



BRICS ACADEMIES FORUM 2023

SOUTH AFRICA IN POLYCRISES AND DEVELOPMENTAL CHALLENGES

2 December 2023

UNDERSTANDING POLYCRISIS



- Polycrisis is a series of crisis occurring at the same time.
- Risks interconnect and combine to create an outcome that is worse than the sum of its parts.



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



2023 : THE YEAR OF POLYCRISIS



“a time of great disagreement, confusion, and suffering”

World Economic Forum, January 2023, Davos Switzerland



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



ADVANCED ECONOMIES



HEADWINDS

- Rising cost of living,
- Increasing food and energy prices,
- Rising inflation,
- Accelerating migration,
- Insatiable resource demands,
- Increasing conflicts in complexity and duration,
- Stretched national assets



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



SOUTH AFRICA: COMPLEXITY OF PROBLEMS AND CHALLENGES



**“...failed state, mafia state,
social unrest, riots, poor service delivery,
poverty, high unemployment, corruption, persistent inequality,
no or slow economic growth or regression,
failing public infrastructure,
decarbonization impact on the economy, technological
disruptions...”**

Inst. of Risk Mgmt. SA 2023/2024



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



FRAGMENTED WORLD



- **Extreme Weather Events**
- **Most Challenging Present-Day Risk = Cost of Living**
- **Future Existential Threat = Climate Related Risks**



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



BRICS ACADEMIES FORUM



TO LEAD

- **Cost of living risk**
- **Climate existential threat risk**
- **Pooling of resources**
- **Research collaboration**
- **Knowledge & praxis sharing**



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



CLIMATE RELATED RISKS – THE EXISTENTIAL THREAT

- **NDCs** to reach global peaking of greenhouse gas (GHG) emissions as soon as possible (**by 2050**)
- **To undertake rapid, science directed reductions** thereafter to achieve a balance between anthropogenic emissions by sources and removals by sinks of GHGs in the second half of this century (**2050 to 2100**).

UNFCCC (CoP 28 Dubai, UAE)



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA





Carbon Neutrality	By 2050	By 2050	By 2070	By 2060	By 2050
------------------------------	----------------	----------------	----------------	----------------	----------------

**Reduction of emission intensity of GDP ,
Electric Power from Non-Fossil Resources,
Carbon Sink from Forests and Trees,
Adaptation starting with the most vulnerable.**

**DEVELOPING ECONOMIES,
HUGH SOCIAL CHALLENGES,**

MOBILIZE FUNDING FROM INDUSTRIALIZED ECONOMIES



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



THE ECONOMY VECTOR IN POLYCRISIS



SOUTH AFRICA & THE COST-OF-LIVING CRISIS

- **Rising food prices – poor are struggling most**
- **High unemployment – youth are stranded**
- **Unavailability of electricity – national disaster**
- **No economic growth**



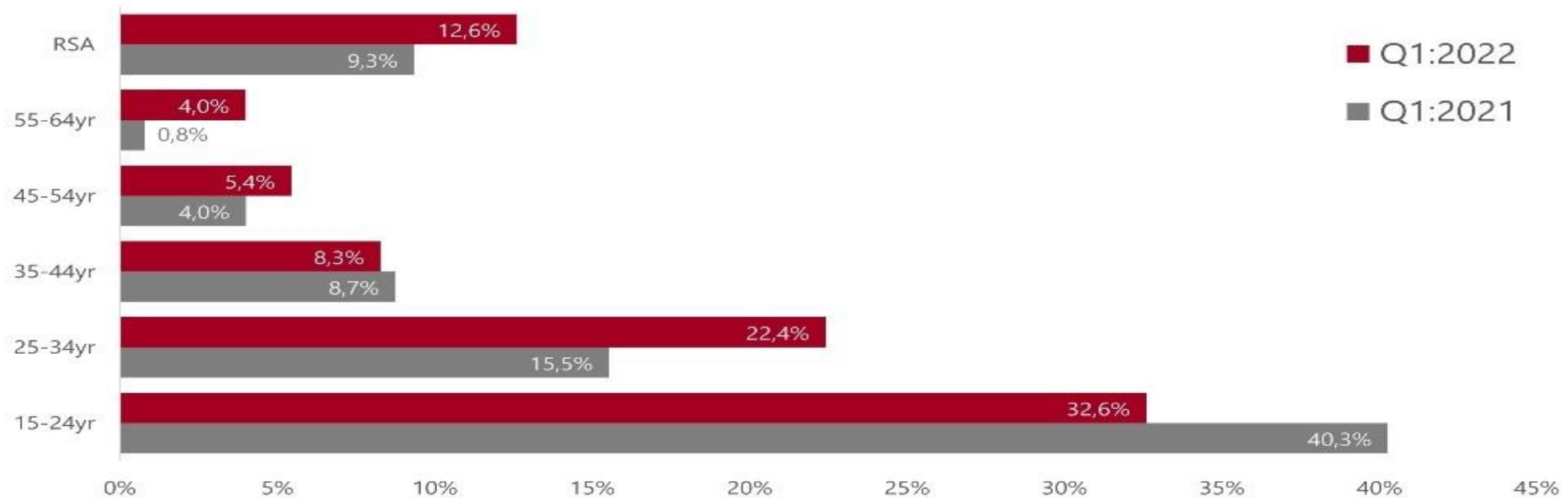
science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



Although the graduate unemployment rate remains low in South Africa compared to those of other educational levels, ***unemployment among the youth continues to be a burden irrespective of educational level.***

Graduate unemployment rate, 2021 and 2022



POLYCRISIS FRAMEWORK-SOCIETY (eg., INEQUALITIES AND SOCIAL DISTRESS)



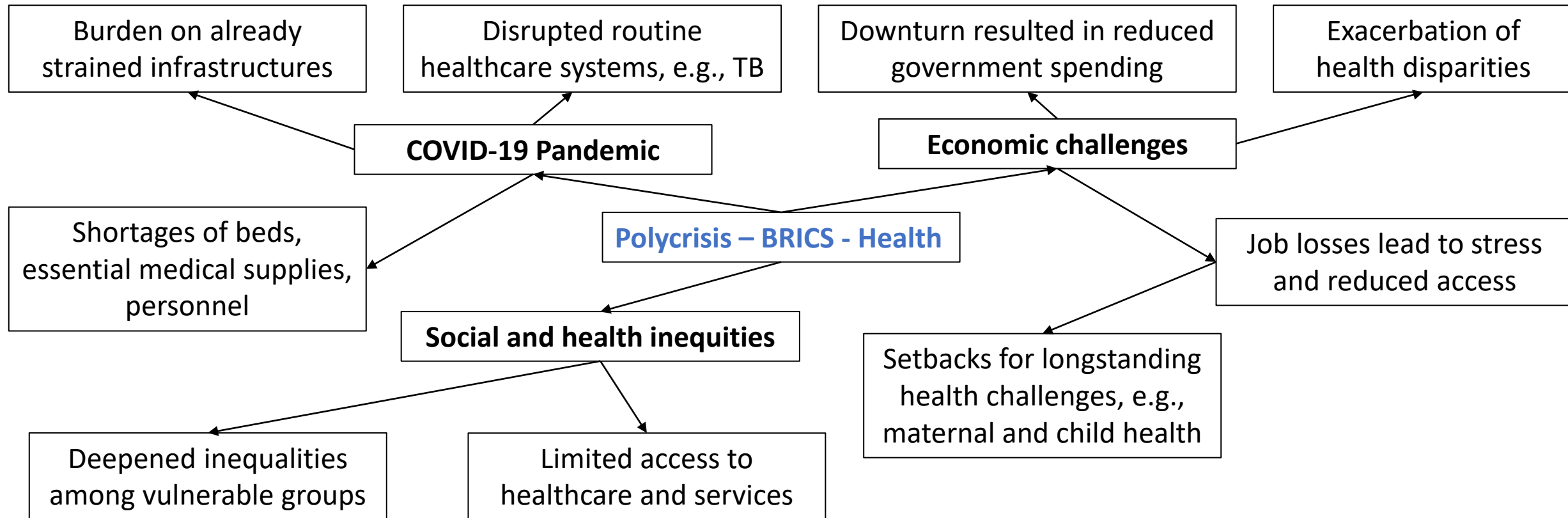
Problem Identification & Definition	<ul style="list-style-type: none"> • Inclusivity (Gender, Race & Disability). • Quality Early Childhood Development . • Unemployment (Economic growth path & skills mismatch). • Public Healthcare Confidence. • Climate resilient society & just energy security.
Potential Solutions	<ul style="list-style-type: none"> • Improved educational development. • Sound social safety & security net. • Improve all basic services, i.e., water, sanitation, waste collection. • Improve public healthcare services & infrastructure. • Improve support for youths & people with disability programmes. • Improve digital connectivity. • Improve societal sense of belonging/dignity and spatial norms.
Prioritization & Budgeting	<ul style="list-style-type: none"> • Social compacts to reduce poverty & inequality. • Create fluid service delivery mechanism.
Monitoring, Evaluation & Learning Tools	<ul style="list-style-type: none"> • StatsSA Quarterly Labour Force Reports. • Social Progress Index.

POLYCRISIS FRAMEWORK-GOVERNANCE (eg., INTERNATIONAL CO-ORDINATION)



Problem Identification & Definition	<ul style="list-style-type: none"> • Regional migration. • Geo-politics. • Economic Inequalities amongst countries. • International Law and Justice. • Regional politics. • Corruption.
Potential Solutions	<ul style="list-style-type: none"> • Inclusive growth through policy actions. • Collective sustainability management. • Improve existential policy implementation. • Establish a competitive base of legislative & regulatory frameworks. • Improve regional cooperation. • Install governance & legitimacy of public systems.
Prioritization & Budgeting	<ul style="list-style-type: none"> • Implementation of international pacts on Financing for Development.
Monitoring, Evaluation & Learning Tools	<ul style="list-style-type: none"> • National Development Plan. • The Presidency Strategic Plan 2020-2025.

POLYCRISIS, BRICS AND HEALTH ISSUES



"As we navigate the polycrisis in the BRICS nations, addressing health challenges becomes paramount, requiring collaborative efforts and innovative solutions for a resilient future." [CYW]

THE NATIONAL FISCUS



What criteria informs the identification and prioritisation of various aspects of the polycrisis? How are public resources such as Budgets influenced by the polycrisis?

- **The impact on the national fiscus, present day poor economic growth = lower levels of national tax collection,**
- **Increasing social security impacts on national debt, increased borrowings, higher interest payments and less capital for infrastructure development; cumulative impact on failing public utility basic services of energy, water, sanitation, housing etc.**

MONITORING AND EVALUATION



- **The Institute of Risk Management of South Africa tracks both national risks and risk management strategies.**
- **The 9th edition of their report reflects great inability to arrest the polycrisis.**

THE ROLE OF ASSAf



- **Engagement with other stakeholders within the NSI**
- **ASSAf Standing Committees (Health; STEMI; Humanities; Biosafety and Biosecurity; Reduction of Poverty and Inequalities)**
- **Just Transition Forum**
- **Forum on Water and Sanitation**
- **Forum on Integrated Climate Change Response**
- **Science Engagement and Communication Strategy to build trust with the public on STI in advancing societal issues**

THANK YOU

*Applying scientific thinking
in the service of society*

www.assaf.org.za

ACKNOWLEDGEMENTS

ASSAf Technical Team

- Prof Rasigan Maharaj
- Prof Caradee Wright
- Prof Pat Naidoo

ASSAf Council Members

- Prof Stephanie Burton (Acting President)
- Prof Evance Kalula

ASSAf Secretariat

- Prof Himla Soodyall
- Dr Melusi Thwala
- Dr Tozama Qwebani
- Mr Aluwani Elijah Ramulifho
- Mr Ian Shendelana
- Ms Marvin Mandiwana
- Ms Henriette Wagner

DSI

Mr Daan du Toit