



## NC PSDF | EXECUTIVE SUMMARY



Province of the  
**Northern Cape**  
REPUBLIC OF SOUTH AFRICA

# NORTHERN CAPE PROVINCE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK

## EXECUTIVE SUMMARY

PREPARED FOR:



Province of the  
**Northern Cape**  
REPUBLIC OF SOUTH AFRICA

PREPARED BY:



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**PLEASE NOTE** that this document is an excerpt from the larger PSDF and has been provided separately for convenience. It serves as the Provincial Sector Plan specifically targeting sectors responsible for Spatial Governance in the Northern Cape Province. However, it should be read in conjunction with the complete Northern Cape Provincial Spatial Development Framework, as it references concepts, strategies, and actions that may be interconnected with other programs, actions, and strategies from different sectors.

## ABBREVIATIONS

<b>COGHSTA</b>	Department of Cooperative Governance, Human Settlements and Traditional Affairs
<b>DALRRD</b>	Department of Agriculture, Land Reform and Rural Development
<b>DEDAT</b>	Department of Economic Development and Tourism
<b>DENC</b>	Department of Environmental Affairs and Nature Conservation
<b>DM</b>	District Municipality
<b>DR &amp; PW</b>	Department Roads and Public Works
<b>DSAC</b>	Department Sports Arts and Culture
<b>DSD</b>	Department of Social Development
<b>DTSL</b>	Department Transport Safety & Liaison
<b>DWS</b>	Department of Water and Sanitation
<b>GIS</b>	Geographic Information System
<b>IDP</b>	Integrated Development Plan
<b>LM</b>	Local Municipality
<b>NCDOE</b>	Northern Cape Department of Education
<b>NCDOH</b>	Northern Cape Department of Health
<b>NCPS</b>	Northern Cape Planning System
<b>NCPT</b>	Northern Cape Provincial Treasury
<b>NSDF</b>	National Spatial Development Framework
<b>OTP</b>	Office of the Premier
<b>PSDF</b>	Provincial Spatial Development Framework
<b>RSDF</b>	Regional Spatial Development Framework
<b>SALGA</b>	South African Local Government Association
<b>SALT</b>	Southern African Large Telescope
<b>SARAO</b>	South African Radio Astronomy Observatory
<b>SEZ</b>	Special Economic Zone
<b>SKA</b>	Square Kilometre Array
<b>SPLUMA</b>	Spatial Planning and Land Use Management Act 16 of 2013
<b>WTW</b>	Water Treatment Works
<b>WWTW</b>	Waste Water Treatment Works





# 1 INTRODUCTION

The Northern Cape Provincial Spatial Development Framework (PSDF) serves as the strategic guiding document for the spatial development of the Northern Cape Province. Its core purpose is to provide a spatial vision and policy direction that aligns with both provincial and national development strategies. The PSDF aims to promote sustainable land use, balanced socio-economic development, and environmental stewardship across the province. The framework is informed by the Spatial Planning and Land Use Management Act (SPLUMA) of 2013, which mandates provinces to develop spatial frameworks that align with key principles of spatial justice, sustainability, and efficiency.

The PSDF is not a static document but a dynamic framework that must adapt to evolving socio-economic and environmental conditions. This requires periodic reviews to ensure that the PSDF remains relevant and aligned with updated data, policies, and development objectives. The review process is crucial for addressing spatial inequalities, optimizing resource use, and enhancing the overall quality of life for Northern Cape residents.

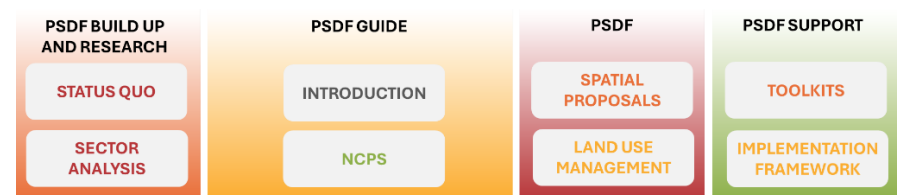
**Table 1** outlines the key objectives of the Northern Cape Provincial Spatial Development Framework (NC PSDF), emphasizing critical focus areas such as economic growth, social equity, environmental sustainability, and governance. These objectives guide the province's spatial planning efforts to ensure alignment with national frameworks and foster sustainable development across various sectors.

**Table 1: Key Objectives of the NC PSDF**

OBJECTIVE	KEY FOCUS
Alignment with Frameworks	Ensure alignment with NDP, NSDF, and Northern Cape Vision 2040.
Economic Growth and Sectoral Development	Promote sustainable growth in agriculture, mining, tourism, renewable energy, and manufacturing.

OBJECTIVE	KEY FOCUS
Social Equity and Inclusion	Address spatial inequalities, improve access to services, and promote land reform.
Environmental Sustainability and Climate Resilience	Integrate climate adaptation and protect natural resources.
Integrated Infrastructure Development	Improve infrastructure in transport, energy, water, and ICT.
Rural Development and Land Reform	Support rural development, land reform, and food security.
Governance and Institutional Strengthening	Strengthen governance and align spatial policies across all government levels.
Integrated Transport Master Plan (ITMP)	Supports the development of transport infrastructure and mobility improvements.
Green Hydrogen Strategy	Guides renewable energy and green hydrogen project development.

The Provincial Spatial Development Framework (PSDF) is structured into **four main components**: PSDF Build Up and Research, PSDF Guide, PSDF, and PSDF Support. The Build Up and Research section focuses on the foundational assessment through Status Quo and Sector Analysis studies. The PSDF Guide includes an Introduction and details the Northern Cape Provincial Strategy (NCPS). The PSDF section outlines key Spatial Proposals and Land Use Management strategies, while PSDF Support provides Toolkits and an Implementation Framework to facilitate effective planning and execution of the spatial framework.



**Figure 1: PSDF Structure**





## 1.1 KEY DEMOGRAPHICS

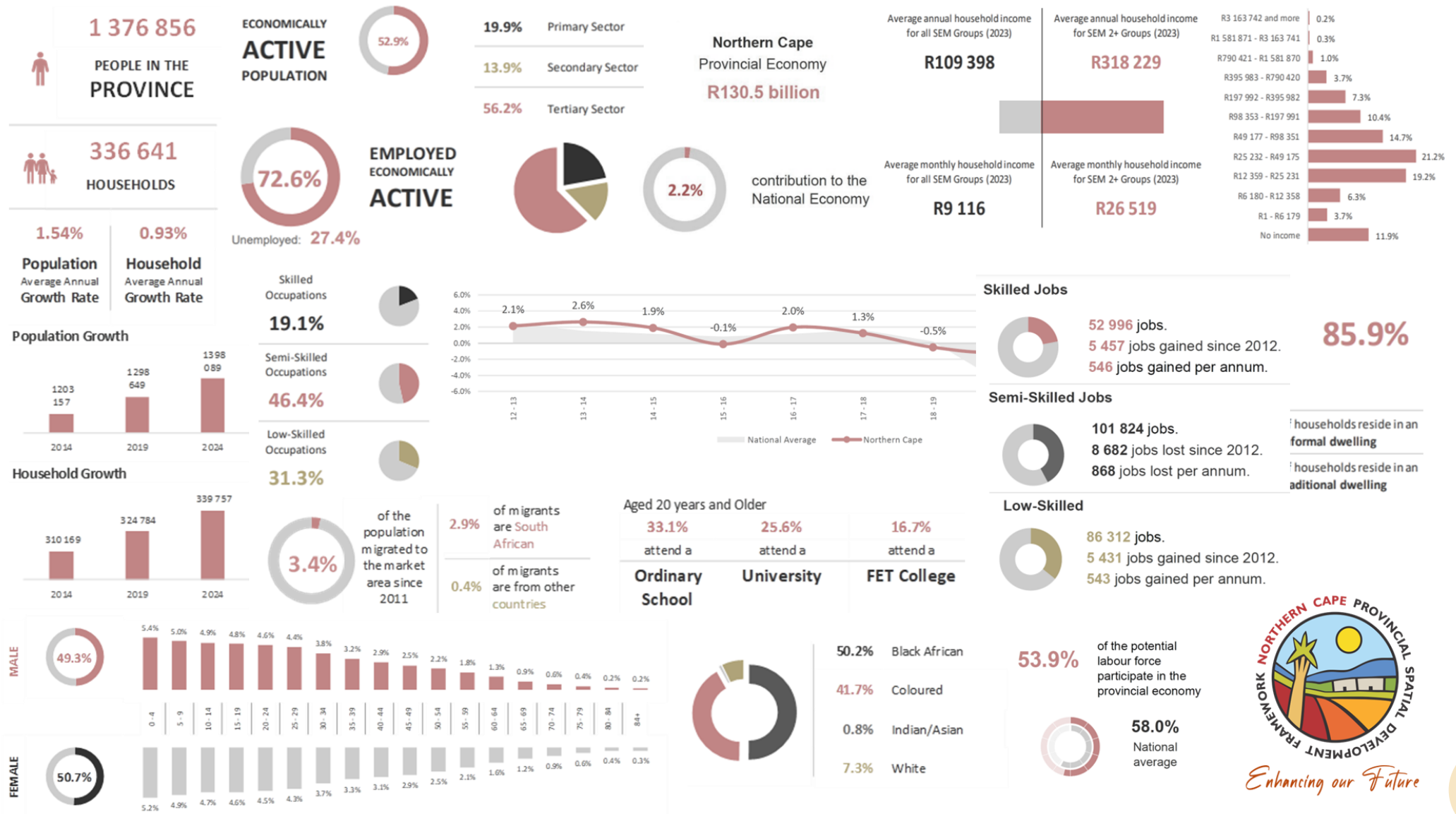


Figure 2: Key Provincial Demographics (also refer to the Status Quo Report for more detail), Stats SA 2022, Quantec, 2024)





## 2 THE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK

### 2.1 INTRODUCTION

This phase of the Northern Cape Provincial Spatial Development Framework (PSDF) outlines and describes the spatial proposals designed to guide the province's sustainable development. The purpose of this document is to translate policy directives into actionable plans that promote responsible growth, ensuring that economic, environmental, and social objectives are balanced. By incorporating principles such as planetary boundaries and bio-regional planning, these proposals aim to create a resilient and prosperous Northern Cape that meets the needs of its people while preserving its unique natural and cultural heritage.

#### 2.1.1 THE SPATIAL VISION OF THE NORTHERN CAPE

The spatial vision of the Northern Cape is shaped and reinforced by a range of policy directives aimed at promoting sustainable growth and transformation. These directives are designed to ensure that development within the region is balanced and equitable, taking into account the long-term needs of the economy, the environment, and local communities. By adhering to these policies, the Northern Cape aims to create a harmonious and prosperous region where all stakeholders can thrive.

#### 2.1.2 ROLE OF THE NORTHERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK (PSDF)

The Northern Cape Provincial Spatial Development Framework (PSDF) plays a crucial role in providing the spatial context necessary for fulfilling strategic mandates. It outlines how land and resources should be utilized to maximize benefits, ensuring that economic development, environmental

preservation, and community well-being are all taken into consideration. The PSDF serves as a blueprint for sustainable development, guiding decision-making processes to optimize the use of resources and support the growth and prosperity of the region.

#### 2.1.3 KEY DIRECTIVES INFORMING SPATIAL PRIORITIES

For the Provincial Spatial Development Framework (PSDF) to effectively fulfil its mandate, it must align with and represent the strategic intents of various national and regional plans, the most prominent being the:

- **National Development Plan (NDP):** A comprehensive framework aimed at eliminating poverty and reducing inequality by 2030.
- **National Spatial Development Framework (NSDF):** A strategic guide to coordinate the spatial aspects of development across different regions.
- **Medium-Term Development Plan (MTDP), previously Medium-Term Strategic Framework (MTSF):** A plan that outlines the government's priorities and medium-term targets.
- **Karoo Regional Spatial Development Framework (RSDF):** A regional plan focused on the unique needs and opportunities within the Karoo area.
- **National and Provincial Sector Plans:** Detailed strategies for specific sectors such as infrastructure, housing, and environmental management.

By integrating these directives, the PSDF ensures a cohesive approach to spatial planning, aligning provincial efforts with broader national objectives to foster sustainable and inclusive growth.

#### 2.1.4 APPROACH TO STRATEGIC PROPOSALS

The Spatial Proposals aim to implement policy directives through sustainable development methods. These methods ensure responsible





development that takes into account potential environmental and social impacts. By adhering to sustainable practices, the Northern Cape province can foster growth that is not only economically viable but also environmentally sound and socially inclusive.

**The following concepts form the basis of the spatial proposals of the Northern Cape PSDF:**

**Planetary Boundaries:** Planetary boundaries set the limits of ecological systems and their self-regulation capacity. Planning proposals must respect these limits to avoid irreversible ecosystem damage, which could harm the province's social, economic, and environmental well-being. Staying within these boundaries is essential for maintaining a healthy and resilient natural environment.

**Bio-Regional Planning:** Bio-regional planning Prioritises the unique ecological, cultural, and social characteristics of specific regions. By considering an area's natural boundaries and resources, it creates sustainable development strategies tailored to local needs. This approach ensures development harmonizes with the region's landscapes, promoting long-term sustainability.

By integrating policy directives, respecting planetary boundaries, and adopting bio-regional planning approaches, the Northern Cape Provincial Spatial Development Framework (PSDF) will ensure that sustainable practices are employed. This integration will unlock development potential and provide bold solutions to the challenges currently hindering the province's growth.

#### 2.1.4.1 PROPOSAL COMPOSITION

The section provides a background for the use of the key components used to articulate the developmental strategies for the Northern Cape Province.

##### DRIVER 1: THRIVING ECONOMIC ENGINES

- Agricultural development and value chain additions
- Promotion of manufacturing and industrial activities
- Expansion of mining support infrastructure
- Green energy development and infrastructure expansion
- Eco-tourism and niche tourism promotion
- Economic growth through logistics and transport infrastructure development
- Sustainable land use and resource management

##### DRIVER 2: TRANSFORMING SPACES AND LIVELIHOODS

- Sustainable human settlement development
- Enhancing public transportation and connectivity
- Integrated social services and infrastructure
- Promotion of spatial justice and inclusive growth
- Rural development and land reform
- Addressing housing needs and informal settlement upgrades
- Climate resilience and disaster risk management

##### CONSERVATION OF RESOURCE PRODUCTION AREAS

- Protection of high-potential agricultural land
- Sustainable management of water resources
- Conservation of biodiversity and ecosystems
- Expansion of protected areas and conservation zones
- Sustainable coastal management and fisheries
- Responsible land use and natural resource management
- Climate change adaptation and environmental resilience

##### DRIVER 4: EFFECTIVE SPATIAL GOVERNANCE

- Inclusive land use decision-making processes
- Strengthening intergovernmental coordination and alignment
- Integration of traditional leadership in governance
- Monitoring and evaluation of spatial development outcomes
- Enhancing transparency and accountability in planning
- Streamlining development application processes
- Building capacity for effective spatial planning and management





#### 2.1.4.2 DEVELOPMENT DRIVERS

These align with the drivers outlined in the Provincial Growth and Development Plan (PGDP), emphasizing the factors necessary to propel sustainable development forward. Development drivers are strategies designed to unlock the full potential of the province's developmental state. They serve as mechanisms to coordinate public and private investments, aligning with the spatial vision outlined in the PSDF. These drivers facilitate change and the achievement of specific objectives in spatial planning and development.

#### 2.1.4.3 SPATIAL OUTCOMES

Spatial outcomes correspond to the desired results of development initiatives specified in the PGDP. They focus on achieving key spatial and governance elements that propel sustainable development initiatives forward. These outcomes are pivotal in reaching the strategic goals of development drivers, providing concise interventions to promote economic growth and social well-being. Spatial outcomes encompass various infrastructure, socio-economic, environmental, and policy-oriented components that shape decision-making processes.

Spatial outcomes complement development drivers by identifying the ideal locations for interventions linked to each lever and associated driver. Spatial targeting enables the prioritization and categorization of investments, ensuring efficient utilization of funds according to the specific needs and opportunities of the province.

#### 2.1.4.4 ACTION AREAS

Action areas provide the spatial targets or ideal locations of development opportunities, high-impact projects and interventions aligned with national and provincial strategic objectives. These action areas are critical for implementing the spatial proposals effectively, ensuring that strategic interventions are focused on areas with the highest potential for positive impact.

By focusing on these key concepts—development drivers, spatial outcomes, and action areas—the Northern Cape PSDF aims to create a comprehensive framework for sustainable development. This approach will ensure that the province can meet its current needs while preserving resources and opportunities for future generations.

## 2.2 STRATEGIC PROPOSALS

### 2.2.1 DRIVER 1: THRIVING ECONOMIC ENGINES

**DRIVER 1** aims to ensure economic growth that will lead to increased development and prosperity for the people of the Northern Cape Province, a conscious effort is required to change the economic trajectory of the province. To achieve this, the following developmental sectors have been identified by the

#### 2.2.1.1 STRENGTHENED AGRICULTURE AND AGRO-PROCESSING

##### ACTION AREAS:

- **Karoo Spatial Action Area:** Promote innovative and smart agricultural practices to enhance agricultural productivity.
- **Land reform:** Concentrate investment and support to projects located within the priority agro-processing areas.
- **Agriparks:** Leverage the Agripark program to maximize the potential of commodities and their value chains by lowering input costs and assisting in the preparation of products for both local and international markets. Focus investment in Agriparks and value chain developments within the **priority agro-processing** areas.
- **High-Potential Agricultural Land:** Safeguard high-potential agricultural land to secure the economic foundation of the agricultural industry.
- **Vaalharts & Douglas-Kakamas Spatial Action Areas:** Enhance the performance of irrigation schemes and pivot irrigation agriculture by prioritizing water quality through cross-border coordination with the





North West and Free State provinces to reduce pollution in the Orange and Vaal River systems.

- **Fresh Produce Markets:** Develop, upgrade, and support local fresh produce markets in key regional anchors and rural service centres.
- **Logistics & Industrial Parks:** Use logistics and industrial parks to set up cold storage and processing facilities along major trade routes and key regional development areas.

### 2.2.1.2 MINING AND MINERAL BENEFICIATION

#### ACTION AREAS:

- **Iron & Manganese Rail Lines:** Mitigate the impact of manganese and iron particle pollution along the railway routes and ensure railway lines are maintained and upgraded as necessary.
- **R31 route:** Upgrade and maintain the R31 route to support road-based transport of mining machinery throughout the Gamagara Spatial Action Area (GSAA).
- **Gamagara Spatial Action Area (GSAA):** Promote the beneficiation of ferrous minerals by promoting steel manufacturing within the GSAA.
- **Integrated Jewellery hubs:** Investigate the potential of integrated jewellery hubs in Kimberley and Springbok with a focus on cutting and processing stones for jewellery purposes.
- **Artisanal mining licence priority areas:** To increase the longevity of mining activities and decrease the impact of mining closure, artisanal mining licenses and operations are to be promoted within the Artisanal Mining Priority Areas.
- **Potential mining areas:** Investigate the viability of mining activities within the potential mining areas identified within the KRSDF.
- **Namakwa SEZ:** Support the beneficiation of non-ferrous minerals within the Namakwa SEZ.
- **Oil and Gas exploration zone:** Investigate the opportunity of gas and oil extraction where the environmental impact can be maintained and limited.

### 2.2.1.3 TOURISM MARKET DEVELOPMENT

#### ACTION AREAS:

- **Tourism nodes:** Ensure heritage sites within nodes are protected, maintained and upgraded where needed. Promote the establishment of tourism-related and supporting industries by promoting land use applications related to entertainment, catering and accommodation.
- **Tourism resource base:** Promote the expansion of nature reserves, maintenance of heritage sites and protection of unique environmental qualities relating to biomes, water quality of rivers and dams, and clear night skies. Promote the establishment of tourism-related activities along tourism resources within the tourism clusters and National Protected Areas Expansion Strategy (NPAES) Focus areas.
- **Tourism support infrastructure:** Support, expand and maintain key tourism routes and airports. Support the upgrading of border posts to enhance ease of tourist movements between Namibia and the Northern Cape.
- **Adventure Hubs:** Support the development of Adventure Hubs in key tourism hotspots along the Orange and Vaal Rivers, West Coast Region, and towards the Kalahari, initiatives should focus on enhancing infrastructure for easier access, developing facilities for adventure sports and eco-tourism, preserving natural and heritage sites, and launching targeted marketing campaigns.







#### 2.2.1.4 DEVELOPMENT OF THE ENERGY SECTOR

##### ACTION AREAS:

- **Boegoebaai Harbour:** Support the development of the Boegoebaai Harbour and green hydrogen-related land uses.
- **Eskom HV line expansions:** Support the upgrading of Eskom bulk infrastructure, as a catalyst for the further expansion of the renewable energy sector.
- **Renewable Energy Development Zones (REDZs):** Support the applications of renewable energy projects within the REDZ, and where the capacity of substations allows for grid integration.
- **Wind Energy:** Prioritise the establishment of wind energy projects within the priority investment area for wind generation.
- **Namakwa Special Economic Zone:** Support Ammonia and green hydrogen-related developments within the Namakwa SEZ, along with mining and mineral beneficiation.
- **Prieska Power Reserve:** Support the development of green hydrogen and ammonia production and related supporting infrastructure.
- **Gas pipelines:** Support the development of inter-provincial gas pipelines to support the transportation of hydrogen.

#### 2.2.1.5 CAPITALISE ON MANUFACTURING AND TRADE

##### ACTION AREAS:

- **Industrial Parks:** Support the establishment of logistic parks and cargo hubs in regional development anchors and rural service centres along the N14 corridor.
- **Namakwa SEZ:** Utilise SEZ to improve investor confidence and enhance international competitiveness and trade of non-ferrous minerals.
- **Boegoebaai port and green energy hub:** Support the role of the Boegoebaai port in positioning the Northern Cape as a major competitor and exporting green hydrogen and ammonia.

- **Border posts:** Ensure border posts are well maintained and upgraded as necessary to enhance trade with Southern African Development Community (SADC) nations.
- **Priority investment areas:** Apart from existing investment priorities, the following have been proposed 1) Industrial Park; 2) Proposed metal fabrication and 3) Renewable energy support manufacturing hub.

#### 2.2.1.6 COMPETITIVE INFRASTRUCTURE DEVELOPMENT

##### ACTION AREAS:

- **Critical Water Treatment Works (WTW) & Wastewater Treatment Works (WWTW):** Prioritise municipal interventions in municipalities with critical and poor Blue and Green Drop ratings, to comply with DWS Blue and Green Drop recommendations
- **Water resource base:** Prioritise the rehabilitation of stressed catchment areas and promote inter-provincial coordination to improve the water quality of the Orange and Vaal River systems.
- **Water conservation:** prioritise water conservation strategic intervention in high rainfall variability and increased evaporation zones.
- **Resource risk:** Prioritise pollution mitigation measures for pollution risks located within strategic water resources.
- **Evaporation mitigation:** Promote the inclusion of evaporation adaptation strategies for district and municipal sector plans and bylaws for areas likely to experience an increase in high-temperature days.
- **Drought mitigation:** Promote the inclusion of drought adaptation strategies for district and municipal sector plans and bylaws for areas likely to experience a decrease in annual rainfall.
- **Prasa rail:** Revitalise Prasa rail infrastructure and operations
- **Transport infrastructure:** Prioritise maintenance of regional linkages
- **ICT Priority Areas:** Prioritise Fibre Infrastructure rollouts in the John Taolo Gaetsewe and Pixley ka Seme District by prioritising wayleave applications received in the district.
- **SKA Core:** Prevent the establishment of projects with the potential to cause dust and radio frequency disturbances within the SKA Core Area.





- **Electronic Vehicle support:** Prioritise the establishment of Electronic Vehicle charging stations along national roads and regional linkages

### 2.2.1.7 THE MARITIME ECONOMY

#### ACTION AREA:

- **Coastal economy resource base:** Ensure development in the area sustainably takes place and complies with the restrictions imposed on marine protected areas.
- **Aquaculture support:** Support the establishment and maintenance of aquaculture projects within the Fishing and Maritime Corridor
- **Lobster processing plant:** Support the establishment and expansion of a lobster processing plant in Port Nolloth.
- **Supporting infrastructure:** Prioritise the upgrading and maintenance of harbours and related infrastructure for Port Nolloth, Kleinsee and Hondeklipbaai.
- **Tourism support:** Prioritise maintenance of gravel roads to ensure tourist attractions are accessible, as well as ensure the accommodation and catering facilities of national parks are upgraded.
- **Labour and skills support:** Enhance the participation of communities in the maritime economy by providing support in accessing funding for skipper and fishing licenses.

### 2.2.2 DRIVER 2: TRANSFORMING SPACES AND LIVELIHOODS

**DRIVER 2** aims to improve the spaces people interact with by enhancing the accessibility to social services as well as supporting the foundation of urban and rural livelihoods by channelling investment into urban and rural settlements, accompanied and supported by programmes aimed at food security, land reform, skills development and public transportation systems.

#### 2.2.2.1 SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

##### ACTION AREAS:

- **CBD Revitalisation priorities:** Prioritise the investment into the maintenance of transport infrastructure, waste management and urban greening projects.
- **Housing Priority Districts:** Allocate funding for housing developments in accordance with the priority rating of the district.
- **Priority Housing Nodes:** Support the Priority Human Settlements and Housing Development Areas by investing in bulk infrastructure to accommodate new housing projects.
- **High climate risk:** Prioritise the inclusion of climate change adaption strategies (Greenbook Toolkits) into land use regulations and bylaws of settlements located in high temperature and low rainfall areas.
- **Elderly Support Focus Areas:** Areas experiencing a population decline must adjust the available social services to cater for the ageing population.
- **Small Town Regeneration Priorities:** Prioritise interventions in basic service delivery in the following small towns: Kuruman, Kathu, Colesberg, Springbok, De Aar, Britstown, Calvinia, Groblershoop and Warrenton. *Refer to the **Small-Town Regeneration Toolkit** to assess the eligibility of towns for regenerative measures.*

#### 2.2.2.2 IMPROVED PUBLIC TRANSPORTATION

##### ACTION AREAS:

- Improve public transport facilities and apply urban design principles to transit-orientated development within the nodes earmarked for public and urban design (Kimberley and Kuruman).
- Improve movement networks between districts through the upgrading and maintenance of the regional trade routes such as the R63, R27, R384 and R31 roads.
- Prioritise the revitalisation of the PRASA rail routes to diversify public transport options within the province and increase the accessibility to and from the province.





### 2.2.2.3 INTEGRATION OF RURAL DEVELOPMENT, LAND REFORM AND FOOD SECURITY

#### ACTION AREAS:

- Cluster land reform project within Rural Intervention Areas.
- Fast track land reform processes and smallholder farm support, through the Agripark and training programmes, within the FB1, FB2 FB3, PKS3 and ZF1 Rural Intervention Areas.
- Prioritise investment in harbour infrastructure, mariculture, marine and nature-based tourism as a means to increase employment opportunities in rural landscapes.
- Avoid large-scale investment in climate-risk areas.
- Support the upgrading of water scheme infrastructure to support rural development viability.

### 2.2.2.4 THRIVING EMPLOYMENT AND EDUCATION LANDSCAPES

#### ACTION AREAS:

- **Smart Education Hubs:** Support the development of training incubators supporting the manufacturing and trade industries in Springbok, Kimberley and Kuruman.
- **Youth Support Focus Areas:** Areas experiencing population growth must Prioritise the investment in projects that support the skills development of the labour force and are related to the dominant and emerging economic industries in the region.
- **Kalahari and Karoo Action areas:** Explore the commercial potential of indigenous knowledge based on agricultural, medicinal and social practices. Prioritise research studies as well as funding and scholarships pertaining to research related to arid-innovation and astronomy.
- **ICT Investment focus nodes & areas:** Promote and stimulate the roll-out of fibre and cell phone tower infrastructure by simplifying wayleave application procedures and requirements.

### 2.2.3 DRIVER 3: CONSERVATION OF RESOURCE PRODUCTION AREAS

The Northern Cape Province has an abundance of natural resources and environmental assets. While these present a plethora of economic opportunities, a concerted effort must be made to ensure that these are protected and enhanced. At the same time, the Province must ensure that enough is done to protect communities against the potential threats of environmental harm and unsustainable resource exploitation. To achieve this, the following developmental outcomes have been identified:

#### 2.2.3.1 PROTECTION AND EXPANSION OF ECOLOGICAL INFRASTRUCTURE

##### ACTION AREAS:

- Prioritise investment and rehabilitation efforts along the priority rehabilitation waterways
- Prioritise the revision of the Northern Cape Coastal Management Programme (**Refer to the Coastal Management Toolkit**).
- Prioritise the establishment of new protected areas and the expansion of existing protected areas within the Priority Expansion Areas.
- Improve the representation of the Nama-Karoo Biome in conservation targets within the Northern Cape by prioritising the registration of protected areas where the biome is present.
- Prohibit harmful and non-compatible land uses such as mining in Critical Biodiversity Areas One and Two.





### 2.2.3.2 PROTECTION OF STRATEGIC PRODUCTION AREAS

#### AGRICULTURE

##### ACTION AREAS:

- Prioritise investment and strategic interventions to facilitate the renewal of the Vaalharts irrigation schemes located within designated Irrigation Scheme Revitalization Areas in the Northern Cape, improving water efficiency and agricultural productivity.
- Investigate methods to manage and mitigate the environmental impact of high-intensity farming, situated within the Agri-Eco trade-off zones, which indicate where high levels of competition exist between conservational and agricultural land uses.
- Prioritise Wind Energy above solar projects where possible, to decrease the level of competition between renewable energy on extensive farming land uses within Agri-IPP trade-off zones.
- Prioritise water use for agriculture purposes above mining activities, to reduce the impact of mining on agriculture and the health of strategic water resources, within the Agri-mining trade-off zone.
- Provide training to communities located on degraded land regarding sustainable agricultural and land use practices to encourage the restoration of degraded agricultural land.

#### MINING

##### ACTION AREAS:

- Develop supporting guidelines and mechanisms for mining practices and application procedures in Agri-mining trade-off zones in the Northern Cape to limit the impact on agriculture and ensure responsible coexistence with agricultural activities.
- Prohibit the establishment of extractive industries, including mining, in Critical Biodiversity and Marine Protected Areas of the Northern Cape to prevent environmental and social harm.

- Develop a strategy to promote artisanal mining practices in locations where mines are facing high risks of closing.
- Prioritise the development and implementation of mitigation and adaptation strategies for mines within high-temperature risk zones in the Northern Cape to safeguard the health and safety of workers in high-temperature work environments.

#### RENEWABLE ENERGY RESOURCES

##### ACTION AREAS:

- Prioritise the adjustment of the IPP project designs to limit soil erosion within the Renewable Energy Development Zones and Wind Production Zones.
- Favour wind energy generation above solar on productive agricultural land located within the Agri-IPP Trade-off Zone.

#### STRATEGIC WATER RESOURCES

##### ACTION AREAS:

- Prioritise the optimisation and compliance of non-conforming WTW and WWTWs.
- Prioritise maintenance and water leak prevention in climate risk areas.
- Prioritise water-wise adaptation strategies and infrastructure deployment in municipalities with high climate risk areas. (Refer to **Climate Change Neutral Toolkit**).
- Establish cross-boundary partnerships with Namibia, North West and Free State Provinces to rehabilitate the waterways and water quality of the Orange and Vaal River Systems by ensuring WTWs and WWTWs comply with the Blue and Green Drop Assessment Report outcomes.

#### SKA ADVANTAGE AREA

##### ACTION AREAS:







- Prevent harmful and disruptive land uses within the SKA Advantage Area.
- Provide support and training to farmers located within the SKA Trade-off zone to adapt to farming techniques that are not disruptive to the SKA.
- Support the establishment of guesthouses and game farms within the SKA Trade-off zone.

- Promote the provision and maintenance of student accommodation in Kimberley in support of SIP 34.

#### 2.2.4 DRIVER 4: EFFECTIVE SPATIAL GOVERNANCE

The Northern Cape Province needs a capable and accountable governance system, with a focus on streamlining inter-governmental relationships while strengthening participatory governance with civil society. To achieve this, the following developmental outcomes have been identified:

##### ACTION AREAS

- Ensure Municipal Planning Tribunal's (MPT) capacity and skill levels are adequate where complex land use applications are required for SEZ, IDZ and IPP projects.
- Prioritise collaboration and engagement with traditional authorities regarding land use practices in the John Taolo Gaetsewe District, as well as with communities located in TRANCRAA Areas.
- Support SIP 35 by prioritising the expansion of ICT infrastructure in the form of cell phone towers and fibre optic infrastructure roll-outs in the Pixley ka Seme district.
- Enhance cross-boundary coordination with the North West province regarding the upgrading and revitalization of the Vaalharts-Taung Irrigation scheme in support of SIP 19.
- Expand and promote social housing projects in Upington, Kimberley and Kuruman as a means to support SIP 24.
- Prioritise investment and municipal coordination for the upgrading and expansion of the Vaal-Gamagara Scheme in support of SIP 19.
- Support the SIP registration process and outcome for the Prieska Power Reserve.





## 2.3 COMPOSITE SPATIAL FRAMEWORK

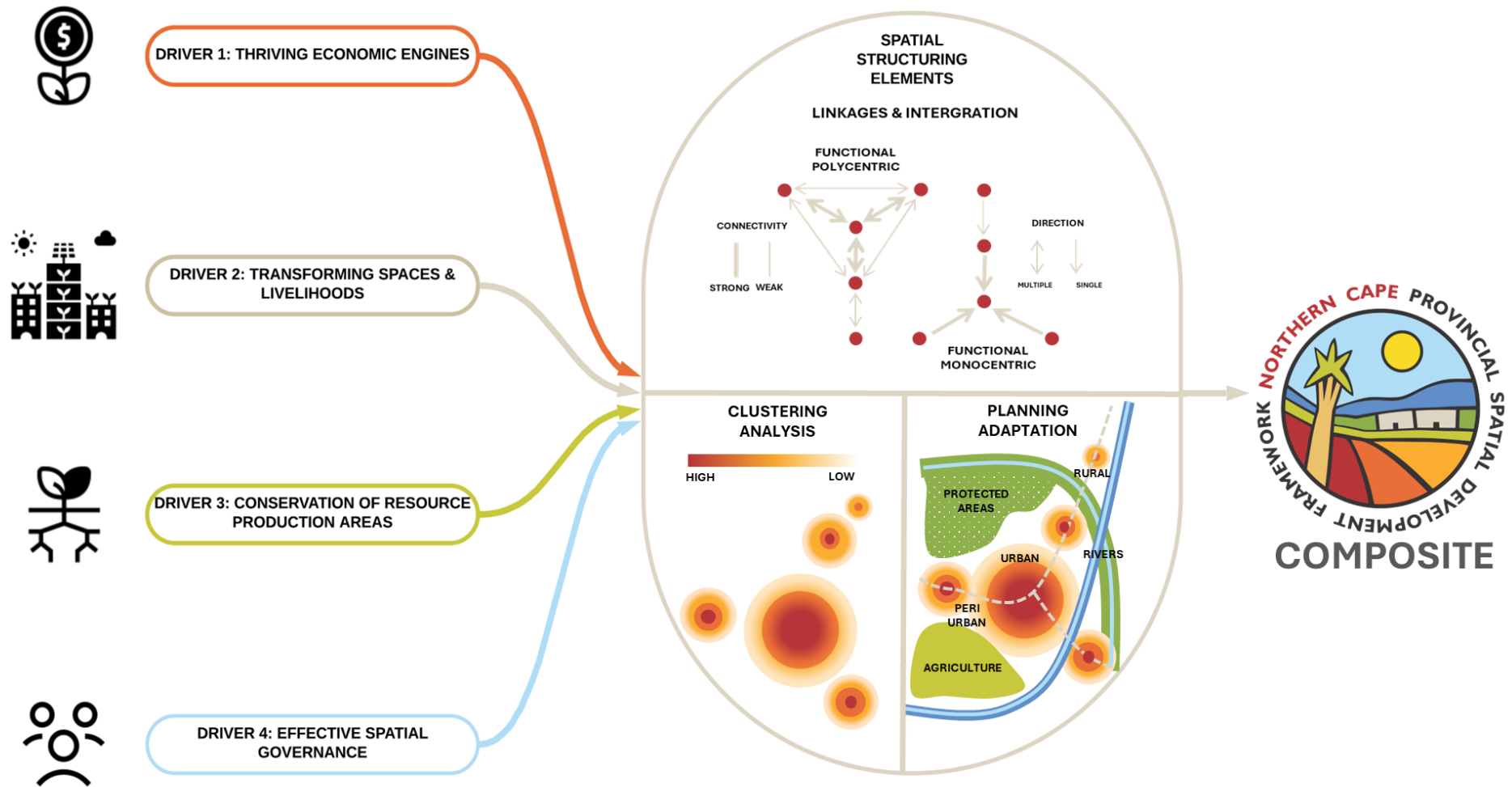
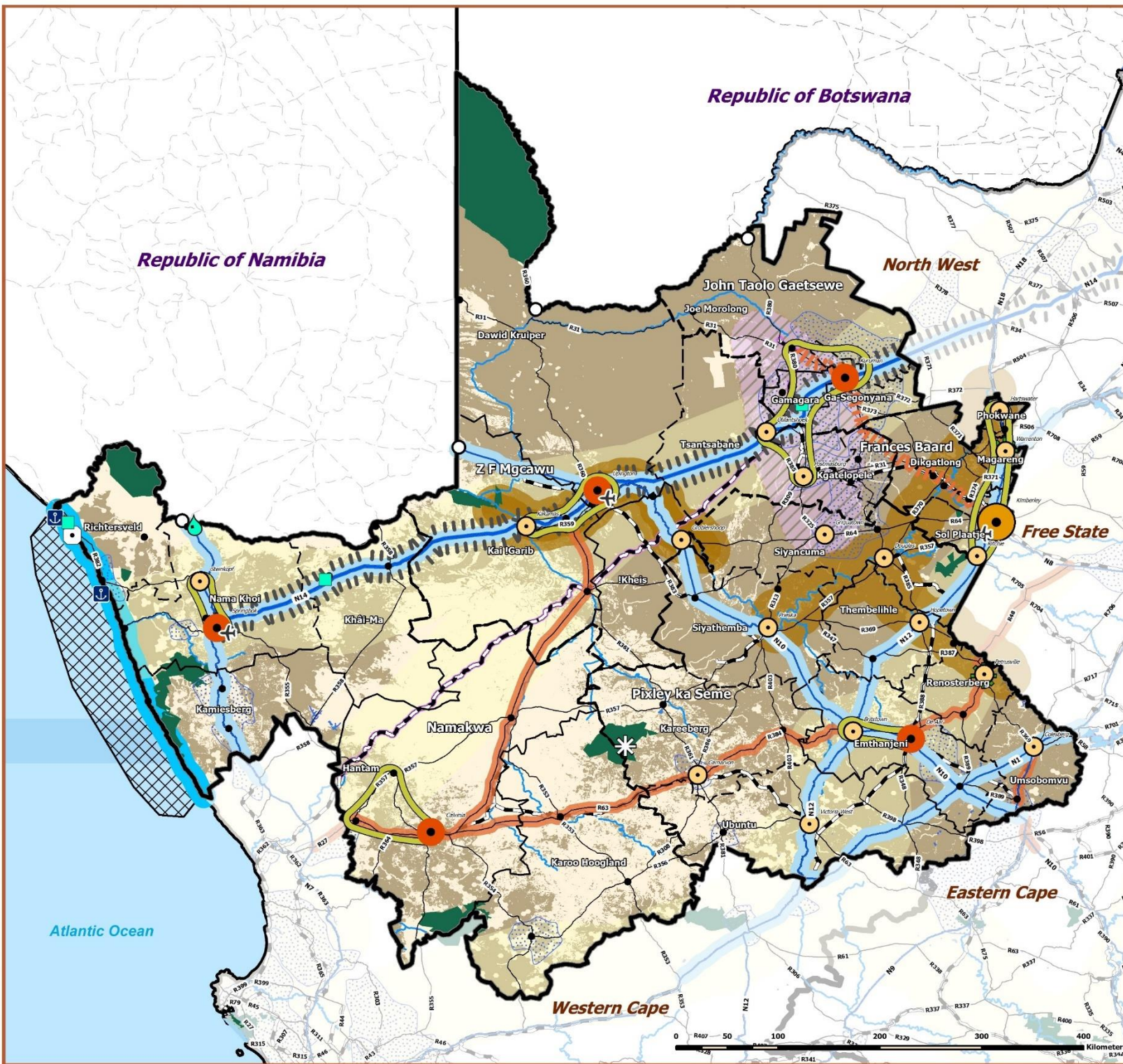


Figure 3: Elements informing the NC PSDF Composite Map







## Northern Cape PSDF Composite

### Zones

- Strategic Groundwater Area
- Gamagara Mining Corridor
- National Protected Area
- Power corridors
- Vaal-Orange Agricultural Zone
- Fishing & Mariculture Corridor
- Main Protein Region
- Marine Protected Areas
- Oil & Gas Exploration
- Extensive Agriculture

### Corridors

- National Highways
- Main / Provincial Roads
- Industrial Corridor
- National Trade Route
- Regional Trade Route
- Proposed Regional Trade Route
- Iron Ore Railway Line
- Fishing & Mariculture Corridor

### Nodes

- SEZ
- Green Hydrogen Energy
- SKA Core Site
- Agri Hubs
- Vioolsdrift Dam

### NSDF Town Typology

- National Urban Nodes
- Regional Development Anchor
- Rural Service Centres
- Other Towns

### Supporting Elements

- Proposed Settlement Corridors
- Northern Cape Province
- Local Municipality
- District Municipality
- Dams
- Main Rivers
- Railway Lines
- Main Airports
- Border Posts
- Harbour

Map 2: Northern Cape PSDF Composite Map

Source: NCPSPDF2024, NCPSPDF2019







## 2.3.1 DEFINING COMPONENTS OF THE COMPOSITE

### 2.3.1.1 NODES

#### SETTLEMENT HIERARCHIES

The settlement hierarchies for the Northern Cape, informed by the NSDF, indicate which settlements play a dominant role in the economic distribution and spatial structuring of the province, highlighting the location of the economic engines of the province.

#### CATALYTIC PROJECTS

Large-scale catalytic projects within the Northern Cape, act as nodes, pulling labour and resources to the location of the projects, with the goals of stimulating economic growth and development.

#### IMPORT/EXPORT NODES

The Northern Cape shares borders with Namibia and Botswana. The four border posts act as crucial trade and tourism nodes, which require upgrading in efficiency as well as an improvement in biosecurity measures to safeguard the agricultural industry.

### 2.3.1.2 ZONES

The following zones form the foundation of the Northern Cape PSDF Composite Spatial Framework:

#### STRATEGIC GROUND WATER

The Northern Cape is a drought-prone province, resulting in a heavy reliance on strategic underground water resources for agricultural, industrial and human consumption. The protection of these resources is of the utmost importance, where great care is required to limit the overuse and pollution of underground water resources.

#### GAMAGARA MINING CORRIDOR

The large cluster of mining operations and settlements is due to the extensive iron and manganese deposits in the area. The area is highly vulnerable to mining closures and as a result, the area requires radical intervention to diversify the economic base.

#### VAAL-ORANGE AGRICULTURAL ZONE

The Vaal and Orange River systems allow for agriculture to thrive on the fertile riverbanks. The high intensity of agriculture in these areas encapsulates opportunities to expand and optimize value chains. The areas also highlight high levels of competing interest as the riverbanks also represent sensitive ecosystems.

#### MARINE PROTECTED AREAS

The Northern Cape coastline and marine life provide unique opportunities for conservation studies and tourism activities. These areas are highly sensitive and as such require strict adherence to activity regulations.

#### OIL AND GAS EXPLORATION ZONES

Oil and gas deposits are evident along the coastline. The area encapsulated potential for extractive industries, which may only be allowed outside marine protected areas, where the environmental concerns can be adequately mitigated.

### 2.3.1.3 CORRIDORS

#### INDUSTRIAL CORRIDOR

The Northern Cape Industrial Corridor represent the clustering of industrial activities along the N14, which links Kuruman and Upington with the North West and Gauteng provinces. Industrial, trade, manufacturing and logistics are promoted land uses along the corridor.

#### POWER CORRIDOR







Renewable energy generation has become a prominent sector within the Northern Cape. The expansion of the sector and the locality of new IPP development are largely dependent on the location and available capacity of the Eskom High and Medium voltage lines. Expansion of the grid is crucial as the Northern Cape network is at full capacity, blocking any further development in the sector.

## NATIONAL TRADE ROUTES

The national trade routes form the main transport spines of the Northern Cape which connect the economic engines of the province with the national urban regions of Gauteng, Cape Town and Nelson Mandela Bay.

## REGIONAL TRADE ROUTES

Regional trade routes play a pivotal role in connecting peri-urban and rural areas to service centres and national nodes. Maintenance and routine upgrades are required on these routes, as the livelihoods of rural communities require the route to access services and transport agricultural products.

## PROPOSED TRADE ROUTE

The proposed trade route forms a dual function of supporting the distribution and logistics stemming from the mining activity in the Gamagara Corridor as well as improving public transport safety on the R31 route connecting Hotazel with Kimberley.

## 2.4 SPATIAL ACTION AREAS

Following the directive of the National Development Plan (NDP), the National Spatial Development Framework (NSDF) identifies areas of significant national risk and potential. These areas, termed National Spatial Action Areas (NSAAs), aim to counteract the centrifugal forces that shaped Apartheid-era spatial development by promoting a cohesive national development strategy. The NSDF envisions a sustainable, resilient, and inclusive spatial footprint for South Africa, aligning regional and local development efforts to national priorities.

NSAAs serve as the foundation for addressing the most pressing spatial development challenges and opportunities. They focus on creating high-quality, serviced, and connected places with robust economies. The identification of NSAAs is driven by the need for radical spatial transformation, risk management, and accelerated movement towards an Ideal National Spatial Development Pattern by 2050. The five types of NSAAs are critical for catalysing national spatial transformation and economic transition, and for addressing the most stressed sub-national regions in terms of current and anticipated risks. These areas necessitate urgent, targeted, and sustained collaborative intergovernmental action.

**In the context of the Northern Cape**, the NSAAs highlight the importance of strategic regional development and risk management. The Northern Cape's unique geographical and climatic conditions, coupled with its economic potential in sectors such as mining, agriculture, renewable energy, and tourism, make it a focal point for implementing the NSDF's strategic spatial interventions. Aligning provincial development plans with national priorities ensures the sustainable utilization of natural resources and addresses regional disparities.





## Northern Cape PSDF Composite

### Zones

- Strategic Groundwater Area
- Gamagara Mining Corridor
- National Protected Area
- Power corridors
- Vaal-Orange Agricultural Zone
- Fishing & Mariculture Corridor
- Main Protein Region
- Marine Protected Areas
- Oil & Gas Exploration
- Extensive Agriculture

### Corridors

- National Highways
- Main / Provincial Roads
- Industrial Corridor
- National Trade Route
- Regional Trade Route
- Proposed Regional Trade Route
- Iron Ore Railway Line
- Fishing & Mariculture Corridor

### Nodes

- SEZ
- Green Hydrogen Energy
- SKA Core Site
- Agri Hubs
- Violsdrift Dam

### NSDF Town Typology

- National Urban Nodes
- Regional Development Anchor
- Rural Service Centres
- Other Towns

### Supporting Elements

- Proposed Settlement Corridors
- Northern Cape Province
- Local Municipality
- District Municipality
- Dams
- Main Rivers
- Railway Lines
- Main Airports
- Border Posts
- Harbour

## Map 3: Northern Cape Provincial Spatial Action Areas (PSAAs)

Source: NCPSDF2024, NCPSDF2019







### 2.4.1 NORTHERN CAPE-SPECIFIC SPATIAL ACTION AREAS (PSAAS)

Building on the NSAAs, the Northern Cape has identified six Provincial Spatial Action Areas (PSAAs) tailored to its unique context and development needs. These PSAAs are designed to leverage local opportunities while mitigating risks, ensuring the province's growth aligns with the national spatial vision.

#### 2.4.1.1 COASTAL SPATIAL ACTION AREA (CSAA)

The **CSA** focuses on the sustainable development of the Northern Cape's coastal regions. It emphasizes the protection of marine and coastal ecosystems, the promotion of maritime and tourism industries, and the enhancement of coastal infrastructure. Key initiatives include developing small harbours to support the fishing and tourism economy and strengthening regional and cross-provincial collaborations for coastal management.

#### 2.4.1.2 DOUGLAS TO KAKAMAS SPATIAL ACTION AREA (DKSAA)

The **DKSA** is characterized by its significant agricultural potential, especially along the Orange River. This area aims to optimize irrigation farming, promote agro-industrial activities, and enhance water management systems. The focus is on sustainable agricultural practices, diversifying the local economy, and improving transport and ICT infrastructure to connect rural areas to larger markets.

#### 2.4.1.3 GAMAGARA SPATIAL ACTION AREA (GSAA)

The **GSA** is a critical mining and industrial hub. This PSAA aims to enhance the economic contribution of the mining sector while addressing environmental impacts and social needs. Key actions include upgrading infrastructure, improving service delivery, and fostering local economic development through skills training and enterprise support.

#### 2.4.1.4 KALAHARI SPATIAL ACTION AREA (KHSAA)

The **KHSA** focuses on the unique challenges and opportunities in the Kalahari region, known for its arid condition, tourism potential and cultural diversity. Strategies include promoting renewable energy projects, supporting sustainable renewable energy practices, and enhancing the resilience of local communities through innovative water and land management techniques.

#### 2.4.1.5 KAROO SPATIAL ACTION AREA (DSAA)

The **DSA** addresses the Karoo's agricultural and ecological challenges, emphasizing sustainable land use and economic diversification. Initiatives focus on promoting agri-tourism, protecting biodiversity, and developing renewable energy sources. Collaboration between local governments and communities is crucial for managing resources and ensuring long-term sustainability.

#### 2.4.1.6 RURAL SPATIAL ACTION AREA (RSAA)

The **RSA** targets the development needs of the Northern Cape's rural areas, which are often characterized by limited access to services and economic opportunities. This PSAA aims to improve rural-urban connectivity, enhance basic service delivery, and support small-scale farming and rural enterprises. The focus is on building resilient rural communities through improved infrastructure, education, and health services.

#### 2.4.1.7 VAALHARTS SPATIAL ACTION AREA (VHSAA)

The Vaalharts Spatial Action Area (VHSAA), the smallest in the province, includes Phokwane and Magareng Local Municipalities and parts of Sol Plaatjie and Dikgatlong. Located in the northeast, it features protected agricultural land and significant mining activity. Kimberley, the provincial capital, is the economic hub with diverse industries and key transport links (N8, N12, N18). Development priorities include energy challenges, agricultural land protection, agro-processing, mineral beneficiation, private sector investment, SMME potential, and natural resource conservation.





Strategic opportunities involve renewable energy, adventure tourism, mining development, infrastructure upgrades, training initiatives, and heritage tourism. The main focus is on agriculture and agro-processing, with support for mining while ensuring environmental conservation.

### 3 CONCLUSION

In conclusion, the Northern Cape Spatial Proposal provides a comprehensive and strategic framework for regional development, integrating economic, social, and environmental objectives. This proposal recognizes the unique challenges and opportunities within the region, aiming to balance growth with sustainability and resilience. By leveraging the identified drivers—Thriving Economic Engines, Transforming Spaces & Livelihoods, Conservation of Resource Production Areas, and Effective Spatial Governance—the framework addresses the multifaceted needs of the Northern Cape's diverse communities.

The spatial structuring elements, including corridors, nodes, and zones, ensure that development is strategic and adaptable to changing circumstances and localized needs. Linkages and Integration emphasize the importance of connectivity within the region and with external markets, fostering economic integration and access to opportunities. Clustering Analysis provides a nuanced understanding of development hotspots and areas requiring more attention, facilitating targeted interventions. Planning Adaptation ensures that strategies remain relevant and effective, accommodating shifts in demographic, economic, and environmental conditions.

By focusing on the specific needs of each Spatial Action Area, the proposal ensures that interventions are tailored and impactful. The Coastal Spatial Action Area (CSAA) prioritizes sustainable coastal development, enhancing marine ecosystems, and boosting tourism and maritime industries. The Douglas to Kakamas Spatial Action Area (DKSAA) focuses on maximizing agricultural potential, improving water management, and linking rural

communities to broader markets. The Gamagara Spatial Action Area (GSAA) aims to enhance the mining sector's contributions while mitigating environmental impacts and fostering community development. The Kalahari Spatial Action Area (KHSAA) addresses the unique arid environment, promoting renewable energy projects and community resilience. The Karoo Spatial Action Area (DSAA) emphasizes sustainable land use, biodiversity protection, and economic diversification through agri-tourism and arid innovation. The Rural Spatial Action Area (RSAA) focuses on improving rural infrastructure, services, and economic opportunities, ensuring balanced regional development. The Vaalharts Spatial Action Area (VHSAA) stands out for its diversified economy, emphasizing agriculture, agro-processing, mining, and renewable energy, while protecting natural resources and enhancing infrastructure.

Ultimately, the Northern Cape Spatial Proposal aims to create a sustainable, prosperous, and resilient Northern Cape. By integrating economic growth with social well-being and environmental stewardship, the proposal envisions a future where the Northern Cape can thrive while preserving its unique natural and cultural heritage. The strategic focus on spatial structuring elements and specific action areas ensures that development is inclusive and forward-thinking, paving the way for a robust and vibrant regional economy.

