving relatively resilient, the decline in inflation continues, and private sector confidence is improving.

AFRICA CONTINENTAL

The AfCFTA promotes a single continental market for goods and services, with free movement of people and investments across Africa. It aims inter alia to support intra-African trade by reducing tariffs and non-tariff barriers, which currently impede optimal continental benefit from foreign investment, economic diversification, industrialisation, job creation, regional value chains, and ultimate global competitiveness. The agreement specifically includes small and medium-sized enterprises, women, and youth in its economic participation aims. For this to happen, Africa needs less complex and more harmonised trade policies across the continent, providing a more predictable, secure trading environment. The new Pan African Payment and Settlement System will facilitate cross border transactions that will not be reliant on the USD. However, implementation is challenged by inadequate infrastructure, varying economic development levels, and existing trade barriers, including extremely complex tax and transfer pricing regimes (almost always requiring International legal, financial and tax experts to resolve to the benefit of companies wishing to operate and/or expand across African borders). Africa requires significant investment in transport, energy, and digital infrastructure, as well as policy reforms, and capable, competent human capital. AfCFTA necessitates strong political will, effective governance, and cooperation among member states to deliver any benefit to Africa's almost 1,5bn people.

In SSA, economic growth slowed from 4.1% in 2021 to 3.6% in 2022, and further to 3.1% in 2023, due to the persistent sluggishness of the global economy, high inflation rates and high debt levels. Growth is estimated at 3.7% and 3.9% in 2024 and 2025, respectively. High inflation, fuelled by rising food and energy prices, weaker currencies and low investment growth continues to constrain African economies, creating uncertainty for consumers and investors. In addition, the following should be noted:

- Western and Central Africa countries continue to outperform Eastern and Southern Africa on GDP growth, and the latter are also experiencing a sharper slowdown in investment growth.
- Inflation is set to remain high, and above central bank target bands for most countries.
- Fiscal deficits continue to widen due to weak growth, combined with fast accumulation of public debt. The number of SSA countries at high risk of external debt distress, or already in debt distress, stands at 22.
- FDI (in)flows to Africa remain moderate and mostly in line with other developing regions.

NEO MONAE
Finance Analyst
National Treasury

LOURENS VAN DER COLF
Independent Governance, Risk, Compliance, Audit, and Forensic Professional

ISAAC WERE
Head of Consulting
RSM Botswana

DR FRANCOIS VAN DYK
Independent International Finance, Risk, and Strategy Advisor

MICHAEL DUNCAN
Fellow
Consultant and Non-Executive Director

PERFORMANCE

Economic Indicator	**2022**	**2023**	**2024F**	**2025F**
(Real) GDP Growth Rate	3.44%	2.25%	2.57%	2.98%
Public Debt (as % of GDP)	64.41%	67.97%	66.32%	64.72%
Inflation (average annual consumer price change)	11.66%	13.28%	13.01%	10.7%
Net Foreign Direct Investment (as % of GDP)	1.05%	1.81%	2.35%	2.59%
Official Reserves (months of imports)	5.33	5.01	4.87	4.67

Source: International Monetary Fund

In the past few years, SADC's economic performance was affected by climate change shocks resulting in droughts, cyclones and floods, and damage to infrastructure, crops and livestock. These were exacerbated by the adverse effects of COVID-19 and geopolitical conflicts, which affected budget financing, commodity prices, food security, and overall economic growth. Most member states also underperformed on the agreed Macroeconomic Convergence (MEC) indicators targets for inflation, fiscal deficit, and public debt. Public debt continues to rise, and FDI to the region remains moderate.

OUTLOOK AND POTENTIAL RISKS AND ITS IMPLICATIONS

In the medium-term, SADC member states are projected to progress towards achieving the agreed MEC indicators, however, none is likely to meet all MEC primary targets. Weak performance on the MEC programme poses a significant risk to the regional integration agenda and its outcomes. The outlook for commodity markets depends on the duration of specific geopolitical conflicts and the extent of associated sanctions. If prolonged, changes in commodity trade patterns are likely to continue. Growth will be depressed, and higher inflation will remain, with the potential to erode consumers' purchasing power, widening income inequality and poverty. Upside price risks include possible disruptions in the supply of energy and metals. Food and energy prices may continue to remain elevated. The region may continue to experience elevated prices of petroleum products and fertilisers, with a significant impact on inflation and high agricultural input costs, and a high risk around the availability, access and affordability of food in the region. The region remains susceptible to adverse weather conditions, including floods, droughts, frost and strong winds. The effects of climate change could manifest in the near-term, adversely affecting infrastructure, agricultural production, and thus economic, food and energy security. As a result, national budgets may be pressured as governments intervene to relocate displaced people and distribute relief aid and food. All these risks could worsen the fiscal situation, undermining governments' ability to respond to crises.

10.2 SADC

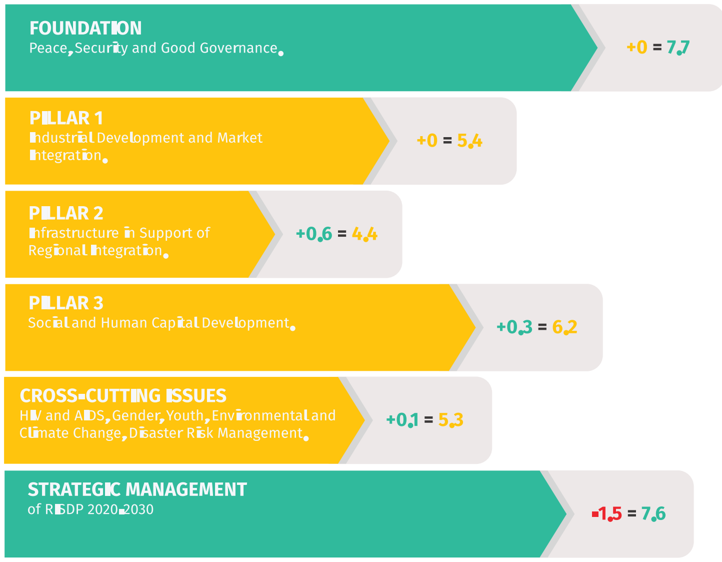
SADC is an inter-governmental organisation and regional economic community, comprising 16 member states, with a mission to, inter alia, promote sustainable economic growth and socio-economic development through cooperation, good governance, peace, and security; so that the region emerges as competitive and effective in international relations and the world economy.

SADC'S Integration and Development Plans

SADC has progressed in implementing the Regional Integration Priorities (outlined in the SADC Vision 2050), and the Regional Indicative Strategic Development Plan (RISDP) 2020-2030. The implementation status (as of August 2023), and 2022/23 progress of the RISDP by pillar, are reflected in the graphic:

*Strategic Management of RISDP includes: (i) increased potential innovative funding avenues, (ii) the SADC Regional Development Fund (RDF), and (iii) enhanced visibility and awareness of SADC, its activities and impacts.

Source: SADC (2023)



	Angola	Botswana	Lesotho	Malawi	Mauritius	South Africa	Zimbabwe
Climate Adaptation Failure			3				
Climate Mitigation Failure			5				
Digital Inequality		5					
Economic Downturn	1		1	1	2	2	1
Energy Supply Shortage						1	2
Extreme Weather Events			4	5	5		
Food Supply Shortage							
Household Debt		4					
Infectious Diseases			2				
Inflation	2	2		3	4		3
Involuntary Migration							5
Labour Shortage	5				1		
Public Debt				2	3		
State Fragility						4	
Unemployment	3	1		4		3	4
Water Supply Shortage						5	
Wealth/Income Inequality	4	3					

Source: WEF Global Risk Report (2024).

SADC MEMBERS STATES: RISKS AND RISK RATINGS

The WEF 2024 Risk Report highlights the top prevalent risks in the evaluated SADC states as economic downturn, unemployment, inflation, and, to a lesser extent, public debt, based on an executive opinion survey of national risk perceptions:

SADC country risk assessments adopted from Coface and Global Edge reflect as follows (with red indicating threats and weaknesses, yellow indicating potential opportunities, and green indicating strengths and opportunities):

Risk Element A1-3 = Very Low to Low Risk A4-C = Acceptable Risk D-E = High to Very High Risk	Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe
Country Risk Rating	c	A4	-	B-D	D	C	C	D	A4-B	D	B	-	A2-C	B-C	D	E
Business Climate Rating	D	A4	-	B-E	C	B	C	D	A3	D	A4	-	A4	C	C	E
Agriculture, forestry and fisheries	Green			Green	Green		Green	Green		Green	Green			Green	Green	Green
Business attractiveness, trade agreements	Red						Green		Green					Red		Red
Climate change impacts, extreme weather		Red				Red	Red	Red	Red	Red	Red			Red		Red
Conflict, political stability, democracy	Red	Green		Red		Red	Red		Green	Red	Green	Red		Red		
Crime (including high levels of corruption)					Red	Red	Red	Red								Red
Dependence on RSA					Red	Red					Red					
Disease	Red	Red														
Financial sector									Green	Red			Green			
Food security								Red	Red							Red
Geographical location (isolated vs. trade routes)	Red	Red		Red	Red				Green	Green		Red			Red	
Good governance and strong institutions		Green	Red		Red				Green	Red	Green		Green			
Hydropower			Yellow		Green					Yellow					Green	
Industry (textile & clothing, diversified or not)				Green	Green				Red	Red	Red		Green			
Infrastructure	Red	Red		Red			Red	Red	Red	Red			Red	Red	Red	Red
Mineral resources	Green	Green		Green		Green	Green	Green		Green	Green		Green	Green	Green	Green
Oil and natural gas	Green									Green				Green		
Skills, human capital		Red							Red					Red		
Tourism			Green			Yellow	Green		Green		Yellow	Green		Green	Green	Yellow
Unemployment, low wages, poverty	Red	Red		Red	Red	Red	Red	Red	Red	Red	Red		Red		Red	

Sources: Global Edge – Michigan State University (2024); Coface (2024).

SADC financial market development

The 2023 AFMI compiled by (OMFIF), scores 28 African countries' financial development based on measures of market accessibility, openness and transparency, using over 40 indicators across 6 pillars. The Index aims to demonstrate how countries can reduce barriers to investment and boost sustainable growth and is used by policymakers and the investment community to gain insights on development and gauge African countries' market infrastructure. Scores for SADC countries rated in the 2023 Index, are as follows:

SADC Country	Rank		Score		Pillar 1	Pillar 2	Pillar 3	Pillar 4	Pillar 5	Pillar 6
	2023	2022	2023	2022	Market Depth	Access to Foreign Exchange	Transparency, Tax, & Regulatory Environment	Capacity of Local Investors	Macroeconomic Environment & Transparency	Legal Standards & Enforceability
Angola	20	20	20	20	33	57	66	12	64	25
Botswana	6	6	6	6	54	68	78	57	87	10
Comoros	25	25	25	25	-	-	-	-	-	-
DRC	14	14	14	14	18	40	55	10	76	10
Eswatini	7	7	7	7	23	49	61	60	76	10
Lesotho	26	26	26	26	12	54	31	25	72	10
Madagascar	27	27	27	27	16	58	32	10	61	10
Malawi	13	13	13	13	28	43	62	12	65	85
Mauritius	2	2	2	2	56	75	94	61	76	100
Mozambique	24	24	24	24	33	49	47	13	70	10
Namibia	5	5	5	5	43	56	61	100	76	40
Seychelles	15	15	15	15	23	58	50	57	77	10
South Africa	1	1	1	1	100	88	98	63	78	100
Tanzania	10	10	10	10	49	54	78	15	81	55
Zambia	12	12	12	12	30	57	74	11	74	85
Zimbabwe	18	18	18	18	17	33	83	18	70	40
Average	14	14	14	14	36	56	65	35	74	40

Source: Absa Africa Financial Markets Index – OMFIF (2023). Pillar scores are based on countries' relative performance for each indicator, rebased to minimum 10 and maximum 100. The overall index score per country is calculated as an average of the scores from each pillar.

Of the 28 countries covered by the 2023 AFMI, 6 of the 16 SADC countries measured ranked in the top 10. The report also highlights the following:

- Market developments and policy changes have boosted growth of financial markets across Africa.
- Progress over the last 2 years have been encouraging, and countries (included in the report) are more resilient; global shocks such as COVID-19, geopolitical conflicts, food and energy security issues, and rising inflation may have derailed or delayed important advances in capital markets.
- More than 20 AFMI countries now have some form of ESG linked financial policies which might help to mobilise new investment.

Key take away for risk professionals

Africa presents various challenges to potential foreign investors. For this reason, risk professionals must lead or participate constructively in all investment due diligence assessments to respond adequately to investment risks. Examples of risks include the following:

Current and emerging issues and challenges in the SADC region

SADC countries have common opportunities rooted in mineral wealth, natural resources, agricultural land, and tourism. In addition, because of its youthful population, SADC will only benefit from a demographic dividend during the second half of the 21st century – SADC's total population is currently 380m and is expected to increase to 618m by 2043. However, SADC countries face a broad spectrum of challenges spanning across social, development, economic, health, integration, diplomatic, defence, security, institutional, political, and policy implementation - some of which cannot be dealt with effectively by individual member states. Some of the current and emerging issues in the SADC region include:

- High inflation and interest rates, low investment and high unemployment (compounded by external factors such as geopolitical conflicts) will continue to slow down the region's economic growth.
- Reliance on fossil fuels for bulk share of energy needs, will continue well into the future, while SADC's carbon emissions are likely to increase by just over 100m tons (of carbon) in the next 20 years.
- The percentage of poor people will continue to decline, reaching 34% in the next 20 years (down from 51% in 2019), but the number of poor people will climb to 209 million (180 million) in the same timeframe as populations grow.
- Isolated threats to peace and security in specific countries and regions.
- A wide range of transnational organised crime.
- Of concern is that new HIV infections may persist for the foreseeable future.
- Communicable health risks and disease outbreaks remain expected – e.g., Marburg Virus Disease, Cholera, Measles.
- Food security is on a downward trend and will remain a concern.
- Environmental management issues, e.g., pollution, inadequate access to clean water and sanitation services.
- Water insecurity is expected to continue in some parts of the region, largely due to climate change, population growth, urbanisation and intra-country migration.
- Shortage of energy will continue because of, but not limited to, growing demand for electricity; insufficient water (due to poor rainfall for some key hydro-power stations); floods and storms that damage or destroy infrastructure for power generation and transmission; and low investment in generation and transmission capacity.
- Increasingly longer and or intensive climate shocks, including droughts, floods, storms and extreme temperatures, across SADC, will significantly impact agricultural production and food security. Some SADC member states' central banks have issued climate risk management guidelines requiring reporting on climate change scenarios, scenario stress tests, and actions related to carbon credits, while SADC's RISDP also includes disaster risk management under the cross-cutting issues pillar.
- The risks and associated impacts stemming from increasing use of AI and the pursuit of its benefits, including cybercrime, are expected to increase in less developed countries as significantly more people gain access to, and use the internet. Relative favourable risk perceptions have, however, been recorded in the WEF 2024 Global Risk Report for SADC countries.
- Roughly half of the world's population will vote in local, regional, legislative, and national elections, which could lead to increased geopolitical tensions and volatility in global financial markets. The challenging global economic environment (including high inflation and rising interest rates in advanced economies) and geopolitical tensions may continue to negatively affect financial markets in SADC.
- Other challenges shared by SADC countries include illegal migration, overcrowded prisons, poaching, insufficient water resources, substandard transport services, and inaccessible health services.

Political Risk:	Regulatory Risk:	Legal Risk:	Financial Risk:	People and Reputation Risk:	Operational Risk:
inter-, intrastate, and regional geopolitical conflicts, terrorist activity, social unrest.	political stability, democratic government, competent public and private sector leadership, strong institutions, bureaucracy, privatisation policies, and restrictions on foreign, capital, exchange, and import control.	independence, efficacy of the judicial system, crime levels (including corruption).	economic trends (e.g. growth prospects, inflation, exchange and interest rates, the availability of foreign exchange), the ease in which to remit capital (including management fees and dividends), trade agreements, tariffs, tax authority attitudes.	choosing the right partners, cultural and language differences, retention of key people post-acquisition, skills and human capital.	market environment, supply chain, communications networks, infrastructure including digital, energy availability, road and rail networks.

CALL TO ACTION

SANELISIWE KHOWANE
ERM & BCM Graduate Trainee
eThekwini Municipality

HORST SIMON
Business Risk Officer
Capricorn Group
Namibia

SHARON CARSON
PARTNER
Lucidum

TOTYELWA DODO
Acting Director: Risk Management Support
Office of the Accountant General

CHRISTELLE MARAIS
CRM Prof
Executive Director
Lucidum

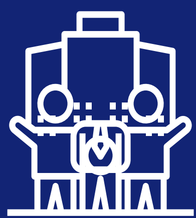
Research conducted for this Report indicated that risk culture is a key focus area that (if focused on collectively) will enable SA to manage its risks to achieve a sustainable future. Essentially, our social culture (made up of individuals in society) informs our organisational cultures (the entities that can structurally respond to risks). This then leads to the risk cultures in organisations (the way in which they optimise the management of their risks), which finally informs Government culture (that serves the needs of our people). Being conscious of this, will guide the country to a improve our risk response strategies.

Social Culture

- How people live behave in their own lives
- Determines how individuals in society react to risk

Organisational Culture

- How business leaders and employees behave
- Informs how individuals form organisations to deal with risk



Risk Culture

- How entities think about and respond to risk
- Becomes the specific ways in which organisations deal with risk

Government Culture

- How Government leaders behave
- Becomes the way in which the State addresses citizens' needs

11.1 Social Culture

Human emotions do not support fact-based, objective risk assessment, yet humans cannot survive or function without emotions. Emotions are what sets humans apart from machines and rather than trying to remove the human factor from risk management, it must be understood, and its benefits must be incorporated. Understanding how emotional human reactions to threats and opportunities contribute to national resilience, will be the differentiating factor in improving SA's risk profile, if deliberately incorporated into the way all organisations in the country are led.

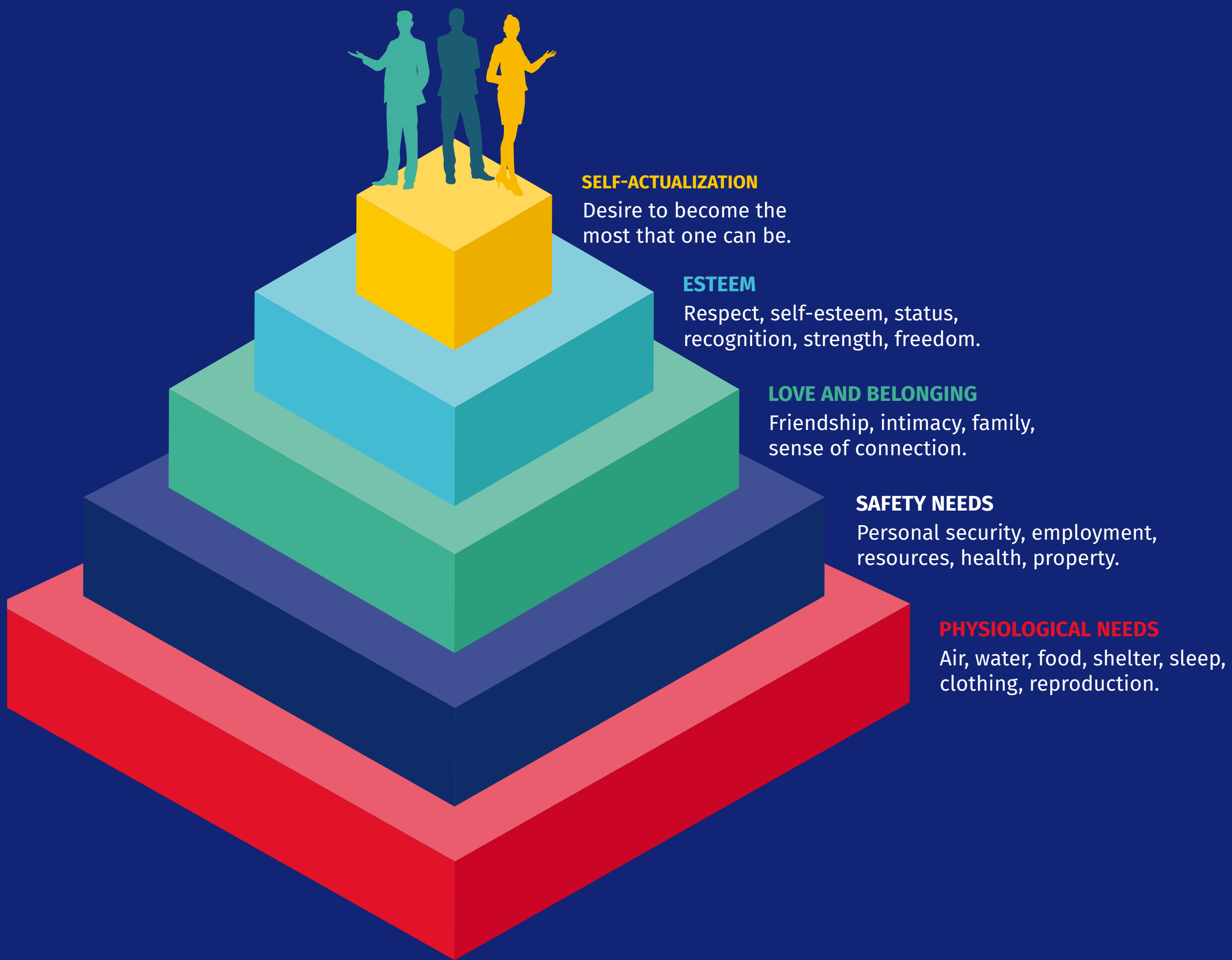
Social culture in SA profoundly influences society's ability to manage risks, intertwining historical, economic, and social factors that shape collective responses to risks. A significant aspect of South African social culture is its diversity, which brings about unique perspectives on risk and resilience. This diversity, which is a key strength, includes the following elements:

- 30 Years of democracy resulted in most South Africans respecting each other across race, class, history, and politics.
- The average South African is predominantly moderate, centrist and has a pragmatic public opinion.
- Most citizens share the same values of democracy, middle class standards, and the right to freedom of expression.
- Most South Africans share the same expectations of jobs to earn a living, good schools for their children, safe living spaces, and opportunities to accumulate wealth.
- Almost all citizens are willing to exchange ideas and practices that promote innovative solutions to social problems.
- South Africans often overcome communication barriers or cultural misunderstandings to act cohesively in crises.
- Citizens share a common desire to build a successful country, based on a just transition to a more equitable distribution of resources and the benefits of democracy.
- There is a strong reliance on communal support networks that disseminate information, provide mutual aid, and organise collective responses to crises.

Some of the negative social culture elements that hamper SA's resilience and ability to prosper include the following:

- Complacency about how 'resilient' we are could lead to a lack of accountability and consequence management.
- Emotional, mental, and intellectual responses to historical experiences that do not always reflect present realities.
- Perceptions about who leaders are and should be – many South Africans do not see themselves as leaders who can bring about change.
- Social cohesion and community networks are sometimes compromised by opportunistic agendas and crime, which erode trust and collaboration.
- Insufficient understanding of social rights and responsibilities and too much reliance on social media prevent positive social participation on how to better serve the country.
- Not always embracing traditional beliefs and practices that influence risk perceptions and behaviours and could respond to risk effectively.

The risks reported over the last decade in context of Maslow's hierarchy of human needs, demonstrate that SA should solve social security and basic needs challenges with urgency, as opposed to spending resources on ideological pursuits. Leveraging social strengths will enable an uncompromising approach to ethical values (as opposed to creating more rules which inevitably will result in a dire spiral of compliance cost and malicious compliance), and a zero tolerance to crime in people's everyday lives. These two elements alone, will create a springboard for responding to the rest of the risks.



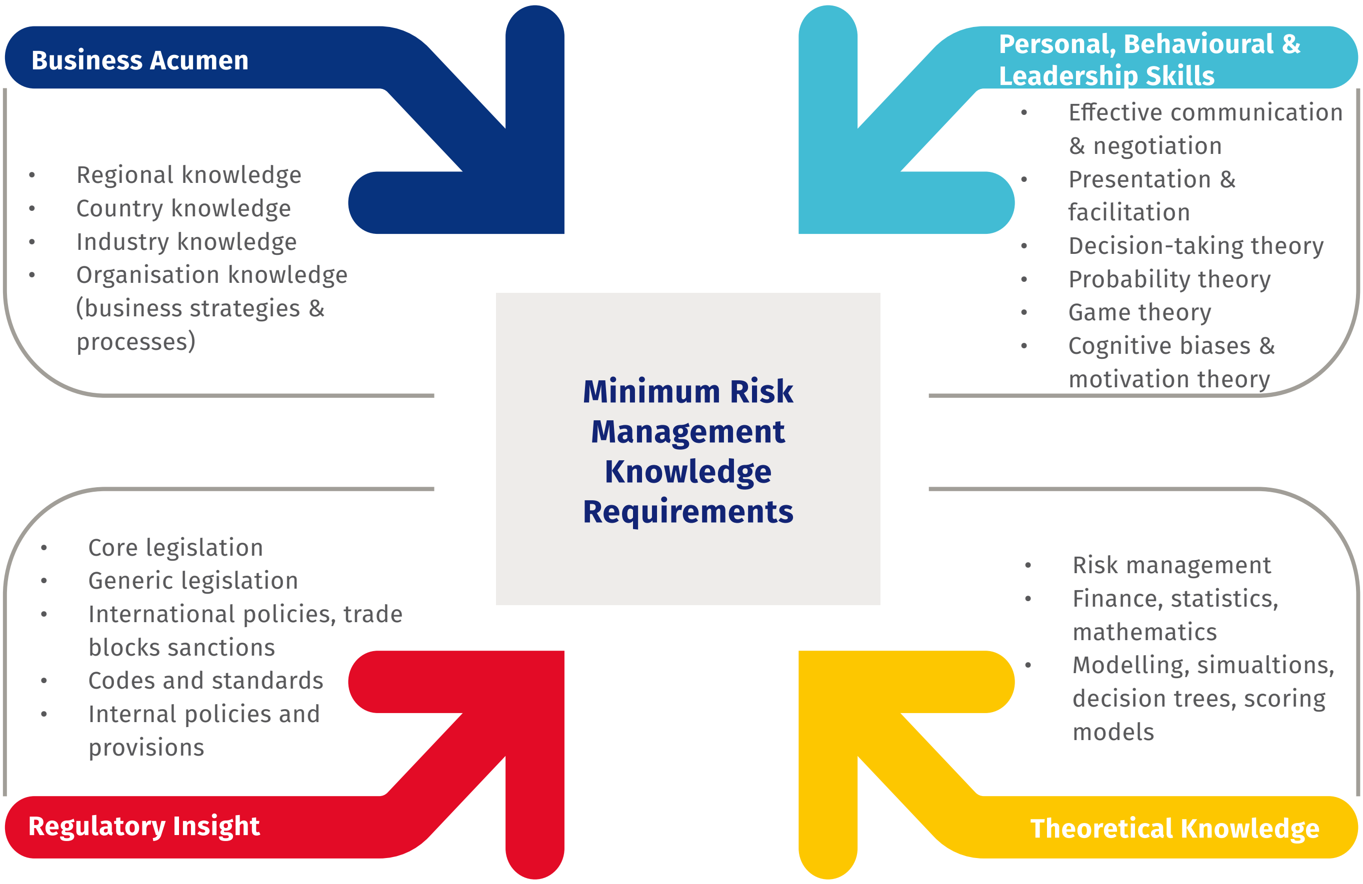
Organisations should integrate and embed risk management more directly into their designs and operations, instead of treating it as a separate activity

11.2 Organisational Culture

Organisations have unique cultures, shaped by the social culture of their employees. The social culture shapes the shared values, beliefs, behaviours, and norms in workplaces, and directs how employees make decisions and interact with their colleagues. Organisational cultures are further informed by their missions, leadership styles, and history, influencing how they operate and their different subcultures. Organisations that incorporate diligence and employee wellness into their cultures influence risk cultures positively.

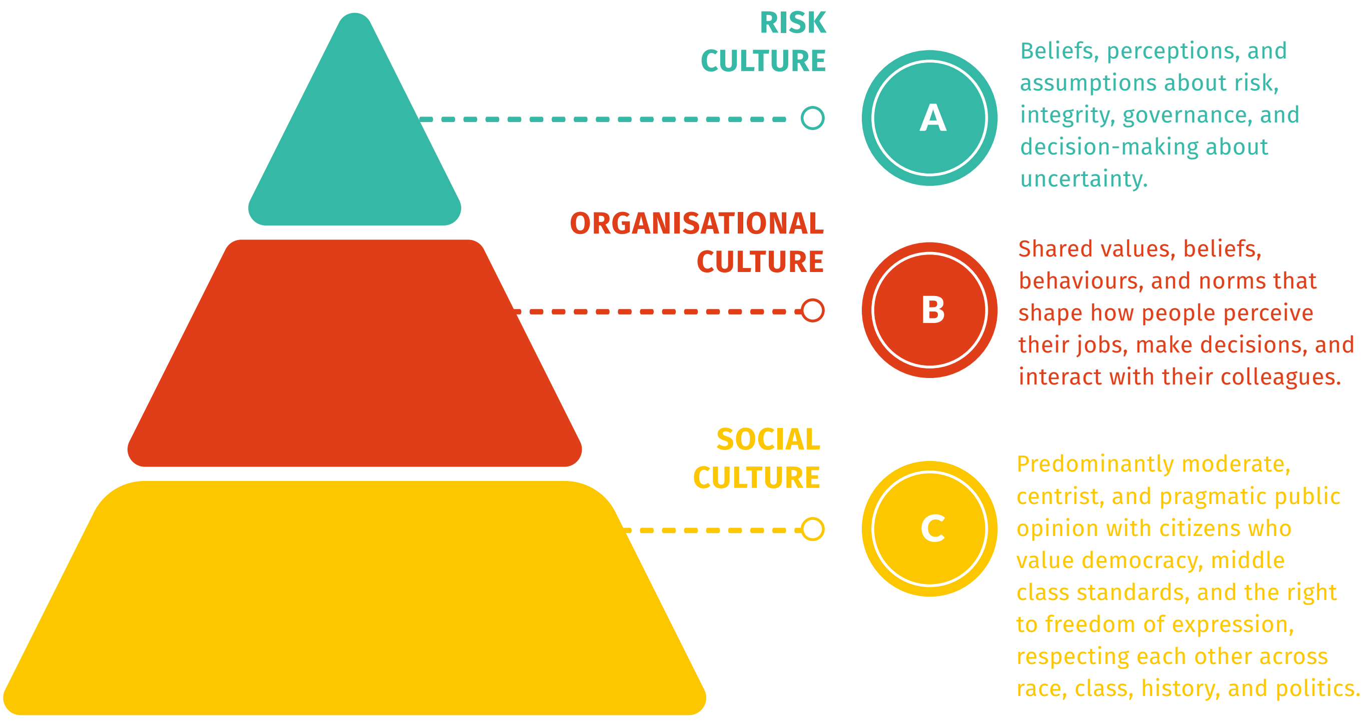
One of SA's strengths is its strong focus on risk management. Organisations should integrate and embed risk management more directly into their designs and operations, instead of treating it as a separate activity. Risk resources should be dedicated to thoroughly interrogate organisations' daily activities in pursuit of their goals. This dedicated risk focus is different from internal audit or corporate governance; it is proactive rather than reactive and provides safe spaces for organisations to learn from failures without fear. The courage to be exposed internally, without the consequences of risks materialising, is what most organisations lack.

Elevating the hierarchical positioning of CROs (reporting functionally to Chief Executives, Risk Committees, or Boards) will discourage the tendency to subordinate risk functions to other functions, which dampens rather than strengthens, institutional risk culture deepening efforts. This comes with the responsibility for risk professionals to take up the accountability and to build exceptional business acumen to supplement robust risk management skills and competencies. Without putting in the academic, experiential, and personal developmental and hard work, risk managers cannot claim the proverbial 'seat at the table', even if it is offered to them. This should be supported by organisational cultures that encourage agility, innovation, and the elimination of bureaucracy.



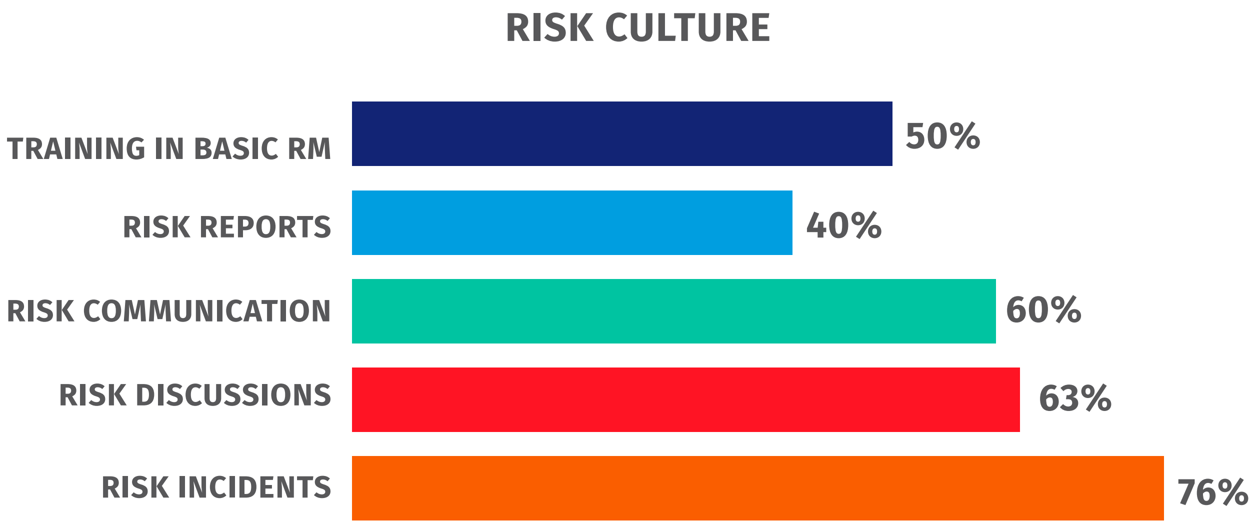
11.3 Risk Culture

Emotions should never influence fact-based, objective risk assessment and the related risk responses, but they always do where human interpretation is required. Risk culture is informed by both social and organisational culture, based on beliefs, perceptions and assumptions about risk, integrity, governance, leadership, decision-making, empowerment, teamwork, responsibility, agility, and adaptability. Both social and organisational culture are key parts of risk culture, because they affect how people think about risk. Building an effective risk culture therefore must consider underlying social and organisational cultures.



Aspects impacting risk culture include organisational maturity, risk management maturity, and the increasingly volatile, uncertain, complex, and ambiguous world. Organisations' risk exposures grow daily and building effective risk cultures become increasingly complex. Organisations must find ways to coherently train employees' minds and hearts over time, to respond to uncertainties with decisions aligned to agreed organisational risk appetite, risk tolerance, and risk bearing capacity levels.

IRMSA's survey of risk culture related practices and competencies in SA revealed the focus areas for governing bodies, executives, and risk managers when building organisational risk cultures (including the formal rules that define risk management objectives, priorities, and competencies, as well as the informal rules, protocols, workflows, decision-making, and compensation practices), discussed below.



The survey results confirmed that risk events are actively discussed in workplaces. This indicates that risk communication is good but reactive as it relates to events that already occurred. It was confirmed that risk discussions are part of the agenda at all business and committee meetings. Together with a minority of employees regularly receiving risk reports, this could indicate that detailed risk focus is limited to management only, and not to operational employees. A key pillar of an effective risk culture is that 'Every employee is a Risk Manager', yet only half of employees are trained on basic risk management skills to evaluate and respond to risks they face daily (through performance contracts and management). Overall, the results confirm that risk communication in SA is 'average' and does not fully support a mature risk culture. Higher risk maturity requires empowered employees and the free flow of information across organisational hierarchies with pro-active focus on risks and responses by every employee, every day as they execute their duties. Such unobstructed pathways for risk information allows 'bad news to travel faster than good news' in safe environments, where responsible risk-decisions can drive organisational performance.

Building an effective risk culture starts with an accurate, robust risk culture maturity assessment to understand how well the existing culture supports the organisation's risk philosophy and strategy. Different models exist, but can be summarised generically as per the table below:

Risk Culture Levels

Level 1: POOR People don't care nor do the right things regardless of risk policies, procedures and controls. Generally managing risks in silos, they are always firefighting with no clear risk owners, no real communication and weak accountability.
Level 2: TYPICAL People care more and do the right things when risk policies, procedures and controls are in place. Risk owners are clearly defined, and roles and commitments are understood, but effective awareness and skills are still lacking.
Level 3: GOOD People care and do the right things even when risk policies, procedures and controls are not in place. Integrated risk management teams with standardised roles and clear accountabilities are in place, controlled by a central function coordinating risk activities.
Level 4 EFFECTIVE People care enough to think about risks associated with their jobs before making decisions. Strong cross-functional teams apply sound judgement about risks with support of a small central risk advisory team with unquestionable business acumen. The organisation is well prepared for crises built on an effective risk

Risk culture assessments are usually conducted through a combination of surveys, questionnaires, interviews, focus groups, external stakeholder interviews, social media reviews, and operational process reviews. The results are often influenced by underlying human factors such as nationality, social culture, work ethics, trust, honesty, religion/spirituality, and unconscious biases. Digitally based assessment tools that measure and analyse human behaviour linked to risk perception in a consolidated manner, beyond mere compliance, are ideal. The outcomes of the assessment must drive targeted risk culture actions through a combination of training, communication, skills development, with continuous monitoring and improvement.

11.4 National Government Culture

In the wake of the national election, SA's democracy must find a new way of governing itself. In the absence of a definite majority for any specific political party, a functional government (which will necessarily comprise of varying policy views) must start to deliver on its mandate within the shortest possible time.

South African citizens must be uncompromising on the following imperatives from their appointed parliamentary members:

- Take direct accountability and responsibility for joint decisions in the interest of transparency and service outcomes.
- Avoid power struggles which will compromise decision-making and outcomes and will paralyse the democratic system.
- Be deliberate about reaching consensus on policy issues through compromise of party objectives in the national interest.
- Embed robust checks and balances to avoid compromising the democratic process in coalition structures.
- Agree on delivery focused portfolios and competent people, instead of ideological or budget/spend considerations.
- Proactively embed conflict resolution mechanisms with robust escalation methods based on transparent coalition agreements with legally binding outcomes (including collaboration on issues versus blanket support).
- Deliberately work to embed professional administrative capabilities in the system that are independent from political patronage (i.e. the State must function irrespective of who is appointed to lead it).
- Work constructively with organised labour to hold public servants accountable instead of aligning with political parties.
- Be deliberate about prioritising SA's interests above historical international relationships.
- Embed risk management in all State departments and SOEs with performance monitoring and proper governance oversight.

DEFINITIONS REFERENCES & ABBREVIATIONS

12. Definitions, references and abbreviations

AfCFTA	African Continental Free Trade Area
2023 AFMI	Absa Africa Financial Markets Index, 7th Edition 2023
AI	Artificial Intelligence
bn	Billion
BCP	Business Continuity Plan (including Emergency Preparedness, Crisis Response, Recovery Plans)
capex	Capital Expenditure
CIPA	Critical Infrastructure Protection Act
COVID-19	Pandemic disease caused by coronavirus 2 (SARS-CoV-2)
CRO	Chief Risk Officer
CIP	Critical Infrastructure Project
CSI	Corporate Social Investment
DHA	Department of Home Affairs
DHET	Department of Higher Education and Training
DMRE	Department of Mining, Resources, and Energy
DOC	Department of Communications
DPME	Department of Planning, Monitoring, and Evaluation
DRC	Democratic Republic of Congo
DWS	Department of Water and Sanitation
ESG	Environmental, Social and Governance
EU	European Union
FATF	Financial Action Task Force
FDI	Foreign Direct Investment
GDP	Growth Domestic Product
ICT	Information and Communications Technology
IRMSA	Institute of Risk Management South Africa
HIV	Human Immunodeficiency Virus
Long-term	More than 5 Years
m	Million
Medium-term	3 to 5 Years
NDP	National Development Plan Vision 2030
NHI	National Health Insurance
NIP	National Infrastructure Plan
OMFIF	Official Monetary and Financial Institutions Forum
opex	Operational Expenditure
p.a.	Per annum
Permacrises	A long period of unresolved difficulty, confusion, or suffering.
Polycrisis	An accumulation of multiple, compounding, and interconnected crises
POPIA	Protection of Personal Information Act
PPP	Public-Private Partnership
Risk	The effect of uncertainties on objectives (ISO 31 000:2018)
SA	South Africa
SADC	Southern African Development Community
SARB	South African Reserve Bank
SAQA	South African Qualifications Authority
SDGs	United Nations Sustainable Development Goals
Short-term	Within 3 Years
SOE	State-Owned Enterprise
SSA	Sub-Saharan Africa
tn	Trillion
WEF 2024 Risk Report	World Economic Forum, 19th Edition Global Risks Report 2024

ACKNOWLEDGEMENTS

13. Acknowledgements

IRMSA expresses its gratitude to all the organisations, partners, sponsors, committees, workgroups, and individuals who contributed to this Report. Their invaluable support, guidance, and assistance have been instrumental in shaping this work, and the Institute recognises their contributions.

Alex Russel	Manufacturing Sector View	
Alicia De Wet	Food Security Risk Theme	
Alize Le Roux	Social Security Risk Theme	
Alkesh Patel	Communication Sector View	
Allarice Bosch	Water Risk Theme	
Amith Sukhnandan	Politics Risk Theme	
Andre Cowley	Healthcare Sector View	
Andre Havenga	Retail, Trade & Commerce Sector View	
Andrea Copland	Politics Risk Theme	Youth contributor
Andrew Wesson	Transport & Logistics Research	
Anita Watson	Non-Profit Sector View	
Anita Samaad	Social Security Risk Theme	
Anna Klopper	Financial Services Research	
Anthony Webster	Non-Profit Sector View	
Anthony Turton	Water Risk Theme	
Antonella Da Cunha	Food Security Risk Theme	
Arthur Linke	RIC Member, Research Consolidation, Retail, Trade & Commerce Sector View	
Arthur Kamp	Economy Risk Theme	
Aslin Gellant	Retail, Trade & Commerce Research	
Atiso Seenmore Tsotetsi	Transport & Logistics Research	
Dr. Avani Kashiram	Healthcare Sector View	Youth contributor
Bafana Hulan	Retail, Trade & Commerce Research	
Benjamin Chayamiti	Agriculture, Forestry & Fisheries Research	
Bernard Louw	Financial Services Sector View	
Bheki Gutshwa	Board Chair, Project Oversight, Foreword, Education Sector View	
Boitumelo Romotsho	Financial Services Research	
Boledi Lebotsa	Energy Research	
Bongi Mkize	Transport & Logistics Research	
Brendan Africa	Agriculture, Forestry & Fisheries Research	
Brenden Maseti	Mining Sector View	
Buhlebuyeza Mabathwana	Retail, Trade & Commerce Research	
Bukhosibethu Kunene	Education Research	
Cameel Chetty	Skills Risk Theme	
Candice Govender	Construction Research	

Catherine Mamabolo	Financial Services Research	
Cay-Low Mbedzi	Non-Profit Sector View	Youth contributor
Celia Mazibuko	Healthcare Research	
Chandu Kashiram	Content Validation, Functional State Risk Theme	
Chené Maartens	Resilience/Continuity	
Chris Van Der Westhuizen	Manufacturing Research	
Christelle Marais	Project Lead, Scenarios, Agriculture, Forestry & Fisheries Sector View, Call to	
Christopher Palm	Project Owner	
Christopher Whittle	Functional State Risk Theme	
Claude Hamman	Financial Services Sector View	
Cobus Rossouw	Transport & Logistics Sector View	
Cordellia Neonyana Moseki	Resilience/Continuity	
Cynthia Motaung	Rule of Law Risk Theme	
Cynthia Stimpel	Rule of Law Risk Theme	
Dalton Nyoni	Retail, Trade & Commerce Research	
Damian Powell	Transport & Logistics Research	
Danielle Harris	Communications Research	
Danielle Van Den Berg	Sport & Recreation Sector View	
Dawid Bosman	Water Risk Theme	
Dean Van der Merwe	Healthcare Sector View	
Deidre Blair	Manufacturing Research	
Dibeco Masabata	Financial Services Research	
Dimpho Thepa	Transport & Logistics Research	
D'Shorne Human	Public Service Sector View	
Elchonon Goldfein	Retail, Trade & Commerce Sector View	
Emily Khanyi	Communications Research	
Estel Scheepers	Agriculture, Forestry & Fisheries Research	
Fillemon Auwanga	Financial Services Research	
Francois Van Dyk	Geographical View, Financial Services Sector View	
Francois Froneman	Agriculture, Forestry & Fisheries Sector View	
Fulufhelo Tshikhudo	Board Member, Project Oversight	
Gabrielle Hussain	Social Security Risk Theme	Youth contributor
Gemmalyn Alcober	Rule of Law Risk Theme	Youth contributor
Ghadile Mashibini	Social Security Risk Theme	
Gratitude Mosehla	Skills Risk Theme	Youth contributor
Gustav Pistorius	Construction, Property & Real Estate Sector View	
Itumeleng Lengoasa	Transport & Logistics Research	
Jacques Marais	Content Validation, Construction, Property & Real Estate Sector View	
Jacques Faul	Sport & Recreation Sector View	
Jade Perumal	Communications Research	
Janie Marais	Sport & Recreation Sector View	
Jonathan Crisp	RIC Member, Technology Risk Theme	
Jonathan Bigham	Construction, Property & Real Estate Sector View	
Jose Correia	Energy Risk Theme	
Joy Nthuli	Retail, Trade & Commerce Research	
Juan Foster	Transport & Logistics Research	
Juanitill Pettus	Manufacturing Research	
Kagiso Mosanya	Communications Research	
Kalwyn Samuel	Communications Research	

Katlego Kekana	Mining Sector View	
Katlego Majola	Professional Services Sector View, Public Service Sector View	
Kay Darbourn	Content Validation, Energy Sector View	
Kedibone Thantsha	Education Sector View	
Keenen Witbooi	Retail, Trade & Commerce Research	
Kefilwe Kgabanyane	Construction Research	
Kerry De Jonge	Non-Profit Sector View	
Kerushan Govender	Technology Risk Theme	
Khuliso Phundulu	Education Research	
Kim Rughbeer	Transport & Logistics Research	
Kristen Fourie	Financial Services Sector View	Youth contributor
Kobus Hurther	Food Security Risk Theme	
Lauren Craven	Manufacturing Research	
Lebalang Makgoba	Healthcare Research	
Lebogang Malinga	Financial Services Research	
Lebogang Jiya	Manufacturing Research	
Leburu Muhamapelo	Mining Sector View	
Lelethu Jordan	Financial Services Research	
Leo Long	Climate Risk Theme	
Leon Rust	Manufacturing Research	
Les Carlo	Content Validation	
Lester Aereboe	Manufacturing Research	
Levin Mbatsani	Climate Risk Theme, Healthcare Research	
Liezl Groenewald	Non-Profit Sector View	
Linda Jaka	RIC Member, Project Oversight	
Lindo Shangase	Communications Research	
Linsy Davids	Transport & Logistics Research	
Logan Ramalu	Resilience/Continuity	
Lorraine Dimairho	Financial Services Research	
Louisa Nana	Risk Analysis, Construction, Property & Real Estate Sector View	
Lourens Van Der Colf	Geographical View	
Lulama Phuthi	Professional Services Research	
Lunga Mkize	Board Member, Project Oversight	
Lyle Botha	Communications Research	
Lynette Kone	Communications Research	
Magaroleng Maduana	Communications Research	
Magdalene Reddy	Energy Risk Theme	
Maik Gremer	Communications Research	
Makitla Molefe	Financial Services Research	
Mamodikwe Kungoane	Financial Services Research	
Marang Digale	Retail, Trade & Commerce Research	
Marianna Harrison	Transport & Logistics Research	
Marianne Van Der Walt	Mining Sector View	
Marisa Grundling	Research Consolidation, Skills Risk Theme, Education Sector View	Youth contributor
Marjam Clementson	Agriculture, Forestry & Fisheries Research	
Marlon Alcock	Manufacturing Research	
Matheko Moshoeshoe	Financial Services Research	
Matsha Joy	Financial Services Research	
Maubane Mahlare	Manufacturing Research	
Michael Judin	Content Validation	

Michael Duncan	Risk Context, Geographical View	
Michael Davies	Resilience/Continuity	
Michel du Hecquet de Rauville	Financial Services Research	
Mighty Mhlanga	Communication Sector View	Youth contributor
Mmabotse Mooke	Skills Risk Theme	
Mpho Modisane	Board Member, Project Oversight	
Mthobisi Ntshangase	Public Service Sector View	
Mzwakhe Xakaza	Retail, Trade & Commerce Research	
Nancy Chadehumbe	Board Member, Project Oversight	
Nancy Gangharam	Energy Risk Theme	
Natasha Winkler	Financial Services Research	
Ndadjepuke Nhinda	Transport & Logistics Research	
Neo Monau	Geographical View	
Neo Mashishi	Manufacturing Research	
Nicky Downing	Logistics Risk Theme	
Nicola Comninos	Board Member (1st VP), RIC Member, Project Oversight	
Nkululeko Zwane	Transport & Logistics Research	
Noma Cristovao	Manufacturing Sector View	Youth contributor
Nomonde Ndhlovu	Food Security Risk Theme	Youth contributor
Nosipho Madondo	Financial Services Research	
Nozenze Mahloani	Financial Services Research	
Nozinjabulo Mazibuko	Financial Services Research	
Ntsatsi Matsie	Financial Services Research	
Nwabisa Bixa	Economy Risk Theme	
Oliver Schramm	Retail, Trade & Commerce Research	
Oratile Segone	Transport & Logistics Research	
Papa Mkhabela	Transport & Logistics Research	
Partrick Meyer	Professional Services Sector View	
Paul Kibuuka	Research Consolidation	
Pavana Ranjith	Graphics, Functional State Risk Theme, Retail, Trade & Commerce Sector View	
PC Botha	Agriculture, Forestry & Fisheries Sector View	
Pedro Maia	Technology Risk Theme	
Peter Links	Board Member (2nd VP), Project Oversight	
Phetlhu Kabo	Financial Services Research	
Phuti Isabel Molamodi	Mining Research	
Prince Shonhiwa	Communication Sector View	
Priscilla Mateta	Transport & Logistics Sector View	
Qiniso Mthembu	RIC Member (Chair), Project Oversight	
Raven Pillay	Public Service Sector View	
Ravi Naicker	Energy Risk Theme	
Rebone Kwadi	Manufacturing Research	
Rejoice Phiri	Financial Services Research	
Rianne Potgieter	Non-Profit Sector View	
Ricardo White	Communications Research	
Ritesh Narsai	Tourism & Hospitality Sector View	
Robert Makgakga	Financial Services Research	
Rudzani Funzani	Politics Risk Theme	
Ryan Marsden	Tourism & Hospitality Sector View	
Sakhumzi Diza	Climate Risk Theme	
Sanelisiwe Khowane	Call to Action	Youth contributor

Sanjay Bhana	Energy Risk Theme	
Santhan Naidoo	Transport & Logistics Research	
Sbusiso Dlamini	Transport & Logistics Sector View	
Sellwane Mofokeng	Retail, Trade & Commerce Research	
Sharon Carson	Professional Services Sector View	
Sheena O'Brien	Tourism & Hospitality Sector View	
Shirley Ratlhagana	Financial Services Research	
Shoko Mercy	Financial Services Research	
Sibongile Shongwe	Financial Services Research	
Sidney Mongala	Content Validation	
Siju Joseph	Energy Risk Theme	
Sikhuthali Nyangintsimbi	Education Sector View	
Simile Ndlovu	Non-Profit Sector View	
Siya Diphoko	Communications Research	
Stefanie Fick	Non-Profit Sector View	
Sugrun Kapongo	Financial Services Research	
Sune Mare	Research Consolidation	
Suzan Mashala	Financial Services Research	
Tamara Kaunda	Financial Services Research	
Tanya Kruger	Technology Risk Theme	Youth contributor
Tebogo Mapaila	Energy Sector View	Youth contributor
Thabile Nyaba	Board Member, Project Oversight	
Thandeka Nyoni	Agriculture, Forestry & Fisheries Sector View	Youth contributor
Thapelo Matsapola	Logistics Risk Theme	
Thato Seritili	Climate Risk Theme	Youth contributor
Thokozani Mvelase	Rule of Law Risk Theme, Communications Sector View	
Thulisile Mpanza	Content Validation, Functional State Risk Theme	Youth contributor
Tiana Smith	Tourism & Hospitality Research	
Tibapi Gucha	Financial Services Research	
Tinyiko Maluleke	Foreword	
Tjaart Van Der Berg	Energy Risk Theme, Energy Sector View	
Totyelwa Dodo	RIC Member, Content Validation, Call to Action	
Trida Ngobeni	Resilience/Continuity	
Tshepile Moganedi	Resilience/Continuity	
Tulonga Amunyela	Public Service Research	
Veronica Singo	Tourism & Hospitality Research	
Volker Von Widdern	Sustainable Risk Response	
Vuyani Macala	Financial Services Research	
Walter Ehrlich	RIC Member, Project Oversight, Rule of Law Risk Theme	
Warren Young	Economy Risk Theme	
Wayne Duvenhage	Non-Profit Sector View	
Wendy Poulten	Energy Sector View	
Willie Nel	Manufacturing Sector View	
Wilna Meiring	Board Member, RIC Member, Project Oversight, Risk Context	
Yolisa Shugu	Financial Services Research	
Yvonne Mothibi	Chief Executive, Project Sponsor	
Yvonne Munyikwa	Financial Services Research	
Zamile Qwemesha	Financial Services Research	
Zodwa Bill	Agriculture, Forestry & Fisheries Research	
Zweni Sisipho	Financial Services Research	

14. Disclaimer

The IRMSA South Africa Risk Report 2024/25 is published by the Institute of Risk Management South Africa (IRMSA, the Institute) under the guidance of the IRMSA Risk Intelligence Committee. IRMSA believes that the third-party sources used in this report are reliable; that the information was provided in good faith and has not been independently verified. No representation or warranty, express or implied, is made as to the accuracy or completeness of any information obtained from such third-party sources. This report highlights risks and related factors, which are not to be considered exhaustive. The comments, deductions, and opinions in this report may reflect current and future expectations and events, based on individual and/or collective experiences, and a wide range of assumptions, including statements that do not directly relate to historical or current facts. Contributors to this report operate in an ever-changing environment, with new risks continually emerging. The report should therefore be read and used in this context. The opinions expressed in this report are valid only for the purpose stated herein and as of the date of publication. No obligation is assumed to revise this report to reflect changes, events or conditions that occur after the date hereof. The vendor names mentioned in this document do not represent all possible vendors. They are the trademarks of their respective owners and are mentioned for identification purposes only. IRMSA does not, by means of including such vendor names herein, advocate for or against any specific vendor or product. All decisions in connection with the implementation or use of advice or recommendations contained in this document are the sole responsibility of the user. This document does not represent investment advice, nor does it provide an opinion regarding the fairness of any transaction to any parties.

The report (in PDF and e-book formats) is available on the IRMSA website: www.irmsa.org.za

The Institute of Risk Management South Africa

IRMSA Risk Report

South Africa Risks 2024/25

Tenth Edition

144 Katherine Street
Grayston Ridge Office Park
Block A, Lower Level

T : +27(0)11 555 1800
E : communications@irmsa.org.za