PROVINCE OF KWAZULU-NATAL

Socio-Economic
Review and Outlook

2022/2023

KwaZulu-Natal Provincial Government

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MAKING A RAND GO AN EXTRA MILE

We continue to put more emphasis on the production of high quality data and analysis to ensure that limited state resources are deployed to address socio-economic challenges faced by the people of this province.

The 2022 KwaZulu-Natal (KZN) Socio-economic Review and Outlook (SERO) publication is now available, at finger-tips, to guide all government departments to ensure that we make progress towards realizing development goals.

Importantly, this publication helps examine approaches that government should adopt to stimulate the provincial economy and create jobs as part of moving this province rapidly into the post COVID-19 era.

A faster and rapid socio-economic recovery in KwaZulu-Natal hinges greatly on deepening transformation and ensuring inclusive economic growth.

We are therefore directed, as the government of the people, to unlock more resources for investment in socio-economic infrastructure for the benefit of the citizens, especially the marginalized.

The publication illustrates that the labour market, at both global and local levels, suffered severely from the adverse effects brought about by the COVID-19 crisis. As a result, unemployment in SA and KZN, in particular, remained high, especially as most people, including the youth, have given up searching for jobs.

Whilst much had been done to promote entrepreneurship in this province ahead of the outbreak of COVID-19, the pandemic has revealed another crisis. The structural racial and gender disparities in business ownership is a long-standing matter and equally damaging.

The reality is that indigenous people in the townships and rural areas are only consumers of goods and services. They do not participate, on equal footing, in the economy of this province as owners and creators of wealth. This province could have millions more businesses if women and young people in previously disadvantaged communities were entrepreneurs in their own right. Structural exclusion that limits entrepreneurship has been built up over decades and this government must act now.

Access to micro-finance remains critical if we are to introduce more players to our economy. This government is therefore mandated to find ways to augment micro-financing facilities in support of SMMEs and Co- Operatives in the townships and rural areas.

The next twelve months will also be a critical period that should be characterized by reforms that addresses digital infrastructure gaps and make the digital economy more inclusive. This government is expected to play a leading role to ensure affordability of internet connectivity. This will assist in accelerating service delivery, building skills and creating jobs for all segments of society.

This latest edition of SERO provides a clear analysis of socio-economic challenges and what needs to be done to turn around the situation.

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Ms Nomusa Dube-Ncube,
MEC for Finance

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List of Acronyms

AAAP	Africa Adaptation Acceleration Program
ADEP	Aquaculture Development and Enhancement Programme.
AE	Advanced Economies
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
AIS	Automotive Investment Scheme
ANA	Annual National Assessment
APSS	Agro-Processing Support Scheme
BBBEE	Broad-based Black Economic Empowerment
BCI	RMB/BER Business Confidence Index
BIS	Black Industrialist Scheme
BRICS	Brazil, Russia, India, China and South Africa
CCI	Consumer Confidence Index
CDR	Crude death rate
CFC's	Chlorofluorocarbons
CH4	Methane
CO2	Carbon dioxide
COP 26	Conference of the parties 26
COVID-19	Coronavirus Diseases 2019 South Africa (SA)
CPI	Consumer Price Index
CTTs	Compulsory temporary transfers
DBE	Department of Basic Education
DoE	Department of Education
DTI	Department of Trade and Investment
EA	Euro Area
EAP	Economically Active Population
EC	Eastern Cape
ECA	Europe and Central Asia,
ECB	European Central Bank
ECOD	Economic Development and Planning Committee
EMDEs	Emerging Market and Developing Economies
ESKOM	Electricity Supply Commission
EU	European Union
FDI	Foreign Direct Investments
FNB/BER	First National Bank/Bureau of Economic Research
FS	Free State

GDP	Gross Domestic Product
GDP-R	regional gross domestic product
GFCF	Gross Fixed Capital Formation
GHGs	Greenhouse gases
GP	Gauteng
GVA	Gross Value Added
ICT	Information Communication Technology
IMF	International Monetary Fund
IPAP	Industrial Policy Action Plan
ISP	Incubation Support Programme
IT	Information Technology
KW	Kilowatt
KZN	KwaZulu-Natal
KZNYF	KZN Youth Fund
LAC	Latin America and the Caribbean
LAR	Labour absorption rate
LER	Learner-educator ratio
LFPR	Labour force participation rate
LSR	Learner-school ratio
MP	Mpumalanga
MPC	Monetary Policy Committee
MW	Megawatt
NAIF	National Integrated Assessment Framework
NC	Northern Cape
NDC	Nationally Determined Contribution
NDP	National Development Plan
NQF	National Qualifications Framework
NSC	National Senior Certificate
NW	North West
OECD	Organisation for Economic Co-operation and Development
PGDS	Provincial Growth and Development Strategy
PGMs	Platinum Group Metals
PIRLS	Progress in International Reading Literacy Study
PMI	Purchasing Managers' Index
PPI	Producer Price Index
PPN	Post-Provisioning Norm
PPP	Purchasing Power Parity

PRB	Population Reference Bureau
SA	South Africa
SACMEQ	Southern Africa Consortium for Monitoring Educational Quality
SACU	Southern African Customs Union
SADC	Southern African Development Community
SADTU	South African Democratic Teachers' Union
SALDRU	Southern Africa Labour and Development Research Unit
SAPOA	South African Property Owners Association
SARB	South African Reserve Bank
SARS	South African Revenue Service
SDGs	Sustainable Development Goals
SMMEs	Small, Medium and Macro Enterprises
SRD	Social Relief of Distress
SSA	Sub-Saharan Africa
TERS	Temporary Employer/Employee Relief Scheme
TIMSS	Trends in Mathematics and Science Studies
TVET	Technical and Vocational Education and Training
UK	United Kingdom
UN	United Nations
UNCC	United Nations Climate Change
UNCTD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
US	United States
VAT	Value-Added Tax
WC	Western Cape
WEF	World Economic Forum
WTO	World Trade Organization
YES	Youth Employment Service
ZEV	Zero-Emission Vehicles

Executive Summary

Socio-economic status is a theoretical paradigm encompassing changes in population dynamics, household, and community access to resources or service delivery. It is commonly conceptualised as economic, social, and work status. Therefore, Socio-Economic Review (SERO) measures the demographic profile, development, economic review & outlook and the labour markets.

Chapter two focuses on the changes and the factors affecting the ***population size*** across the globe, including South Africa (SA). According to the Population Reference Bureau (2021), the ***global population*** increased from 7.7 billion in 2020 to approximately 7.8 billion in 2021. The United Nations (2019) report shows that the global population will reach 8.5 billion in 2030 and further increase to 9.7 billion in 2050 and 11.2 billion by 2100. The less developed countries constitute about 83.8 per cent of the world population.

Asia and Africa are the most populous regions. Around 59.3 per cent of the world's population resides in Asia, with China and India comprising 35.8 per cent of the world population. On the other hand, about 17.5 per cent of the population live in Africa. The rapid population increase in Africa is anticipated to almost double by 2050. ***In SA,*** the total population has been consistently increasing over the years. It rose from 47.4 million in 2006 to 50.6 million in 2011. As a result, the country's population was estimated at 60.1 million in 2021.

On the other hand, ***KZN's share*** of the total national population has been gradually declining over the past decade. It dropped from 21.4 per cent in 2011 to 19.1 per cent in 2021. Nevertheless, the estimated population size in the province increased from 10.8 million in 2011 to 11.5 million in 2021.

In KZN, the ***population of children*** between 00 and 14 was estimated at 31.3 per cent in 2021. On the other hand, it was 35.1 per cent for youth from 15 to 34 and are economically active. Together, children and youth account for an estimated 66.4 per cent of the total provincial population. Therefore, the estimated number of dependent people in KZN results in a dependency ratio of 59.3, which is 8.2 percentage points higher than the national average of 51.1.

Despite the slight decline in the total national population share, KZN is still the country's second-largest populous province after Gauteng (GP), with approximately 15.8 million or 26.3 per cent of the national percentage in 2021. In addition, the World Economic Forum's (WEF, 2021) estimates show that the global fertility rate dropped slightly to 2.3 in 2021, primarily due to COVID-19. However, the fertility rate in KZN between 2016 and 2021 is estimated to have averaged 2.61 children. This estimate is above the national average of 2.51 children.

In KZN, ***life expectancy*** is projected at 57.4 for males and 63.6 for females. However, these estimates are lower than the national average of 59.7 for males and 65.4, respectively. Meanwhile, between 2016 and 2021, GP is estimated to continue to absorb the highest number of migrants (1 564 861) out of all other South African provinces. In contrast, KZN is estimated to have had a net outflow of people (84 387).

Chapter three: In 2020, the World Bank estimated that the COVID-19 pandemic would result in between 119 and 124 million people moving into extreme ***poverty***. Approximately 40.3 per cent of the KZN population was still living below the food poverty line (FPL) in 2020. Moreover, in KZN, about 42 per cent of African households earned less than R54 000 per annum. On the other hand, SA recorded a medium ***Human Development Index (HDI)*** of 0.66, and KZN had an estimated HDI of 0.62.

In a country like SA, where unemployment levels are high and inequality runs rampant, social grants play an important role in supporting households to attain a minimum standard of living. Thus, social grants have made a substantial contribution towards reducing food poverty in the country. KZN continued to have the highest number of ***social grant beneficiaries*** in the country at 4.04 million, followed by EC at 2.83 million and Gauteng at 2.81 million people.

In ***education***, in KZN, the learner educator ratio (LER) is currently estimated at 29.9, whereas the LSR is 481 over the same period. Meanwhile, ***literacy rate*** increased significantly in KZN from 78.2 per cent in 2010 to 85.1 per cent in 2020. However, it was still below the national level of 87.1 per cent. In addition, an estimated 5.9 per cent of the people who were 20 years and older had not received any schooling in 2020.

In KZN, the percentage of the population aged 20 years and above that completed secondary education or National Senior Certificate (NSC) increased from 28.7 per cent in 2010 to 33.2 per cent in 2020. However, as expected in 2020, COVID-19 had a more significant negative impact on the learners' performance. The province of KZN, which had the highest number of matriculants, obtained 77.6 per cent pass rate.

For the 2021/22 financial year, the recommended national ***funding norm for quintiles one to three schools*** by the Department of Education is R1 466 per learner. However, no fee schools in KZN had been funded at R955 per learner for more than five years, resulting in a shortfall of R511 per learner. In SA, the number of learners who wrote NSC in 2021 was 704 021. However, the number of learners in grade 10 were 1 033 799 in 2019. This implies that a potential drop-out of 31.9 per cent happened in the grades mentioned above, which caused them not to complete upper secondary level of schooling. In KZN, the drop-out rate was estimated at 28.8 per cent.

Regarding access **to medical aid**, only a fraction of 15.2 per cent of the South African citizens belonged to a medical aid scheme in 2020. At 9.8 per cent, KZN was among the provinces with the least proportion of the population with medical aid schemes. At the same time, the share of households with ***electricity in SA*** increased from 83.8 per cent in 2010 to 92.8 per cent in 2020. KZN's share of electrical connections increased markedly from 77 per cent in 2010 to 93.3 per cent in 2020. In 2020, all provinces had electrical connections above 90 per cent. KZN had 78 per cent of the population with piped compared to the national average of 88 per cent in 2020.

Chapter four: The ***world economy*** dropped sharply by 3.1 per cent in 2020 amid disruptions to activity caused by the COVID-19 pandemic. While vaccines rollout progressed smoothly during the year, fault lines on economic recovery emanated from inequitable vaccine access and distribution. Consequently, in countries with adequate vaccines access, almost all Advanced Economies (AE) continued to realise further normalisation of activity. Nevertheless, the global GDP is estimated to have rebounded significantly by 5.9 per cent in 2021. However, the global growth is expected to soften marginally to 4.4 per cent in 2022 and 3.8 per cent in 2023.

Global inflation took a significant jump throughout the second half of 2021 owing to several factors varying importance across regions. Globally, inflation is estimated at an aggregated 4.4 per cent in 2021 compared to 3.5 per cent in 2019. However, it is expected to moderate at 3.8 per cent in 2022 and 3.3 per cent in 2023.

Though the global economy bounced back in 2021, it remains tentative, with risks to growth skewed to the downside. Therefore, the Omicron variant remains a major health risk, and the pandemic resurgence could devastate health systems and trigger the simultaneous imposition of additional pandemic control measures across the globe. In addition, the sluggish progress in vaccination programs has been a major contributing factor weighing on the recovery in under-vaccinated countries. Another risk to the global outlook is the supply bottlenecks that contributed to downward revisions on projections for several countries.

In **SA**, the economy has bottomed up from the depths of COVID-19 induced contraction estimated at 6.4 per cent in 2020. However, after Stats SA conducted a rebasing and benchmarking exercise, the revised estimate of GDP in 2020 increased by 11 per cent to R5 521 billion, compared with R4 973 billion in 2010. As a result, the annual GDP growth rate for 2020 was revised from a contraction of 7 per cent to 6.4 per cent.

Economic performance in the country expanded by 4.6 per cent in 2021. However, this growth is short-lived as the country is expected to moderate to 1.9 per cent and 1.4 per cent in 2022 and 2023, respectively. KZN continues to rebound from the contraction of 6.4 per cent induced COVID-19 in 2020. As a result, the KZN's economy is estimated to have expanded by 4.2 per cent in 2021. However, it is expected to remain at 1.7 per cent in 2022 and 2023.

Real gross fixed capital formation (***GFCF)*** reported no growth in the third quarter of 2021 after it had expanded by 1.2 per cent in the preceding quarter. In addition, the RMB/BER Business ***Confidence Index (BCI)*** moderated to 43 indices in the third quarter of 2021, following a significant jump to 50 indices in the second quarter. As a result, although the inflation rate remains within the South African Reserve Bank's (SARB's) inflation target of 3 to 6 per cent, it is estimated that the headline consumer price index (CPI) accelerated to 5.9 per cent in December 2021. The items that contributed significantly to the annual inflation rate include *transport, food and non-alcoholic beverages; housing and utilities; and miscellaneous goods and services*.

Transport reported the highest increase at 16.8 per cent year-on-year, contributing 2.3 percentage points to the overall CPI annual rate. The most significant contributor to higher transport costs was *private transport operation* at 32.4 per cent, primarily driven by the fuel prices at 40.5 per cent. This was followed by the cost of public transport, which grew by 9.9 per cent. The high inflation is further exacerbated by a weaker currency, higher domestic import tariffs, and escalating wage demands.

The rapid rise in CPI prompted the South African Reserve Bank's (SARB) Monetary Policy Committee (MPC) to hike the repurchase rate (repo rate) by 25 basis points to 3.75 per cent per annum, with effect from November 2021. The MPC further rose the repo rate to 4 per cent in January 2022, leading to the prime rate of 7.5 per cent.

International trade remains an engine of growth that creates better jobs, reduces poverty, and increases economic opportunity. However, the global trade and world economy have been hindered by COVID-19 pandemic unexpected disruption. As a result, the World Trade Organisation (WTO) estimates worldwide trade declined by between 13 per cent and 32 per cent in 2020. Encouragingly, SA continues to realise a trade surplus estimated at R455 billion in the third quarter of 2021. Therefore, the current account of the balance of payment surplus stood at R226.4 billion or 3.6 per cent as a percentage of GDP in the third quarter of 2021 (SARS, 2021).

The total estimation of South African exports was valued at R668.8 billion in 2010, which increased extensively over ten years to R1.39 trillion in 2020. Regional distribution of value exports by province shows that GP remained the most significant contributor to the total national value of exports at R949.4 billion or 68.1 per cent in 2020. Despite improvement from R80.2 billion in 2010, KZN is the third-largest exporter, contributing to the total national value of exports.

Travel and tourism suffered a decline in global GDP of a staggering 49.1 per cent from $9.2 trillion in 2019 to $4.7 trillion in 2020. The sector contributed 5.5 per cent or $4.7 trillion of global GDP and created 272 million jobs, both directly and indirectly. *Travel and tourism's* job losses in 2020 are estimated at 62 million, a decrease of 8.5 per cent from 2019. Medium-Sized Enterprises (SMMEs), which constitute 80 per cent of all global businesses in the sector, are mostly affected.

In SA**,** *travel and tourism's* total contribution to GDP was R182.5 billion or 3.7 per cent of the total national economy in 2020, down from R363.2 billion recorded in 2019. The sector employed 987 000 people in 2020, accounting for 6.5 per cent of the total employment. The total number of jobs created was 1.460 million in 2019. However, due to COVID-19, the country lost an estimated 32.4 per cent of jobs in 2020.

In 2020, the number of people directly employed in the Travel and tourism sector in KZN equated to approximately 79 393. During the same year, tourism's direct contribution to provincial GDP was R11.9 billion. Therefore, the total contribution (inclusive of direct, indirect, and induced spending) to GDP was approximated at R13.7 billion (South African Tourism (SAT), 2021).

Chapter five: The emergence of COVID-19 exacerbated the prolonged economic challenges SA has grappled with over the past decade. As a result, SA recorded a substantial and consistent growth ***in unemployment level***, estimated at 34.9 per cent in the third quarter of 2021. ***In addition, discouraged work-seekers*** continued to increase in 2021, resulting in the expanded unemployment rate of 46.6 per cent in the third quarter of 2021.

Quarterly Labour Force Survey (QLFS) by Stats SA indicates that unemployment was high at 66.5 per cent among young people aged 15 to 24 years, followed by those aged 25 to 34 at 43.8 per cent in the third quarter of 2021. ***Those with less than matric education levels (51.8 per cent)*** comprise the largest share of the unemployed, followed by those with matric only at 37.8 per cent. However, unemployment was relatively low among graduates at 2.7 per cent.

In KZN, official unemployment rate was estimated at 28.7 per cent in the third quarter of 2021. However, discouraged work-seekers are on the rise, contributing to a higher expanded unemployment rate of 48.6 per cent in the province. The most significant proportion of people in the working-age has given up searching for employment while others are not economically active.

When measured using the expanded definition, the youth unemployment rate is significantly higher in KZN, which incorporates discouraged-work seekers. Approximately 72.4 per cent of young people aged between 15 and 24 years were unemployed in 2020. This is followed by those aged between 25 and 34 years at 46.2 per cent. As a result, the average rate of unemployment using expanded definition among people aged between 15 and 34 years stood at 59.3 per cent. Unimpressively, the growth rate in ***labour remuneration has out***-weighed productivity growth in KZN. In 2020, the labour productivity contracted by 7.5 per cent while the labour remuneration dropped by 4.7 per cent.

Chapter six: Global warming is a rise ***in global temperatures due to excessive*** emission of greenhouse gases such as carbon dioxide (CO2) and Chlorofluorocarbons (CFC's). The excessive emission is released into the atmosphere and traps or absorbs the sunlight that would usually escape to space, causing the planet to get hotter. It is, therefore, one of the concerns to most economies around the globe.

The negative impact posed by ***climate change is already*** a measurable reality posing social, environmental and economic challenges to the world, and SA is no exception. ***SA is Africa's most significant greenhouse gas (GHG) emitter and the 12th largest globally*** due to its reliance on coal resources to generate power and liquid fuels. In addressing the climate variation dilemma, the country has committed to the climate change targets per ***the COP 26 Paris agreement requirements***. However, reducing GHG emissions and adapting to climate change will involve a concerted national effort, achieving a just transition, and promoting resilience to droughts, floods, and extreme temperature change requires all economic sectors' participation.

Chapter One: Introduction

Socio-economic status is a theoretical paradigm encompassing demographic changes and community access to resources or service delivery. It is commonly conceptualised as economic, social, and work status. Therefore, the Socio-Economic Review (SERO) measures the demographic profile, development, economic revive and outlook and the labour markets. The publication also focuses on development indicators, including poverty, income inequality, human development, and educational attainments.

Chapter two focuses on the changes and the factors affecting the *population size* across the globe, including South Africa (SA). According to the Population Reference Bureau (2021), the global population increased from 7.7 billion (Keep together) in 2020 to approximately 7.8 billion in 2021. The United Nations (2019) report shows that the global population will reach 8.5 billion in 2030 and further increase to 9.7 billion in 2050 and 11.2 billion by 2100. The less developed countries constitute about 83.8 per cent of the world population.

The total national population has been consistently increasing over the years. It rose from 47.4 million in 2006 to 50.6 million in 2011. As a result, the country's population was estimated at 60.1 million in 2021. On the other hand, KZN's share of the total national population has been gradually declining over the past decade. It dropped from 21.4 per cent in 2011 to 19.1 per cent in 2021. Nevertheless, the estimated population size in the province increased from 10.8 million in 2011 to 11.5 million in 2021.

In KZN, the population of children between 00 and 14 was estimated at 31.3 per cent in 2021. On the other hand, it was 35.1 per cent for youth from 15 to 34 and are economically active. Together, children and youth account for an estimated 66.4 per cent of the total provincial population. Therefore, the estimated number of dependent people in KZN results in a dependency ratio of 59.3, which is 8.2 percentage points higher than the national average of 51.1.

Chapter three of this publication is dedicated to the development indicators. As demonstrated in this chapter, it is broadly accepted that the true wealth of a nation is a function of and dependent on its citizens. The development covered includes poverty, human development index, and grant beneficiaries. The chapter further outlines education-related indicators such as learner ratio, literacy rate, matric results, and school drop-out rate. SA's learner's performance in reading and mathematics and performance in mathematics and science are also covered. Regarding health, the chapter discusses the causes of death and the burden of diseases such as Tuberculosis (TB), human immunodeficiency virus (HIV), hypertension and diabetes, healthcare financing. Other social delivery issues include crime and access to basic services such as electricity, sanitation, and piped water.

Chapter Four illustrates the global economic performance and outlook amid COVID-19. As demonstrated in this chapter, the world experiences renewed uncertainty coming into 2022, following the discovery of the Omicron variant. Despite the new variant, access to vaccines is still uneven. As a result, the global economy continues to experience supply disruptions and rising inflation.

In SA, the recovery softened in the second half of 2021 amid an ongoing rapid surge in infections that warranted stricter lockdown restrictions, continued electricity shortages, and a rise in social unrest. Considering both the global and national economic performance, this chapter provides an economic review and outlook of the Province of KwaZulu-Natal (KZN). The chapter begins with an economic review and outlook from global, national and provincial levels. This is followed by a brief discussion of the sectorial analysis, including capital formation and tourism. The chapter proceeds by providing a summary of international trade at both national and provincial levels. Finally, it concludes by providing policy recommendations to stimulate economic performance in the country, emphasising KZN.

Chapter Five presents the labour market dynamics at the national, provincial and district municipal levels. It is evident from the chapter that the global economy recovered significantly from the severe contraction caused by the COVID-19. Notwithstanding the ongoing surge in infections in other regions, economic activity continues to improve as vaccinations rollout progresses and mobility measures remain low. This allows labour market conditions also to pick up. However, the South African labour market remained constrained despite a robust economic upturn in 2021. As a result, the employment level continued to grow at a slower pace while unemployment accelerated significantly to all-time highs.

Given the outlined background~~,~~ of chapter five reviews the labour market dynamics in SA, KZN and District Municipalities. A comparative analysis for KZN and other provinces is also provided to comprehend the differences across the country. The analysis focuses on South African labour market dynamics. It includes employment, employment distribution by industries, unemployment, labour force participation and absorption rate. Similar topics are also covered under the KZN's labour market dynamics. The labour market dynamics discussed in this chapter include employment, employment distribution by industries, unemployment, labour absorption rate, labour force participation rate, and job scarcity at the District level. The chapter concludes by reviewing labour productivity and remuneration for KZN before providing the recommendations.

Evidence from ***Chapter six*** shows that global warming is a cause for concern to the economies around the world. The rise in global temperatures is due to excessive emission of greenhouse gases such as carbon dioxide (CO_2) and Chlorofluorocarbons (CFC’s) impacts human lives. Therefore, the chapter focuses on the impact of global warming on the global economy, examining the effects of climate change in Africa and SA. It also discusses emissions by industry, highlighting the advantages and disadvantages of climate change and decarbonising. Finally, the chapter concludes by providing alternative international policy interventions to consider in dealing with this global crisis.

As highlighted in ***Chapter seven***, the SERO publication comprises of seven chapters, whereby Chapter One is the Introduction, Chapter Two focuses on the demographic profile at the global national and provincial levels. Chapter Three analyses development indicators, including poverty, income inequality, education and health. Chapter Four provides an overview of the economic review and outlook at a global, national and provincial level and sector analysis, international trade, and inflation. Chapters Five and Six discuss labour markets and climate change's effects on the global economy. Finally, the publication concludes with Chapter Seven, which summarises vital concluding remarks and the recommendations.

Chapter Two: Demographic Profile

2.1 Introduction

The coronavirus (COVID-19) pandemic caught most countries in the world unprepared. Since the official announcement of an official report about the outbreak of this pandemic in early 2020, there have been uncertainties about the virus, which range from the clinical epidemiological[1] aspects and policy measures to social and economic impacts. The social effect includes the lack of mobility both domestically and internationally, border closures, air travel and domestic travel restrictions. In addition, many people were less equipped to use Information Communication Technology (ICT), which ~~is~~ became the primary mode of communication as people were forced to work remotely. Lack of ICT compounded inequalities.

The economic impact includes disruptions in global supply value chains, unprecedented shock to the labour market, and the most significant decline in employment and global trade and tourism. It is not only that people with varying demographic and socioeconomic characteristics are differently susceptible to COVID-19 pandemic; the ability to cope, respond, recover and adapt to the pandemic varies across population subgroups as well as institutional and geographical contexts.

The forecasting of the population, which is critical for planning and economic development, is influenced by trends in fertility and mortality rates, the initial age profile of the population, and migration trends. The population size is influenced by the per capita population growth rate, which is the rate at which the population size changes per individual. The population per capita growth rate is determined by the population's birth, death, emigration, and migration rates. The change in the population size has a direct bearing on the population density of a region. As population density increases, individuals from various households tend to compete for inadequate resources such as food, habitat, water, and the earth's carrying capacity, influenced by land availability. Therefore, a perpetual increase in population growth leads to fewer resources to sustain the population.

It is through this backdrop that a country needs to recognise and adequately plan for demographic changes, which is an essential prerequisite for sustainable development. Therefore, this chapter analyses population dynamics on global, national and provincial levels. It commences with the global and national population sizes, followed by the national population growth rate. This chapter also discusses the dynamics of the provincial population, ranging from population size, population distribution by age and gender, and population distribution by race. It further analyses the fertility rate, mortality rate, life expectancy and concludes with migration. All these factors determine

[1] Epidemiological is the branch of medicine that deals with the incidence, distribution, and possible control of diseases and other factors related to health.

the province's population structure. Finally, this chapter makes policy recommendations to improve the status quo and promote the province towards achieving the Sustainable Development Goals (SDGs).

2.2 Global population growth

According to the Population Reference Bureau (2021), global population growth has been driven primarily by the tremendous increase in the number of people reaching the age of reproduction. Significant changes in global fertility rates[2] have also supported this rapid increase and the declining mortality rate[3]. Data by the World Bank (2019) shows that the global fertility rate has dropped significantly over the past six decades, from 4.98 per woman in 1960 to 2.4 in 2019. According to the World Economic Forum (WEF, 2021) this rate is estimated to have dropped slightly to 2.3 in 2021, primarily due to COVID-19.

Nevertheless, more women avoid pregnancy using modern methods, and some are focusing on education and seeking to establish their careers before having a family. Furthermore, there is increasing urbanisation and increasing migration. As a result of changes in these demographic dynamics, the global population increased, leading to overpopulation[4]. Such changes challenge the way governments elevate discussions on public spending, infrastructure investment, and urban design based on projections for future urban growth or decline (World Bank, 2020).

The World Bank (2020) report shows that similar to the fertility rate, the global mortality rate declined from 17.71 per 1 000 people in 1960 to an estimated 7.52 in 2019. The report further states that these estimates exclude death related to coronavirus (COVID-19). However, the World Health Organisation (WHO, 2021) provides preliminary estimates suggesting that as of 31 December 2020, the total number of global deaths attributable to the COVID-19 pandemic was at least 3 million, representing 1.2 million more deaths than the 1.8 million officially reported.

Figure 2.1 shows that the world population growth rate peaked at 2.2 per cent in 1962 and 1963 and continued to decline, implying that it has not been growing exponentially for decades. Since 1960 the slope of the figure indicates that the population has been increasing at a slower pace. This is due to demographic factors influencing growth, depressing fertility, as many people were struggling with economic uncertainty and worrying about health consequences of the pandemic (Sobotka, *et al.,* 2021). This slow growth in the population can be exacerbated by the emergence of COVID-19. The world continues to experience a sustained change in the population's age structure, driven by increasing life expectancy[5] and decreasing levels of fertility (United Nations, 2020).

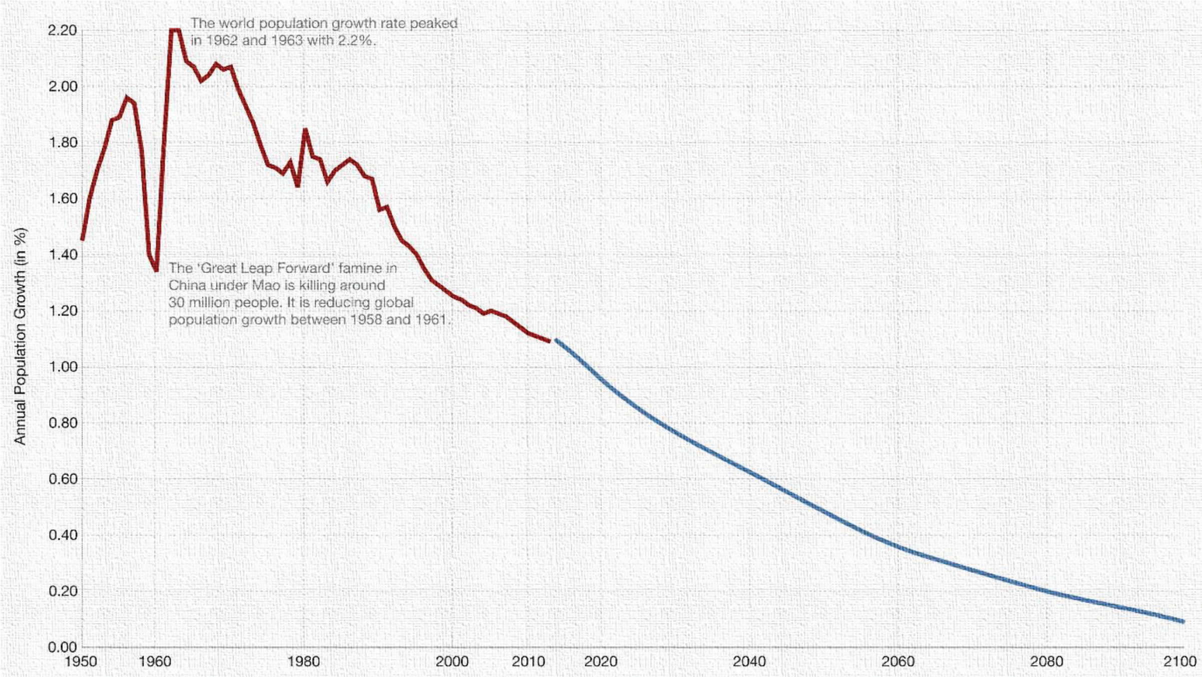
[2] Fertility rate is the average number of children born to women during their reproductive years.

[3] Mortality rate is the number of deaths per 1 000 persons occurring during a specified period, usually a year.

[4] Overpopulation is defined as an inability of a country to support its existing population over time.

[5] Life expectancy is an estimate of the average number of additional years that a person of a given age can expect to live. The most common measure of life expectancy is life expectancy at birth.

Figure 2.1: Annual world population growth from 1950 to 2100



Source: US Census Bureau and Projections; United Nations Population Division 9 Medium Variant, 2015 revision

The Population Reference Bureau (2021) indicates that the world population increased from 7.7 billion in 2020 to approximately 7.8 billion in 2021. Table 2.1 depicts that less developed countries constitute about 83.8 per cent of the world population. Asia and Africa are the most populous regions. Around 59.3 per cent of the world's population resides in Asia, with China and India comprising 35.8 per cent of the world population. On the other hand, about 17.5 per cent of the population live in Africa, followed by America and Europe, which have the lowest population among the regions at 13.1 per cent and 9.5 per cent, respectively.

According to the World Population Prospect highlights, the global population is projected to reach 8.5 billion in 2030 and further increase to 9.7 billion in 2050 and 11.2 billion by 2100. These estimates rely on the medium projection variant, which assumes a decline of fertility for countries where large families continue to be prevalent and a slight rise of fertility in several countries with less than an average of two children per woman. Governments have also projected improvement on survival prospects (United Nations, 2019). The rapid population increase in Africa is anticipated to almost double by 2050. This exceptional growth is primarily due to a significant decline in mortality rates and better-improved quality of life. As a result, the number of births and deaths per 1 000 people is 34 and 8 persons, respectively. However, in less developed countries, birth rates remain high at about five children per female (PRB, 2021).

The Table further shows that the world continues to witness an unprecedented and sustained change in the age structure of the global population, driven by rising levels of life expectancy and decreasing levels of fertility. An increase in life expectancy for people means that both the share and number of older people in the total population are overgrowing. Globally, the people aged 65 years or over were estimated at 9 per cent in 2020. This estimate is projected to rise to 10 per cent in 2021.

As the United Nations (UN, 2019) pointed out, the world is experiencing demographic changes skewed with varying degrees towards the ageing population. South-Eastern and Eastern-Asia, Latin America and the Caribbean witnessed the fastest growth in the population age 65 and over. The percentage of those aged 65 years and over almost doubled from 6 per cent in 1990 to 11 per cent in 2019 in South-Eastern and Eastern Asia. This proportion rose from 5 per cent to 9 per cent in Latin America and the Caribbean over the same period. In Europe and Latin America, older persons rely heavily on public transfers to fund more than two-thirds of their consumption. However, property and financial assets, particularly equities and bonds, are the primary sources of financing consumption in countries with relatively low public transfers. This trend is evident in Southern Asia and South-Eastern Asia and Australia, the United Kingdom (UK), and the United States (US).

Table 2.1: World population and selected countries in 2021 and 2050

	Mid-2021				Population in Mid-2050 (million)
	Population (million)	% Share of world population	% Population under 15 years of age	% Population over 65 years of age	
World	**7837**	**100**	**26**	**10**	**9688**
More Developed	1271	16.2	16	19	1296
Less Developed	6566	83.8	27	8	8393
Less Developed (Excl. China)	5154	65.8	39	4	7127
Africa	**1373**	17.5	**40**	**4**	**2529**
Sub-Saharan Africa	1125	14.4	42	3	2181
Nigeria	211.4	2.7	50	3	401.3
South Africa	**60.1**	0.8	**28**	**6**	**82.5**
Northern Africa	248	3.2	33	6	348
America	**1027**	13.1	**22**	**12**	**1174**
Northern America	371	4.7	18	17	412
Latin America and the Caribbean	656	8.4	24	9	762
Asia	**4651**	59.3	**24**	**9**	**5192**
China	1412.3	18.0	18	14	1266.54
Japan	125.4	1.6	12	29	109.9
India	1393	17.8	26	7	1638.7
Europe	**744**	9.5	**16**	**19**	**731**
European Union	445	5.7	15	21	442
United Kingdom	67.5	0.9	18	19	73.9
Russia	145.8	1.9	18	15	140.4
Oceania	**43**	0.5	**23**	**13**	**62**
Australia	26	0.3	19	16	36.5

Source: Population Reference Bureau, 2021

Over the next three decades, the number of older people worldwide is projected to more than double, reaching over 1.5 billion in 2050. This rapid increase implies that the share of the population aged 65 and above is expected to increase from 9 per cent in 2020 to around 16 percent in 2050 (United Nations, 2020). People around the world are ageing at a faster pace than in the past; therefore, this demographic transition[6] will have an impact on almost all aspects of society.

The ageing population can directly pressure countries' fiscal and macroeconomic stability through additional pension, health and long-term care expenditure by increasing government spending. This may harm economic growth and overall quality of life if the government needs to divert public spending from critical investments such as education and infrastructure to finance programs for the elderly. Moreover, in other developing countries, high public expenditure limits the fiscal possibilities for increased ageing-related spending in the long run. Therefore, appropriate and prompt policy solutions are essential to ensure that all human beings' fiscal and macroeconomic sustainability and health services are well catered for (United Nations, 2019).

Whereas, there have been concerns that this kind of structure might reduce the total productivity of an economy in the elderly's capacity to adopt new technology and innovation. Inherently, older people are comparatively slow in adapting to new technologies or approaches. This can hinder overall productivity and efficiency as the world economy changes with rapid technological progress. The Population Reference Bureau (2021) further concludes that a high proportion of the population growth anticipated in developed countries is immigrants from less developed countries. Nearly 56 per cent of the immigrants lived in more developed regions, whilst countries in less developed areas hosted 44 per cent. In addition, as many as 65 per cent of all international immigrants reside in high-income countries, 30 per cent settled in middle-income countries, and 5 per cent lived in low-income countries (United Nations, 2019).

2.3 South African population

The South African population is spread across the nine provinces. Each province has a diversified population with different races, religions, cultural identities and eleven official languages. Statistics South Africa (Stats SA, 2021) estimates that the latest population considers the effects of COVID-19, migration, death and birth rates. The report reveals that despite the adverse impact of COVID-19, the total national population has been consistently increasing even in the past two years. It rose from 47.4 million in 2006 to 50.6 million in 2011. The South African population further rose from an estimated 59.6 million in 2020 at 60.1 million in 2021 (Table 2.2). The overall national population's upward trajectory is further evidence in the Population Reference Bureau (PRB, 2021), which expects SA's population to increase by around 22.4 per cent between 2021 and 2050. However, this forecast is 4.9 percentage points lower than the 27.3 per cent projected in 2020. The significant drop in the estimates could be attributed to high COVID-19 cases in SA compared to other African countries.

The Table further shows that KwaZulu-Natal's (KZN) share of the total national population has been gradually declining over the past decade, from 21.4 per cent in 2011 to 19.1 per cent in 2021. Nevertheless, the estimated

[6] Demographic transition is a long-term trend of declining birth and death rates, resulting in a substantive change in the age distribution of a population.

population size in the province increased from 10.8 million in 2011 to 11.5 million in 2021. Despite the slight decline in the total national population share, KZN is still the country's second-largest populous province after Gauteng (GP), with approximately 15.8 million or 26.3 per cent of the national population in 2021. The increase in the population size in GP from 9.5 million in 2006 and 11.2 million in 2011 is primarily due to many people migrating to Gauteng for better employment opportunities. KZN and the EC continue to decline in the percentage of the total national population, whilst GP and Western Cape (WC) are gradually increasing. This shows that people migrate from these provinces to GP and WC for economic opportunities. Furthermore, the number of international migrants entering the provinces was highest in Gauteng for all periods, with WC ranking second (Stats SA, 2021).

Table 2.2: South African population by the province in 2006, 2011 and 2021

	2006		2011		2021	
	Population	% Share of national population	Population	% Share of national population	Population	% Share of national population
South Africa	**47 390 900**	**100**	**50 586 757**	**100**	**60 142 978**	**100**
Eastern Cape	6 894 300	14.5	6 829 958	13.5	6 676 590	11.1
Free State	2 958 800	6.2	2 759 644	5.5	2 932 441	4.9
Gauteng	9 526 200	20.1	11 328 203	22.4	15 810 388	26.3
KwaZulu Natal	**9 924 000**	**20.9**	**10 819 130**	**21.4**	**11 513 575**	**19.1**
Limpopo	5 365 400	11.3	5 554 657	11.0	5 926 724	9.9
Mpumalanga	3 508 000	7.4	3 657 181	7.2	4 743 584	7.9
North West	3 374 200	7.1	3 253 390	6.4	4 122 854	6.9
Northern Cape	1 094 500	2.3	1 096 731	2.2	1 303 047	2.2
Western Cape	4 745 500	10.0	5 287 863	10.5	7 113 776	11.8

Source: Stats SA, 2021

2.4 Population growth rate

Table 2.3 illustrates the national population growth rate per age category from 2011 to 2021. As observed in the Table, the national population grew by an annual rate of 1.54 in 2011 and peaked at 1.55 in 2014. However, the growth rate dropped to 1.51 in 2015 and never recovered in subsequent years as it plunged to 1.01 per cent in 2021. As a result, the annual average growth stood at 2.41 per cent between 2006 and 2021. This rate is estimated to have dropped to 1.75 per cent between 2011 and 2021. For the young people between ages 15 to 35, annual growth had been negative between 2011 and 2019. However, this age category exhibited a positive population growth rate of 0.22 percent and 0.53 percent for 2020 and 2021.

Contrarily, growth rates for the elderly and child population remained positive during the consideration period. For elderly people, the steady increase in growth rates is due to understanding the interconnections between the living arrangements of the elderly, their socioeconomic status and their health and well-being. This trend is critical, particularly considering the 2030 Agenda for Sustainable Development that the Sustainable Development Goals (SDGs). Countries have pledged that targets for all segments of society and ages, focusing on the most vulnerable, including older people, will be met (United Nations, 2020).

Table 2.3: National annual population growth rate (percentages), 2011 to 2021

Period	Children (0 to 14 years	Youth (15 to 34 years)	Elderly (60 + years)	Total
2011-2012	1.25	-0.96	2.97	1.54
2012-2013	1.4	-1.37	2.94	1.54
2013-2014	1.31	-1.39	3.05	1.55
2014-2015	1.29	-1.37	3.02	1.51
2015-2016	1.13	-1.2	2.99	1.47
2016-2017	1.34	-1.22	2.95	1.5
2017-2018	1.37	-1.05	2.96	1.51
2018-2019	0.95	-0.23	2.95	1.49
2019-2020	0.64	0.22	2.9	1.37
2020-2021	0.38	0.53	1.53	1.01

Source: Stats SA, 2021

The decline in the population growth rates for the youth could be attributed to influences such as irresponsible behaviours and harmful activities, including crime, drugs, and other similar activities, especially males usually involved themselves in society that threatens their lives. For example, the latest South African survey on youth risk behaviours reports that adolescents initiate alcohol use prior to 13 years. Compared to their female counterparts, men were more likely to use alcohol, engage in binge drinking, drive or walk under the influence of liquor, and engage in physical fighting (Khuzwayo *et al*., 2020).

2.4.1 Population distribution by age and gender in KZN

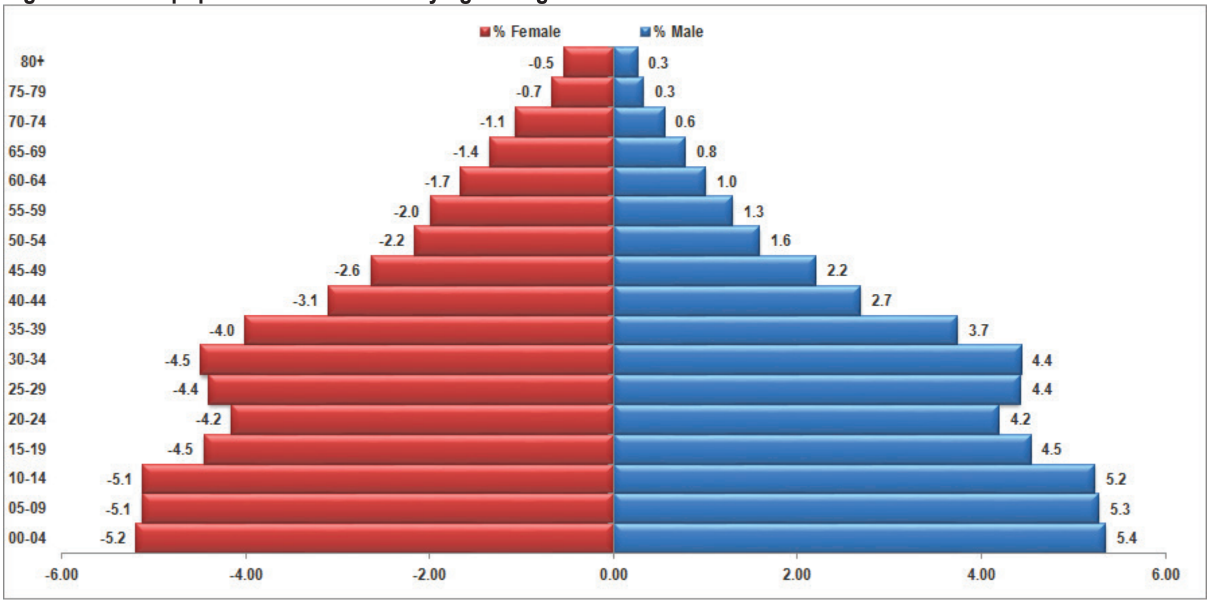
Figure 2.2 shows the population distribution of KZN by age and gender in 2021. An estimated 31.3 per cent of the population are children between 00 and 14 years of age, and about 35.1 per cent is youth between the ages of 15 to 34 and are economically active. Collectively, children and youth account for an estimated 66.4 per cent of the total provincial population. The total dependent population[7] is estimated at 4 315 203, while the economically active population is estimated at 7 271 801.

The implication of these estimates show a high dependency ratio[8] of 59.3 per cent. A high dependency ratio puts pressure on government finances, resulting in higher tax rates on a declining working-age population, creating disincentives to work and reducing disposable income. In addition, the government can collect more indirect taxes and wealth taxes to improve revenue for such cases. For these undesired effects, a country's dependency ratio must be maintained lower than the global average. If it remains high, this may hinder competitiveness internationally, thus leading to a decline in the number of productive workers and a more significant tax burden.

[7] The dependent population is the number of people aged 15 and younger and 65 and older.

[8] Dependency Ratio = [(Number of people under 15 years) + (Number of people aged 65 and over) ÷ (Number of people between 15 and 64)] × 100 = (4 315 203 ÷ 7 271 801) × 100 = 59.3 per cent.

Figure 2.2: KZN population distribution by age and gender in 2021

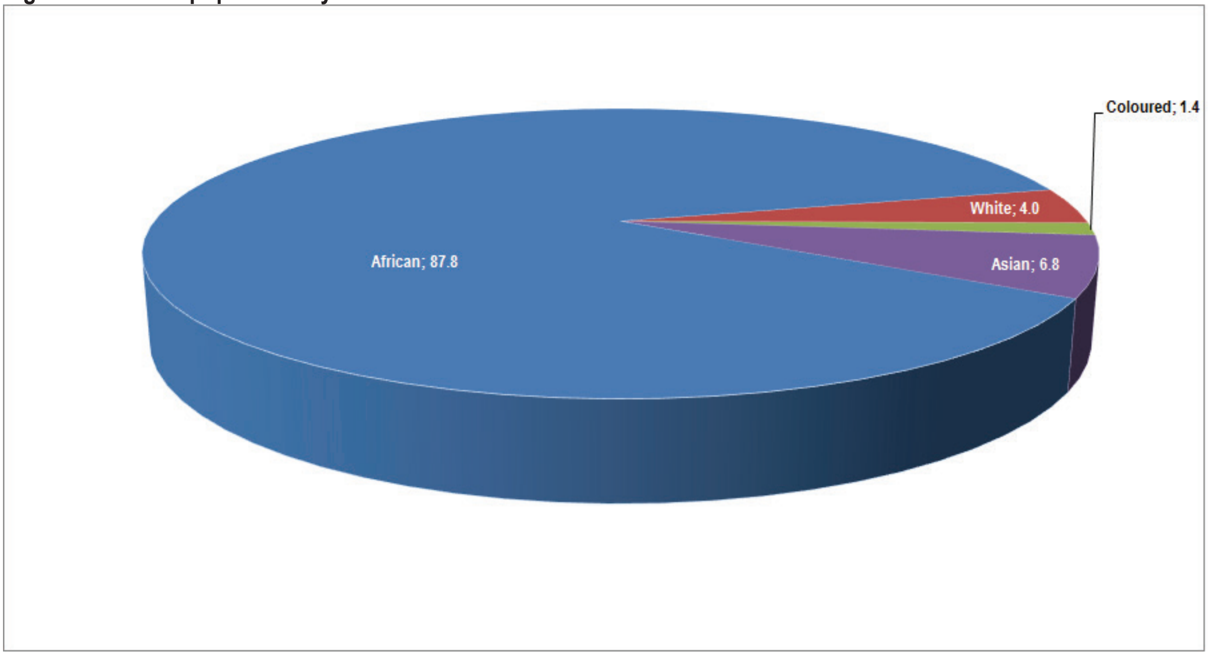


Source: Stats SA, 2021

2.4.2 Population by race

Figure 2.3 illustrates KZN's population distribution by race in 2020. The province is primarily dominated by Africans, constituting 87.6 per cent of the total KZN population, followed by Asian at 6.9 per cent, Whites at 4.1 per cent and Coloureds at 1.4 per cent.

Figure 2.3: KZN's population by race in 2021



Source: IHS Markit, 2022

2.5 Fertility, mortality, life expectancy and migration

In order to understand fertility, mortality and life expectancy, it is imperative to take cognisance of the demographic transition theory. This theory is about the generalised analysis of the changing pattern of mortality, fertility and growth rates as societies move from one demographic regime to another (Notestein, 2016). Dominant demographic theories such as the demographic transition and second demographic transition frameworks postulate a negative relationship between development and fertility. As societies progress economically, socially, industrially, and educationally, fertility decreases (Lesthaeghe, 2010).

Table 2.4: Fertility, mortality and life expectancy in KZN, 2006 to 2021

	SA	EC	FS	GP	KZN	LP	MP	NC	NW	WC
Average total fertility rate										
2006-2011	2.94	3.26	2.85	2.24	3.01	3.39	2.95	3.12	3.23	2.45
2011-2016	2.63	2.98	2.48	2.10	2.82	3.13	2.53	2.74	2.77	2.14
2016-2021	2.50	2.85	2.34	1.90	2.78	2.90	2.44	2.61	2.68	2.01
Delivery in 10 to 14 years in facility rate (%)										
2017/18 DHIS	0.3	0.4	0.3	0.2	0.3	0.3	0.5	0.6	0.2	0.3
2018/19 DHIS	0.4	0.4	0.3	0.2	0.5	0.3	0.7	0.5	0.3	0.3
2019/20 DHIS	0.4	0.6	0.4	0.3	0.3	0.3	0.7	0.6	0.2	0.3
Delivery in 15 to 19 years in facility rate (%)										
2017/18 DHIS	12.4	15.0	10.2	7.9	17.3	13.2	12.5	16.5	10.6	10.5
2018/19 DHIS	12.6	16.0	11.6	6.5	16.8	13.0	14.0	18.0	13.1	10.8
2019/20 DHIS	12.5	16.1	12.2	6.6	16.0	13.8	14.0	17.7	12.6	10.8
Inpatient early neonatal death rate (deaths per 1 000 live births)										
2016/17 DHIS	9.9	10.8	11.4	10.0	9.7	10.6	9.5	13.4	10.0	7.1
2017/18 DHIS	10.2	11.8	12.0	10.2	10.3	11.0	10.4	10.0	7.9	7.2
2018/19 DHIS	12.1	12.5	16.8	13.0	11.5	13.2	11.5	11.7	10.6	8.9
2019/20 DHIS	11.9	12.3	15.6	12.4	10.9	14.3	11.2	15.5	11.5	8.2
Death in facility under 5 years rate (%)										
2016/17 DHIS	4.4	4.3	5.5	6.7	4.5	5.9	6.1	4.3	6.3	1.3
2017/18 DHIS	4.7	5.7	6.2	6.9	4.5	5.7	7.0	4.2	7.8	1.5
2018/19 DHIS	4.8	5.1	5.9	6.1	5.5	5.9	7.4	4.5	8.0	1.4
2019/20 DHIS	5.0	4.8	5.4	6.4	5.9	6.7	7.6	5.7	7.3	1.5
Under 5 pneumonia case fatality rate (%)										
2016/17 DHIS	2.0	3.0	3.2	1.5	1.8	2.9	3.4	1.6	2.5	0.4
2017/18 DHIS	2.5	3.7	2.9	2.6	2.5	3.0	2.3	1.9	6.4	0.7
2018/19 DHIS	1.9	3.2	1.7	2.8	2.3	3.3	2.7	2.3	2.2	0.2
2019/20 DHIS	1.6	3.4	1.8	1.8	2.0	2.7	2.3	1.7	1.2	0.2
Under 5 severe acute malnutrition case fatality rate (%)										
2016/17 DHIS	8.0	10.2	9.6	6.5	7.4	8.3	8.4	5.1	10.6	0.6
2017/18 DHIS	7.4	11.8	7.5	6.2	7.7	5.0	9.1	6.1	8.0	2.2
2018/19 DHIS	7.1	8.9	6.2	6.8	7.8	6.3	9.1	4.3	9.3	1.6
Infant exclusively breastfed at Dtap-IPV-Hib-HBV 3rd dose rate (%)										
2016/17 DHIS	41.6	32.8	46.2	44.0	53.9	28.9	35.3	55.0	45.5	31.8
2017/18 DHIS	47.8	46.7	53.8	47.4	56.0	39.2	48.5	56.0	56.9	34.4
2018/19 DHIS	83.0	67.1	78.6	84.2	77.9	97.5	90.4	96.9	77.9	92.9
Institutional maternal mortality ratio (deaths per 100 000 live births)										
2016/17 DHIS	111.5	127.6	148.4	114.7	100.2	125.9	123.0	87.5	130.1	57.7
2017/18 DHIS	105.7	128.3	132.9	108.5	108.5	109.2	120.0	65.9	117.5	55.1
2018/19 DHIS	105.9	106.1	168.3	122.8	88.4	111.6	92.4	71.3	137.4	66.8
2019/20 DHIS	88.0	108.2	116.2	102.9	76.9	97.8	67.1	109.9	88.0	43.6
Life expectancy at birth (Stats SA)										
2011-2016 Female	63.7	64.3	58.7	66.2	60.9	64.7	63.8	62.0	62.6	70.3
2011-2016 Male	57.9	57.7	53.3	61.4	54.7	58.8	58.1	56.2	56.8	64.2
2016-2021 Female	66.3	66.3	62.0	68.7	64.6	67.2	66.8	64.8	65.0	71.0
2016-2021 Male	60.5	59.6	56	63.9	58.2	62	61.8	58.6	58.6	65.7

Source: Health Systems Trust (HST) and Stats SA, 2022

Potential motivating factors for this behaviour include the opportunity costs of childbearing and investments in the quality of children instead of the number (Becker, 1960). In addition, rising higher-order needs conflict with childbearing aspirations (Lesthaeghe, 2010). These frameworks fit the available evidence over most of the twentieth century, whereby development in advanced countries tended to have lower fertility levels than less developed regions.

Perhaps due to the implicit assumption of demographic transition theory that the decline in fertility is not reversible (Burger and DeLong 2016), much attention has been directed towards this relationship's implications, particularly around population age structures (Wigglesworth, 2016; Zeihan, 2014). However, new theoretical considerations have been published, suggesting that the relationship between development and fertility might turn positive (Esping-Andersen and Billari, 2015; Goldscheider et al., 2015). Furthermore, these new theories point to improvements in gender equality as a potential driver of rising fertility levels in highly developed countries.

In 2021, SA continued to experience a decline in fertility, moving from a total average total fertility rate (TFR) of 2.94 per cent over the period 2006 to 2011 to 2.51 per cent between 2016 and 2021. The estimated total TFR of 4.9 in 1970 declined to 3.2 in 1996. As evidenced in Table 2.5, TFR continued to decrease. Reporting on fertility supports the monitoring of Goal 3 of the Sustainable Development Goals (SDGs). This goal seeks to ensure healthy lives and promote well-being for people of all ages. Amongst others, indicators related to the goal include a reduction in global maternal mortality ratio, under-5 mortality rate, neonatal mortality rate, and adolescent birth rate. In addition, the increasing proportion of women of reproductive age who have their need for family planning satisfied with modern methods is also a critical indicator (United Nations, 2015).

2.5.1 Fertility[9]

Considerable population growth in a country is either associated with a poor economy, a lack of awareness and preventive measures, or poor living conditions. According to Statistica (2021), Africa assumes the role of the continent with the vast majority of countries with the highest fertility rates, with Niger topping the list at 6.91 children per woman, followed by Angola at 5.9 children per woman. The Democratic Republic of Congo, Mali and Chad follow at 5.7, 5.63 and 5.57 children per woman, respectively. Collectively, the countries of Sub-Saharan Africa have the highest average fertility rate in the world at 4.6. Countries with the lowest fertility rates in 2021 were Taiwan (1.07), South Korea (1.09), and Singapore (1.15).

According to the World Population Review (2021), the two most populous countries in the world, China (1.7) and India (2.2), have fertility rates on the lower-middle part of the scale. These numbers are impacted by government policies and cultural expectations around reproduction in these countries. China, for instance, maintained a "one-

[9] The Total Fertility Rate represents the number of children born to a woman if she were to live to the end of her childbearing years and bear children per current age-specific fertility rates

child policy" from roughly 1980 until 2016 but passed a law in August 2021 formally declaring married couples could have as many as three children. According to Stats SA (2021) fertility rate in KZN between 2016 and 2021 is projected to have averaged 2.61 children. This projection is above the national average of 2.51 children and is the fourth-highest after LP (3.08 children), the EC (2.8 children), and NC (2.7 children). Gauteng (1.92 children), and the WC (2.04 children) had the lowest projections.

2.5.2 Mortality[10]

There are several indicators of mortality widely used to measure premature mortality at various stages of life. However, this sub-section focuses on infants, children under five, maternal mortality and the ten leading causes of death in SA and KZN. The neonatal death in facility rate measures the number of neonates, aged 0–28 days, who died during their stay in the facility as a proportion of all babies born in the facility, expressed per 1 000 live births. This rate includes early (0–6 days) and late (7–28 days) neonatal deaths. In addition, it indicates the quality of antenatal and intrapartum care of the mother and the postnatal care of the neonate. In the past, early neonatal deaths were defined in the National Indicator Dataset (NIDS) as deaths at 0–7 days and late neonatal deaths at 8–28 days. From April 2019, early neonatal deaths are defined in the NIDS as deaths at 0–6 days and late neonatal deaths at 7–28 days. The neonatal mortality rate is a crucial indicator for Goal 3 of the SDGs, with a target of fewer than 12 deaths in the neonatal period for every 1 000 live births by the year 2030.

Between 1990 and 2018, there was an estimated 56 per cent reduction in global deaths among children and adolescents younger than 15 years. This included a 52 per cent reduction in neonatal mortality from 5 million deaths in 1990 to 2.5 million in 2018. Neonatal deaths account for 44 per cent of under-5 deaths globally, with the most significant proportion occurring in low and middle-income countries. Any further improvement in the under-5 mortality rate requires an ongoing reduction in neonatal deaths. The global neonatal mortality rate was estimated to be 18 per 1 000 live births in 2018. However, in sub-Saharan Africa, where there has been little, if no, improvement in 40 per cent of the countries, the rate was 28 per 1 000 live births, and 42 of the 48 sub-Saharan African countries are not expected to achieve the SDG target (HST, 2021).

The report further indicates that pneumonia is the leading infectious cause of death in young children globally, claiming the lives of over 800 000 children younger than five years every annum, or around 2 200 every day. This includes over 153 000 new-borns. Globally, there are over 1 400 cases of pneumonia per 100 000 children, or one case per 71 children every year. However, progress in reducing deaths due to pneumonia in children under five has been significantly slower than for other infectious diseases.

Closer scrutiny at the health status of babies and children in KZN between 2019/20 and 2020/21 reveals that the in-patient early neonatal death rate increased from 8.7 per 1 000 live births in 2019/20 to an average of 9.4 deaths

[10] The mortality rate represents the average number of deaths in a particular area over a specified period.

per 1 000 live births. However, this estimate was below the national average of 9.7 per 1 000 live births in 2020/21. It further fell within the SDG target of 12 per 1 000 live births. The province had the lowest rate in the country, being surpassed only by the WC with 6.5 per 1 000 live births. The under-five pneumonia case fatality rate increased from 2 per cent in 2019/20 to 2.3 per cent in 2020/21, placing the province above the national average of 2.1 per cent. The under-5 acute malnutrition case fatality rate increased substantially from 7.6 per cent in 2019/20 to 10.5 per cent (Keep together) in 2020/21, placing the provincial score far above the national average of 7.3 per cent. This means there has been an increase in pneumonia and malnutrition. These diseases have proven fatal for children below five years in the province.

According to Schlaudecker (2011), new studies parallel earlier reports that diarrhoea and pneumonia impair children's growth and that underlying malnutrition is a major risk factor for these conditions. Episodes of diarrhoea may predispose the child to pneumonia in cases of malnourished children. Malnutrition may partially account for the reduced efficacy of oral rotavirus vaccines in low-income countries. Additional studies support breastfeeding and micronutrient supplementation to prevent and control diarrhoea and pneumonia. According to the Health Systems Trust's District Health Barometer (2021), 57.4 per cent of infants were exclusively breastfed when receiving their 14-week vaccination KZN. This figure was below the national average of 59.7 per cent.

2.5.3 Life expectancy

"Life expectancy is the most widely used measure of health, although it only considers the length of people's lives and not their quality of life. There have been remarkable gains in life expectancy since the 1970s in the Organisation for Economic Co-operation and Development (OECD) countries. On average, life expectancy at birth reaches 80 years across OECD countries, a gain of more than ten years since 1960. Women live almost six years longer than men, averaging 83 years versus 77 years for men" (OECD, 2011). The United Nations Development Plan (UNDP) defines life expectancy at birth as the number of years a newly born infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infant's life.

The indicator is an essential yardstick for any economy as it indicates its health status. Low life expectancy implications include losing a productive workforce, loss of tax revenue, and a high dependency ratio. Predicting how a population will age has implications for the planning and providing services. Conversely, increases in life expectancy could translate into significant increases in the population. According to Stats SA (2021), KZN is projected to have a lower life expectancy of 57.4 for males and 63.6 for females than the national average of 59.7 for males and 65.4, respectively. The 2021 projections for KZN are higher than those of 2019 for both males and females, indicating an improvement in the provincial populace's living conditions over the past year.

2.5.4 Migration

Migration has significant impacts on both the people and the places involved. When supported by appropriate policies, migration can contribute to inclusive and sustainable development in origin and destination countries while benefiting migrants and their families. Therefore, reliable data on migrants and migration are crucial for assessing current and future trends, identifying policy priorities, and making informed decisions. In addition, reliable data on migration can help ensure that discussions on migration are based on facts, not myths or misperceptions at national and international levels.

According to the Migration Data Portal (2021), international migrant stocks are estimates of the total number of international migrants present in a given country at a particular point in time. The report found that in 2020 international migrants globally reached an estimated 281 million people. This constituted persons 15 per cent below 20 years old, 73 per cent of people between 20 and 64 years (the basic working age), and 12 per cent of persons who were 65 years or older. According to the United Nations (UN), the estimated number of international migrants worldwide increased in the twenty years between 2000 and 2020, reaching 281 million in 2020. This figure is up from 248 million in 2015, 220 million in 2010, 191 million in 2005, and 173 million in 2000. In the past two decades, the international migrant stock grew annually by an average of 2.4 per cent. However, the growth rate increased to 2.5 per cent during the period 2015-2020 from 2.3 per cent between 2010 and 2015 (Migration data portal, 2021).

At mid-year 2020, Europe hosted the most significant number of international migrants (86.7 million). This is followed by Asia (85.6 million), North America at 58.7 million, and Africa at 25.4 million. According to the world population review (2021) in 2021 the US is home to the highest number of immigrants globally. The number of immigrants in the US has increased by at least 400 per cent since 1965. Other countries with a large number of migrants include but are not limited to The Russian Federation (11.6 million), Saudi Arabia (10.8 million), Germany (10.2 million), and the United Kingdom (UK) at 8.4 million. Concerning their place of birth, one-third of all international migrants originated from only ten countries, with India as the lead country of origin, accounting for about 15.9 million persons living abroad. Migrants from Mexico constituted the second largest “diaspora” (12.5 million), followed by The Russian Federation (10.4 million), China (9.7 million) and Bangladesh (7.2 million).

Table 2.5: Migration trends in KZN, 2011 to 2021

Provinces	2011-2016			2016-2021		
	Out- migrants	In- migrants	Net- migration	Out- migrants	In- migrants	Net - migration
Eastern Cape	506 901	181 268	-325 633	512 504	192 839	-319 665
Free State	159 452	128 193	-31 259	164 042	134 907	-29 135
Gauteng	503 400	1 528 924	1 025 524	573 271	1 564 861	991 590
KwaZulu-Natal	**351 540**	**280 660**	**-70 880**	**373 366**	**288 998**	**-84 368**
Limpopo	446 755	271 154	-175 601	469 960	281 289	-188 671
Mpumalanga	203 441	270 874	67 434	220 641	283 137	62 496
Northern Cape	72 116	82 981	10 865	76 837	88 433	11 596
North West	187 555	306 140	118 586	204 053	320 679	116 626
Western Cape	161 436	458 749	297 313	178 136	470 657	292 521

Source: Stats SA, 2021

Against this backdrop, the SDGs recognise migration as a core development consideration, which marks the first-time migration is integrated explicitly into the global development agenda. Migration has a considerable impact on development, in the context in which people live, where they move to, and the places they go through to get there play a role in shaping people's resources, aspirations, motivations, and opportunities to migrate. Among the SDGs, Goal 8 on economic growth and decent work explicitly refers to migration, acknowledging the economic value of migrant labour. Migration can also contribute to the achievement of Goal 1, as it can reduce poverty for migrants and their families in origin and destination countries. Migrants[11] and their families benefit from increased income and knowledge, which allows them to make productive investments, meet basic needs and access education and health services, and achieve Goals 1, 3 and 4 (Foresti & Hagen-Zanker, 2017).

Table 2.5 shows that between 2016 and 2021, Gauteng is estimated to continue to absorb the highest number of migrants (1 564 861) out of all other South African provinces. In contrast, KZN is projected to have had a net outflow of people (84 368). Net out-migration has also been projected in the EC, FS and LP. In contrast, NC, MP, NW, and the WC are projected to have a net inflow over the period under consideration. Migration is cited as one of the main factors contributing to the decline in KZN's share of the national population and its share of the equitable share grant.

2.6 Conclusion and recommendations

The social and economic implications of an ageing population have a profound implication for economic development and growth. With populations ageing more rapidly than ever before, policymakers are confronted with several interrelated issues, including a decline in the working-age population, increased health care costs,

[11] Migration can reduce the poverty of migrants' poverty and their families in countries of origin. It can do this through remittances and other mechanisms, including knowledge and norm transfers, in-kind transfers (e.g. assets) and changing household dynamics.

unsustainable pension commitments, and changing demand drivers within the economy. The reduction in the working-age population could lead to a supply shortage of qualified workers, making it a challenge for businesses to fill in-demand roles. An economy that cannot fill in-demand occupations faces adverse consequences, including declining productivity, higher labour costs, delayed business expansions and reduced international competitiveness. In some instances, a supply shortage may push up wages, thereby causing wage inflation and creating a vicious cycle of wage spiral. In order to compensate for such a negative situation, many countries look to immigration to keep their labour forces well adequately supplied and improve their economies. However, it also becomes a challenge to test and recognise the credentials of those immigrants to ensure their authenticity. The alternative option for countries involves adopting new technology and artificial intelligence.

It is critical to link interventions in the area of population to the issues of economic and human development. These issues relate to reducing poverty and inequalities and the roll-out of education services from preschool to tertiary levels while ensuring equity in allocating resources. Therefore, efforts to slow down population growth, reduce poverty, achieve economic progress, improve environmental protection, and reduce unsustainable consumption and production patterns are mutually reinforcing. Slower population growth gives more time for countries to adjust to future population increases and plan accordingly in ensuring that resources are used optimally to meet the demand for the growing population. This reinforces the country's ability to attack poverty, protect and repair the environment, build the base for future sustainable development and control the spread of diseases by having enough health facilities for the growing population.

The age structure of the population is an essential indicator for the demographic analysis. Growing populations generally have more significant proportions of individuals in younger age classes, whereas declining populations typically have smaller proportions of individuals in these age classes. Conversely, stable population sizes typically have more individuals in reproductive age classes. However, the age distributions differ among countries mainly because of differences in the levels and trends of fertility. A population with persistently high fertility, for instance, has a large proportion of children and a small proportion of aged persons. Changes in fertility have an immediate effect on the number of children, but many years must pass before the change affects the numbers above childhood.

Collectively, children and young people account for approximately two-thirds of the KZN population. Hence the dependency ratio of 59.3 per cent is highly skewed towards children. However, the dominance of children and consequently the youth population can yield an economic dividend in the long-run, provided efforts are made to ensure that quality education is provided from an early age. The long-term result of quality education is an increase in productive citizens, which are anticipated to improve the average income per capita in the country. The opposite of this is that more pressure could be exerted on government fiscus if children are provided with poor education, which is unequally distributed.

Factors influencing changes in population structure require that the world prepare a variety of tools to monitor economic development and growth. As different dynamics impact population changes, the countries should prepare their economies to be able to intervene in all aspects. For instance, if the old-age population increases due to available proper health systems and healthy lifestyle choices, the government needs to cater to those without putting more pressure on the state's revenue. This is because an increase in the ageing population will likely lead to a declining labour force, lower fertility and a rise in the age dependency ratio.

The COVID-19 disturbances exerted pressure on most economies across the globe. A response to the economic impact of COVID-19 calls for interventions that also address the structural problems that beset the South African economy prior to the effects of the coronavirus. This means crafting interventions that bring about an outcome that decisively deals with the impact of the pandemic on the South African economy. In addition, the intervention must deal with the last standing structural challenges that have been inhibiting the type of inroads that needed to be made as an economy and a people. KZN's performance against most of the highlighted mortality indicators has dwindled compared to the previous years and its ranking against other provinces. Yet, the province has a relatively higher disease and population burden. This is a worrying outcome as the health sector receives donor funding to supplement its programmes' budget. Should this negative situation persist, the province could withdraw financial support from donor organisations, leaving it in an undesirable state.

Considerable growth in a country is often associated with poor economies, lack of education, and in many cases, poor living conditions. Africa is a prime example of a continent where high fertility exists. Therefore, it is recommended that policies be put in place to reduce fertility in order to curb poverty and perhaps increase economic benefits. According to the United Nations Department of economic and social affairs division reducing fertility through appropriate policies can aid and abet the achievement of the goals of the 2030 SDG targets, in particular those related to sustainable development, poverty, nutrition, health, education and gender equality. Fertility is a global problem, with many countries having to put extreme controls in place in order to curb the growing population. For example, in China, the government implemented a plan of one child per couple in 1980. This restriction was relaxed in 2016, and couples are now allowed two children. The policy helped reduce the ever-growing population, placing a heavy burden on both society and the economy.

In SA, the total population was estimated at approximately 60.14 million in 2021. However, it is a concern that social grant allocations increase dramatically as the population grows. In addition, proper schooling and the impacts of childbirth need to be pushed by the government to children at a young age to reduce underage teenage pregnancies. Migration has significant impacts on both the people and places involved. When supported by appropriate policies, migration can benefit the destination venue. On the other hand, migration can have widespread adverse effects that impact all areas where migrants intend to move. While the international community has long recognised the vital relationship between international migration and development, integrating migrants and migration into the 2030 Agenda for Sustainable Development represents a significant step forward.

It is essential to note that nearly all Governments have adopted specific policy measures to address the issue of irregular immigration. Globally, 99 per cent of Governments “employ fines, detention, or deportation of migrants in an irregular situation, while 77 per cent use penalties for employers of migrants in an irregular situation" (United Nations, 2017). As a result, KZN's performance against most of the highlighted mortality indicators has dwindled compared to the previous years and its ranking against other provinces. Yet, the province has a relatively higher disease and population burden. This is a worrying outcome as the health sector receives donor funding to supplement its programmes' budget. Should this negative situation persist, the province could withdraw financial support from donor organisations, leaving it in an undesirable state.

Chapter Three: Development Indicators

3.1 Introduction

It is broadly accepted that the true wealth of a nation is a function of and dependent on its citizens. In turn, citizens' choices regarding their economic, social, political, and cultural existence. Whilst these choices are adopted by individuals, there is a marked correlation between persons regarding choice prioritisation. As a result, the three most prevalent goals are the desire to live, to build on one's knowledge and to be able to realise an acceptable living standard.

To this end, Malhotra (2004) defines human development as a process of enlarging these and other choices. In stark contrast, macro-economic indicators effectively reflect an amorphous average. Therefore, it has become increasingly apparent that macro-economic indicators fail to present an accurate picture of the living standards of many ordinary people. This phenomenon is amplified in countries with a notable dichotomy between rich and poor. Accordingly, the challenge facing public policy is to address the stresses associated with such variances and, in so doing, ensure credibility whilst simultaneously protecting the precepts of democracy.

In 2015 the Sustainable Development Goals (SDGs)[12] with a target to be reached by 2030, were ratified. The development of these goals has an empirical link with human well-being whilst measuring various aspects of economic, social, and environmental development. A study undertaken by the World Happiness Report (2020) shows a strong correlation between achieving sustainable development and self-reported measures of well-being. Therefore, dividing the SDG Index into its 17 component goals allows for analysing possible trade-offs between sustainable development and well-being. While most SDGs were positively correlated with well-being, goal 12, responsible consumption and production, and goal 13, climate action, were negatively correlated with social well-being. Nevertheless, though it is more than satisfying material needs and desires, well-being is most fundamentally dependent on consuming goods and services.

Accepting that a need and a want are mutually exclusive concepts, the former is the essential foundation of human well-being whilst the latter constitutes a 'value add'. To this end, there is, therefore, a primary need to eliminate poverty, receive health care, ensure food security, be adequately attired, have shelter and receive an education. Nevertheless, it must be re-emphasised that the national macro-economic indicators such as gross domestic product (GDP), inflation and others are necessary to measure the overall performance of an economy. However,

[12] The 17 SDGs goals are (1) no poverty, (2) zero hunger, (3) good health and well-being, (4) quality education, (5) gender equality, (6) clean water and sanitation, (7) affordable and clean energy (8) decent work and economic growth (9) industry, innovation and infrastructure (10) reduced inequality (11) sustainable cities and communities (12) responsible consumption and production (13) climate action (14) life below water (15) life on land (16) Peace and justice strong institutions (17) partnerships to achieve the goal.

in countries with marked divides between rich and poor, micro-statistical measurements to determine income, consumption, and wealth are an equal imperative in determining welfare and the distribution of resources.

Following the above background, this chapter focuses on development indicators such as poverty, human development, grant beneficiaries, school and educator: learner ratio, literacy rate and matric results, school drop-out rate, SA's learner's performance in reading and mathematics, SA learners' performance in mathematics and science, health, causes of death and the burden of disease TB, HIV, hypertension and diabetes, healthcare financing, crime, and access to basic services (electricity, sanitation, piped water). In addition, five principles underpin sustainable development: natural, human, social, manufactured, and financial capital. These are the five types of sustainable capital from which human beings derive the goods and services they need to improve their quality of life. Finally, this chapter covers some of the topics integral to attaining sustainable development in KZN. These are poverty, income inequality, human development, grant beneficiaries, education, health, access to basic services and crime.

3.2 Poverty

In 2020, the World Bank estimated that the COVID-19 pandemic would result in between 119 and 124 million people moving into extreme poverty. This, according to the global funder, is the first increase in global poverty since 1998, when the Asian Financial Crisis took place (World Bank, 2021). The IMF revised this projection in its report and estimated that 97 million persons moved into extreme poverty during 2020. Despite the revised forecast, this reduced estimate represents a historically unprecedented increase in global poverty. In 2021, the World Bank further projected that global poverty would decrease by about 21 million people compared with 2020. The implications of this are that the pace of reduction is returning to the pre-pandemic levels. However, despite the projected decline in poverty levels, the expected recovery will not be sufficient to lessen the gap that the pandemic is estimated to have caused in 2020. The report further maintains that with the convergence of climate change, civil wars, unrest and COVID-19, the goal of ending poverty by 2030, at the current time, is well beyond reach.

According to the World Bank (2021), prior to the COVID-19 pandemic, the share of the world's population living in extreme poverty fell from 10.1 per cent in 2015 to 9.3 per cent in 2017. This implies that people living on less than $1.90 per day dropped from 741 million to 689 million. In addition to the $1.90-per-day international poverty line, the World Bank measures poverty lines of $3.20 and $5.50, reflecting national poverty lines in lower-middle-income and upper-middle-income countries. While less than a tenth of the world's population lives on less than $1.90 a day, close to a quarter of the world's population live below the $3.20 line and more than 40 per cent of the world's population – almost 3.3 billion people – live below the $5.50 line.

The World Bank (2020) has estimated that for the last 25 years, extreme poverty has been on the decline. However, as alluded to above, various factors have reversed this trend. This setback can be ascribed to three main factors; climate change, conflict and COVID-29. While COVID-19 is a new obstacle, conflicts and climate change have been the catalysts for increased poverty for many years over various parts of the world, with poorer countries being the most affected. In respect of poorer countries affected by conflict, more than 40 per cent of the poor live in conflict-affected countries. Conflict destroys livelihoods and discourages investment. For instance, the extreme poverty rates nearly doubled between 2015 and 2018 in the Middle East and North Africa, spurred by the conflicts in Syria and Yemen.

Climate change is also an ongoing threat to poverty increase. According to the World Bank (2020), it is estimated that climate change will drive 68 million to 135 million persons into poverty by 2030. Climate change is a particularly grave threat for countries in Sub-Saharan Africa and South Asia — the regions where most of the global poor are concentrated. The impacts of climate change can also include higher food prices, deteriorating health conditions, and exposure to disasters, such as floods, that affect both the poor and the general population. Among others, conflict, global warming, COVID-19 and malfeasant administration impede drives towards erasing poverty. Nevertheless, every effort is made to sustain the momentum of progress made to date. Accordingly, in the interests of improving and saving lives, this endeavour warrants high priority policy.

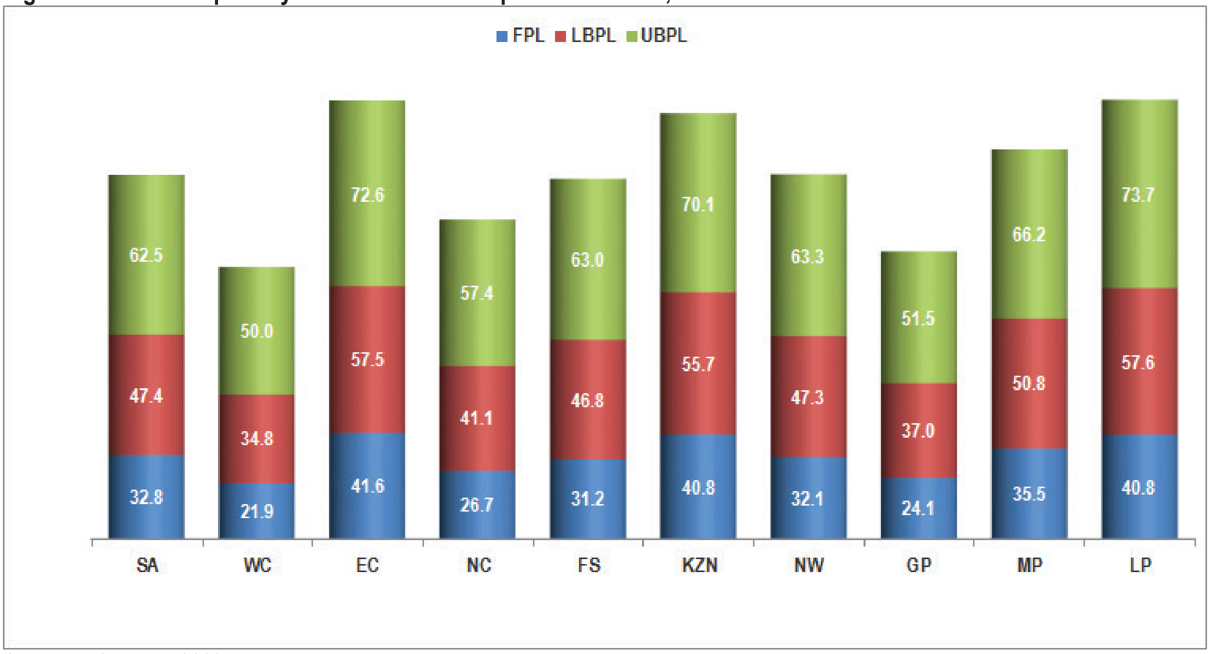
Data from Stats SA (2021) shows that SA is an upper-middle-income country. Yet, regardless of this perceived wealth, most of the country's households live in absolute poverty or continued vulnerability to poverty. Although significant progress was made prior to the economic crisis of 2009 in addressing poverty, many South African households have fallen back or remained in the trap of poverty through inadequate access to clean water, proper health care facilities and household infrastructure. Further to this, whilst the World Bank classifies SA as an upper-middle-income country, SA is judged by a 2020 recent United Nations Children's Fund (UNICEF) report that six out of ten children, or 62.1 per cent, are multidimensionally poor. This finding is consistent with an income poverty line that is based on the upper-bound poverty line, which finds that 67 per cent of children are located in income-poor families.

Multidimensionally poor children are overwhelmingly located in rural areas live in traditionally poor provinces. For example, the Eastern Cape (EC), KwaZulu-Natal (KZN) and Limpopo (LP). In addition, a household head is female and Black African and lives in households where few adults are gainfully employed. The study further found that 42 per cent of children are multidimensionally poor and income poor and that this overlap is extremely strong for children who live in rural areas. In rural areas, nearly two-thirds of deprived children are also income-poor, whereas, in urban areas, the overlap accounts for only 23 per cent of children.

Despite the above, the government has continued to prioritise the well-being of children. Even after the global economic crisis of 2009, critical spending on child services and programmes, such as basic education, social grants, and health, continue to receive funding support. National data also shows that while child poverty rates were consistently higher than those for the adult population, between 2006 and 2011, the child income poverty rate declined, from 77.5 per cent in 2006 to 63.7 per cent in 2011. However, between 2011 and 2015, income poverty for children increased to almost 67 per cent. Therefore, government must place emphasise on child poverty, in line with SDG 1. To this end, the government should continue to invest in social infrastructure in the rural areas where health and school facilities require significant upgrading and focus on the continuation of financing of the social services sector.

It was found that a key driving factor for multidimensional poverty among all age groups is the poor state of social infrastructure. This includes poor school facilities, long distances to the nearest health centres and inadequate waste disposal services at a community level. In South Africa (SA), there are three measures of poverty, these being the food poverty line (FPL), the lower-bound poverty line (LBPL), and the upper-bound poverty line (UBPL) for statistical reporting. The national poverty lines were constructed using the cost-of-basic-needs approach, linking welfare to goods and services. The lines contain both food and non-food components of household consumption expenditure (Stats SA, 2021).

Figure 3.1: Share of poverty lines across all the provinces in SA, 2020



Source: IHS Markit, 2022

As defined by Stats SA (2021), the food poverty line[13] shows the level of consumption below which individuals cannot purchase sufficient food to provide them with an adequate diet. Those living below this line are consuming insufficient calories for their nourishment. The LBPL[14] denotes food and non-food items required by households. However, those living below this line must sacrifice some food to get these non-food items such as transport and

[13] Food poverty line – R624 (in April 2021 prices) per person per month. This refers to the amount of money that an individual needs to afford the minimum required daily energy intake. This is also commonly referred to as the "extreme" poverty line.

[14] Lower-bound poverty line – R890 (in April 2021 prices) per person per month. This refers to the food poverty line plus the average amount derived from non-food items of households whose total expenditure is equal to the food poverty line.

airtime. Finally, individuals living below the UBPL[15] are those who can consume both food and non-food items but cannot meet other necessities such as shelter, education, security and healthcare.

Figure 3.1 shows the share of people living below the food poverty line, the lower-bound poverty, and the province's upper-bound poverty lines in 2020. The WC (21.9 per cent) had the lowest share of people living below the FPL, followed by GP (24.1 per cent), NC (26.7 per cent), and FS (31.2 per cent). Approximately 40.8 per cent of the KZN population was still living below the FPL in 2020. This estimation was the second-highest in the country after EC at 41.6 per cent. Regarding the share of people living below the LBPL, KZN had the third-highest number of people living within this bracket (55.7 per cent), after LP and EC at 57.6 per cent and 57.5 per cent, respectively. As a result, the share of persons within KZN living below the UBPL in 2020 stood at 70.1 per cent, 1.3 percentage points up from the level it was at in 2019, and the third-highest in the country. Currently, the government provides several social grants (Old-age grant, Disability grant, Grant-in-aid, Care dependency, Foster Care, and Child support grant), all of which aim to reduce poverty.

3.3 Household income and inequality

One of the National Development Plans (NDP's) targets is to reduce income inequality, measured using the Gini coefficient[16] from 0.70 to 0.60 by 2030. This is further supported by Goal 10 of the SDGs, aiming to reduce inequalities between countries. Income inequality has increased in nearly all world regions in recent decades but at different speeds. According to the World Inequality Report (2022), the Middle East and North Africa (MENA) are considered the world's most unequal regions. In Europe, the top 10 per cent income share approximate 36 per cent, whereas in MENA it reaches 58 per cent. In East Asia, the top 10 per cent makes 43 per cent of total income and in Latin America, 55 per cent. Regarding global average incomes across regions, expressed as a percentage of the global average income of €16,700 per year, the average income in sub-Saharan Africa is 0.3 (30 per cent) of the global average. In South and Southeast Asia, it is 0.5 (50 per cent) of the global average.

Latin America, East Asia, The Russian Federation and Central Asia have average incomes at or near the global average. In Europe, the ratio is more than twice the global average (200 per cent), and in North America, it is three times the global average. This means that North Americans earn ten times more than sub-Saharan Africans, South and Southeast Asians, while East Asians earn half of what Europeans earn. The persistence of inequality is primarily due to the lack of land ownership reforms, the absence of social security, and progressive taxation systems (World Inequality Database, 2020).

[15] Upper-bound poverty line – R1 335 (in April 2021 prices) per person per month. This refers to the food poverty line plus the average amount derived from non-food items of households whose food expenditure is equal to the food poverty line.

[16] The Gini Coefficient is a measure of income inequality, where 0 represents a perfectly equal distribution of income, and a coefficient of 1 represents perfectly unequal distribution (Todaro, 2011)

Table 3.1: Income distribution by proportion of households in KZN, 2020

Income category	Income level (R'000)	African	White	Coloured	Asian	Grand total
Lower income	0 - 54	42%	2%	14.7%	3.5%	35.2%
Low emerging middle income	54 - 96	24%	2%	15.9%	9.4%	21.0%
Emerging middle class	96 - 360	27%	30%	42.2%	47.3%	28.8%
Realised middle class	360 - 600	4%	22%	12.9%	17.3%	6.9%
Upper middle class	600 - 1 200	3%	26%	10.3%	14.5%	5.4%
Affluent	1 200 +	1%	17%	4%	8.0%	2.6%
Grand total		100%	100%	100%	100.0%	100.0%

Source: IHS Markit, 2022

In terms of SA as a whole, in 2020, 38 per cent of Africans were categorised as lower-income earners. On the other hand, 24.3 per cent, 28.3 per cent, 5.2 per cent, 3.1 per cent and 1.2 per cent were categorised as low emerging, emerging middle class, realised middle class, upper-middle-class, and affluent income earners, respectively (Table A3.1). In the case of whites, lower and low emerging income earners were at 2.3 per cent, and 2.6 per cent, whilst 27.7 per cent, 22.0 per cent, 26.9 per cent, and 18.5 per cent were classified between emerging middle class to affluent income earners.

In 2020, the bulk (35.2 per cent) of KZN households were categorised as being lower-income earners (between R0 and 54 000 per annum), whilst approximately 21 per cent were categorised as low emerging middle-income earners (between R96 000 and R360 000 per annum). An estimated 28.8 per cent were emerging middle-class (earning between R96 000 and R360 000 per annum). Approximately 6.9 per cent of households in the province were categorised as realised middle-class earners (R360 000 - R600 000), 5.4 per cent were upper-middle-class (R600 000 - R1 200 000), and a minimal 2.6 per cent of KZN households were considered as affluent, earning over R1.2 million per annum (Table 3.1).

In the case of KZN, about 42 per cent of African households earned less than R54 000 per annum. A further 27 per cent earned between R54 000 and R96 000 per annum. In contrast, most white, coloured, and Asian households fell within the emerging middle-class at 30 per cent, 42.2 per cent and 47.3 per cent, respectively. The white segment of the population enjoyed dominance over the realised middle-class, upper-middle-class and affluent income categories. It is evident that significant income disparities still exist among the four population groups in the country, with Africans remaining the least favoured by the current conditions.

3.4 Human development

The Human Development Index (HDI) is an aggregated indicator designed by the United Nations Development Programme (UNDP, 2020). It is used to track development progress among countries and provide valuable and accurate information to policymakers to make sound and informed decisions. The HDI is calculated on three key measures: health, education, and income. The aim is to reflect, using specific criteria, the multidimensional nature of development. This is done by introducing elements that, for various reasons, are considered to be of utmost importance in the creation of human capabilities, opportunities, and choices such as mean years of schooling (expected years of education), life expectancy at birth and gross national income per capita. The Human Development Report (2016) categorises an HDI of 0.8 and above as high development status, 0.5 to 0.8 as medium development and low human development as anything less than 0.5.

During the past one and a half-century, the world has experienced various crises. These crises range from the First and Second World Wars, the stock market crash of 1939, the 2008 Global Financial Crisis, health crises such as the human immunodeficiency virus (HIV), and acquired immunodeficiency syndrome (AIDS). Massive starvation in war-infested countries such as Ethiopia and Rwanda and the COVID-19 pandemic are also part of the global crises. In each instance, the process of human development has been subject to retardation in the medium term. Yet, despite these setbacks, the world has been resilient and recovered in most cases. The onset of COVID-19 has resulted in slight differences from other crises as it has directly affected income, health, and education, all being the fundamental building blocks of human development. Income levels have dropped due to a significant contraction in economic activity; the total number of deaths has exceeded 5.69 million as of 28 February 2022, and children have been effectively out-of-school for extended periods. This still excludes the less visible indirect effects, including increased domestic violence, yet to be fully documented.

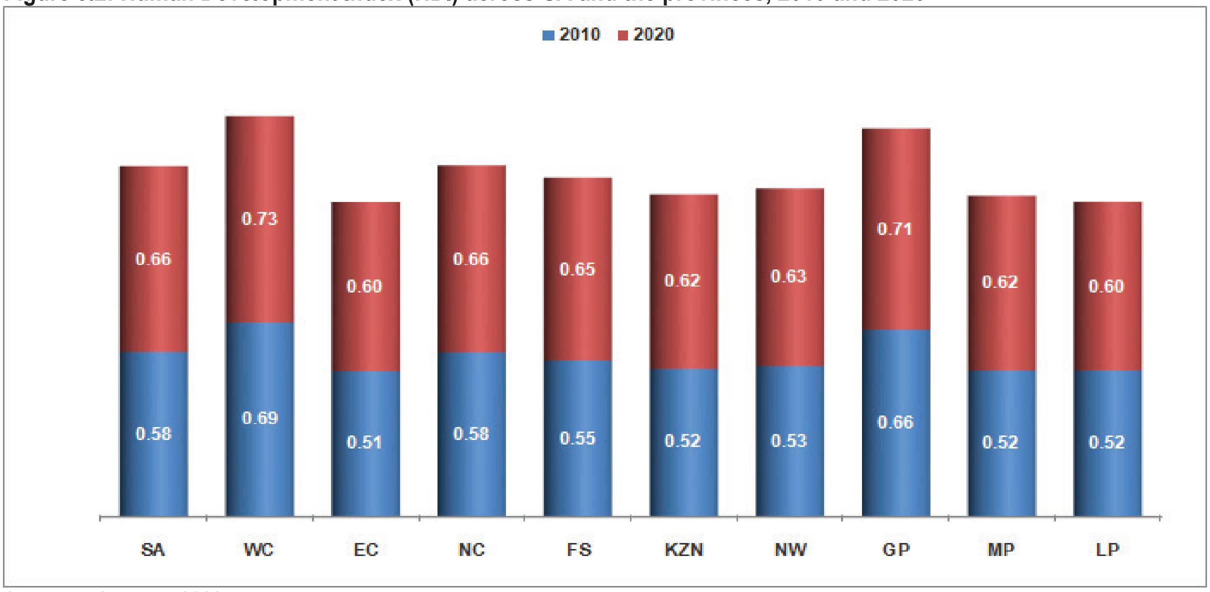
However, much of that damage can be turned around with concerted effort. It will require a global cooperation change that promotes coordination among countries and collective action in multiple development dimensions. Countries have to learn from each other, working together on an equal footing, to fight inequalities from access to quality healthcare to broadband internet. To shed light on the effect of the pandemic on human developmental issues across the globe, the UNDP has released two dashboards shedding light on these areas. Although scientists are still racing to understand the factors that drive or hinder the spread of COVID-19 and make any one country more vulnerable than another, many factors typically render nations more vulnerable to crises. Some factors determine a nation's resilience to the broader socio-economic fallout from national shutdowns, closed borders and more, linked to existing inequalities (Conceição and Pezzini, 2020).

In respect of health, hospital beds, access to ventilators, and protective gear have proved vital in keeping people alive. In addition, the ability to test widely for the disease is critical, as it allows for greater access to available vaccines. The high human development countries have significant advantages in this regard. However, SA has proved to be one of the leading research countries globally, with scientists discovering both the Delta Variant and the new Omicron Variant. About education, while many schools were forced to close during various periods in 2020 and 2021, not all pupils fared equally, according to the UNDP. With approximately one billion children out of school for a significant amount of time, the COVID-19 pandemic has worsened pre-existing learning crises worldwide. The UNDP (2021a) estimates that the effective out-of-school rate for primary education is highest in lower human development countries (86 per cent), followed by medium human development countries (74 per cent) and high human development countries (47 per cent).

With specific reference to SA, COVID-19 has altered the nature of child care arrangements. The percentage of children aged between 0–4 years that remained at home with a parent, guardian, other adults or children increased from 57.8 per cent in 2019 to 67.2 per cent in 2020. Over the same period, the percentage of children that attended grade R, preschool, nursery school, crèche, and edu-care centres decreased from 36.8 per cent to 24.2 per cent (Stats SA, 2021a). As with the rest of the world, school attendance was negatively affected. In the case of SA, although participation (enrolment) in education was still extremely high, a comparison with 2019 shows that a slightly higher percentage of children within the age group of six years of age and older did not attend school. Although the pandemic forced many schools to close, very few learners aged between 7–18 years of age attended schools that offered remote or home school alternatives to contact classes (Stats SA, 2021a).

From the above, it is evident that existing inequalities between higher and lower-income countries in health, social security, and education will play an essential role in determining the impact of the crisis and the timing of the recovery period. In 2020, SA recorded a medium human development index (HDI) of 0.66, substantially up from 0.56 in 1997. This performance is even more impressive when compared to the rest of Sub-Saharan Africa, which had an average HDI of 0.55 in 2019 (Statistica, 2021). As depicted in figure 3.2, KZN had an estimated HDI of 0.62 in 2020, which the UNDP (2020) considers as medium human development. Although there was a significant improvement from the 2010 HDI of 0.52, the province's HDI was below the national average of 0.58.

Figure 3.2: Human Development Index (HDI) across SA and the provinces, 2010 and 2020



Source: IHS Markit, 2022

3.5 Grant beneficiaries

SA has the largest and most well developed social security system in Africa. In a country like SA, where inequality levels are high, and labour market participation is low, social grants have played an essential role in supporting households to attain some minimum standard of living. Table 3.2 shows the number and percentage of SA grant beneficiaries by provinces at the end of September 2021. KZN continued to have the highest number of social grant beneficiaries in the country at about 4.07 million people, followed by the Eastern Cape at 2 848 158 million people and Gauteng at 2 848 069.

Table 3.2: Number and proportion of grant beneficiaries as at the end of September 2021

	Old Age		War Veterans'		Disability		Grant-in-aid		Care Dependency		Foster Child		Child Support		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Eastern Cape	590 530	15.9	6	22.2	175 857	16.7	33 656	12.3	22 495	15.2	75 273	22.0	1 950 341	15.1	2 848 158	15.4
Free State	211 859	5.7	-	-	78 048	7.4	10 718	3.9	8 657	5.8	25 025	7.3	708 109	5.5	1 042 416	5.7
Gauteng	681 047	18.4	7	25.9	121 003	11.5	10 612	3.9	20 368	13.7	42 974	12.6	1 972 058	15.3	2 848 069	15.4
KwaZulu-Natal	**728 251**	**19.6**	4	14.8	**235 067**	**22.3**	**79 439**	**29.1**	**38 285**	**25.8**	**65 058**	**19.0**	**2 928 076**	**22.7**	**4 074 180**	**22.1**
Limpopo	487 710	13.1	1	3.7	100 285	9.5	54 668	20.1	16 342	11.0	40 878	11.9	1 949 568	15.1	2 649 452	14.4
Mpumalanga	265 889	7.2	-	-	77 738	7.4	23 286	8.5	11 154	7.5	23 215	6.8	1 156 223	9.0	1 557 505	8.4
North- West	276 503	7.5	1	3.7	63 990	6.1	17 241	6.3	9 310	6.3	26 733	7.8	876 759	6.8	1 270 537	6.9
Nothern Cape	92 331	2.5	1	3.7	50 579	4.8	19 279	7.1	5 622	3.8	10 588	3.1	323 218	2.5	501 618	2.7
Western Cape	377 049	10.2	7	25.9	151 721	14.4	23 738	8.7	16 062	10.8	32 574	9.5	1 046 099	8.1	1 647 250	8.9
South Africa	**3 711 169**	**100.0**	**27**	**100.0**	**1 054 288**	**100.0**	**272 637**	**100.0**	**148 295**	**100.0**	**342 318**	**100.0**	**12 910 451**	**100.0**	**18 439 185**	**100.0**

Source: South African Social Security Agency (SASSA), 2022

KZN had the highest number of social grants beneficiaries as at the end of September 2021 on a national scale, with a total number of 4 074 180 recipients (22.1 per cent). The province had the highest share of all categories of social grants, except for the Foster Child Grant. The Old Age Grant (728 251, 19.6 per cent), Disability Grant (235 067, 22.3 per cent), Grant-in-Aid (79 439, 29.1 per cent), Care Dependency Grant (38 285, 25.8 per cent), Foster Child Grant (65 058, 19.0 per cent), and Child Support Grant 2 928 076, 22.7 per cent) (Table 3.2).

3.6 Education

The provision of quality education represents one of the main determinants of the composition and growth of a country's output and exports. It provides a foundation for development in which a country's economic and social well-being is built. The investment in education provides the rate of return like any other investment because of the ability to quantify the costs and benefits incurred at a different point in time. The long-term benefits include improved quality of life and broad social benefits to individuals and society. In addition, education raises people's productivity creativity and promote entrepreneurship potential. Therefore, it plays a critical role in securing economic and social progress and improving income distribution.

The COVID-19 pandemic has fast-forwarded global education thinking on transforming and strengthening education systems through technology that complements skilled and well-supported educators so that every child receives quality and inclusive learning. This pandemic has compelled countries to rethink and reflect on the best action to build a schooling system that better prepares learners for an increasingly digital and technology-driven world. However, due to the lack of digital devices, data, and skills in using technology, education services have been affected in the past two years. In addition, the introduction of lockdown restrictions where learners have been in school for a few days per week has negatively impacted learners receiving quality education.

Given all these dynamics, the Department of Education (DoE) ensured that teaching and learning occurred. Through education, any country can improve economic growth and development; hence, the importance of education is indicated in the department of education's (DBE's) strategic objectives and the South African Constitution. One of the DBE's strategic objectives is to extend a better quality of life to children of school-going-age. Furthermore, education is enshrined in the South African Constitution as a fundamental human right. Section 29 (1) (a) of the Constitution states that "everyone has a right to a basic education", and section 29 (1) (b) asserts that "everyone has a right to further education", and the state must make such education "progressively available and accessible" (The Constitution of the Republic of South Africa, 1996).

Amid the COVID-19 dynamics, the education department continued to ensure that basic and further education rights were respected, though under challenging conditions. Therefore, it is not surprising that education continues to receive the largest allocation in the national budget and KZN. Following its critical role in a country, this section analyses education. It focuses on the learner educator ratio, literacy rate and national senior certificate (NSC) results. This section also discusses basic education funding, school drop-out rate, learners' performance in reading and mathematics, and scholar transport.

3.6.1 School and educator: learner ratio[17]

Educators are an essential part of the educational system as they have a vital and decisive role in the quality of education and how well learners perform. Therefore, it is necessary to examine the factors that impact educators' quality and effectiveness in imparting knowledge to the learners and how learners' academic achievements are affected. The problem of a high learner-educator ratio is one of the challenges affecting the effectiveness of educators and academic performance for learners. This was confirmed by Cortes, Moussa and Winstein (2012), who found that class size affects learners' performance due to misbehaviour and other disciplinary problems in large classes.

A sizeable amount of literature has shown that smaller classes allow teachers to focus more on the needs of individual learners and reduce the amount of class time needed to deal with disruptions. As a result, they contribute to a better learning environment and improved working conditions for educators. The ratio of learners to educators is also an essential indicator of the resources devoted to education. Along with learners' total instruction time, educators' average working time, and the division of educators' time between teaching and other duties, class size and learner-educator ratios are determinants of countries' teaching force (OECD, 2021).

The problem of having overcrowded classrooms began in the apartheid era affecting primarily black schools. After the first democratic elections in 1994, the Post-Provisioning Norm (PPN)[18] policy was implemented to reduce

[17] The learner-to-educator ratio (LER) is the average number of learners per educator at a specific level of education, or in a particular type of school, in a given school year.

[18] The PPN refers to the total number of state-paid educator posts allocated to institutions regardless of their post

over-crowding by lowering learner-educator ratios (LER) in all South African schools. The PPN was introduced partly to address the problem of overcrowding, which impacts educators as the quality of teaching and learning diminishes in an overcrowded environment. As a result, teachers en masse get frustrated when experiencing problems that prevent them from achieving the desired educational outcomes (Dflo, Dupas and Kremer, 2015). The LER is one of the most common indicators used in planning. It is critical to gauge the level of human resource input (educators). The low number of learners per educator indicates learners will have a better chance of contact with the educators and, hence, a better teaching and learning process. In addition, this ratio makes it much easier for the educator to communicate with all learners and give them much needed attention.

The effectiveness of the LER indicator is further supported by Mtika (2010), who argues that smaller classes allow educators to interact more with learners and give individual attention to slow learners. Shah and Inamullah (2012) postulate that small classrooms enable effective teaching and learning. Furthermore, Monyatsi (2016) found that factors contributing to the learner's academic performance are parental involvement, medium of instruction, teaching, and learning materials. The author also identified infrastructure, the learner-educator ratio, school libraries, motivation of teachers, qualification of teachers and learners' discipline as critical in improving quality educational outcomes.

Table 3.3: Learner-educator ratio (LER) and learner-school ratio (LSR) by provinces, 2016 and 2021

	2016					2021				
	Number of Learners	Number of Educators	Number of Schools	LER	LSR	Number of Learners	Number of Educators	Number of Schools	LER	LSR
South Africa	**12 932 565**	**418 613**	**25 574**	**30.9**	**506**	**13 409 249**	**447 123**	**24 894**	**30.0**	**539**
Eastern Cape	1 961 547	61 629	5 676	31.8	346	1 848 053	62 698	5 341	29.5	346
Free State	688 349	23 523	1 282	29.3	537	726 713	23 867	1 071	30.4	679
Gauteng	2 326 584	82 078	2 813	28.3	827	2 564 812	91 958	2 941	27.9	872
KwaZulu-Natal	**2 877 544**	**89 799**	**6 142**	**32.0**	**469**	**2 893 958**	**96 659**	**6 022**	**29.9**	**481**
Limpopo	1 765 555	54 418	4 018	32.4	439	1 799 130	53 582	3 855	33.6	467
Mpumalanga	1 074 352	34 404	1 847	31.2	582	1 134 889	36 963	1 785	30.7	636
Northern Cape	291 515	9 136	574	31.9	508	304 566	10 486	585	29.0	521
North West	830 547	26 108	1 535	31.8	541	872 601	28 248	1 539	30.9	567
Western Cape	1 116 572	37 518	1 687	29.8	662	1 264 527	42 662	1 755	29.6	721

Source: Department of Basic Education, 2022

Table 3.3 shows the number of learners, educators, and schools in 2016 and 2021. A comparison of the period under review indicates a decline of 1.6 per cent in the KZN's number of learners from 2.877 million in 2016 to 2.894 million in 2021. The number of schools also decreased by 2 per cent from 6 142 to 6 022 over the same period. However, this is in contrast to the increase in the number of educators by 7.6 per cent. This decreased LER from 32 to 29.9, whereas the LSR slightly increased from 469 to 481 over the same period. It is evident from the Table that most provinces experienced a decline in LERs except for FS and LP. Except for the EC, which maintained 346 LSR, all eight provinces recorded an increase.

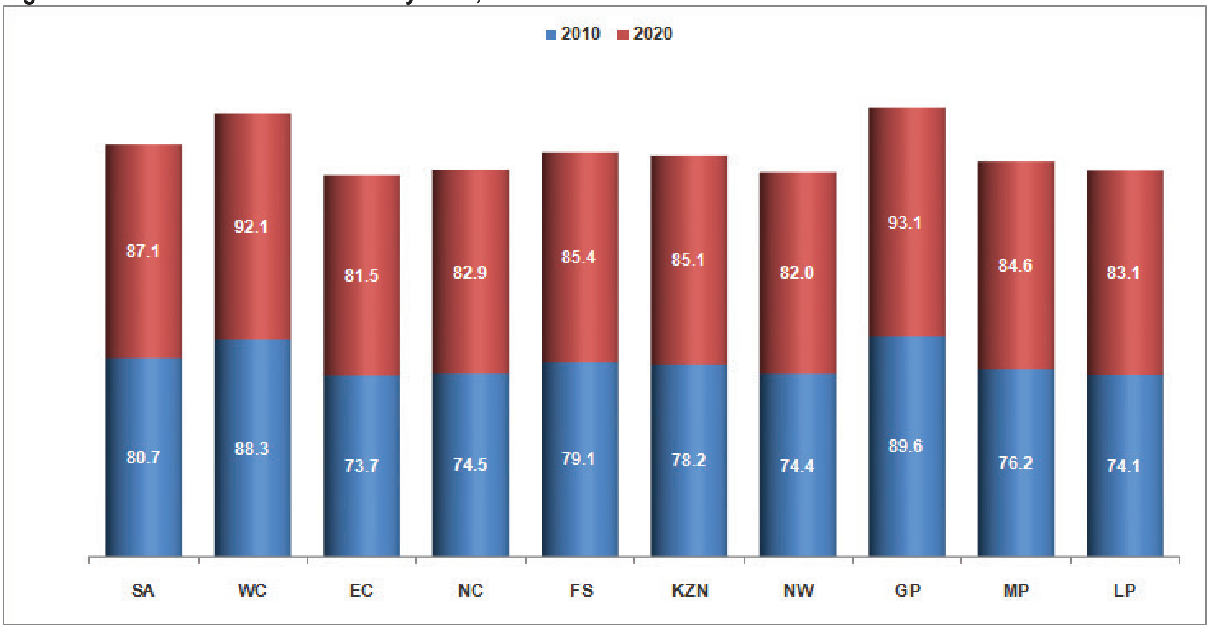
level. If a school's staff establishment is above the declared PPN for the year, that school must declare those posts above the PPN as 'surplus'. Educators who are deemed 'surplus' are redeployed through compulsory temporary transfers (CTTs) to schools where vacancies exist

3.6.2 Literacy rate and NSC results

The rationale for recognising literacy is that it confers human development benefits on individuals, families, communities and the nation. It improves self-confidence, self-esteem and a feeling of greater self-empowerment, irrespective of whether it was acquired through schooling or adult literacy programmes. In addition, literacy skills are fundamental to informed decision-making, personal empowerment, and active participation in society. Literacy also influences human capital and the ability of individuals, social institutions and nations to adapt and change along with technological and other developments in the global market. Moreover, literate people tend to have a high social status; since they can obtain employment and economic status, they can be more productive as they are less costly to train.

Figure 3.3 shows the functional literacy rate in SA by provinces in 2010 and 2020. In KZN, the literacy rate increased from 78.2 per cent in 2010 to 85.1 per cent in 2020. However, it was still 2 percentage points below the national level of 87.1 per cent in 2020. The WC and GP were the only two provinces with a functional literacy rate exceeding 90 per cent and surpassing the national average of 87.1 per cent.

Figure 3.3: Provincial functional literacy rates, 2010 and 2020



Source: IHS Markit, 2022

Table 3.4 represents the level of education in KZN in 2010 and 2020. The level of education in KZN has improved over the ten years. An estimated 5.9 per cent of the people who were 20 years and older had not received any schooling in 2020. Though there is an improvement from 10.2 per cent recorded in 2010, this indicator is still below the top ten most literate countries in the world[19]. In KZN, the percentage of the population aged 20 years and above

[19] Ten most literate countries in the world are (1) Uzbekistan at 99.99 per cent in 2018. (2) Ukraine at 99.9 per cent in 2012. (3) San Marino 99.92 per cent in 2018 (4) Latvia at 99.89 per cent in 2018. (5) Estonia at 99.89 per cent in 2011. (6) the Czech Republic at 99.83 per cent in 2016. (7) Lithuania at 99.82 per cent in 2011. (8) Tajikstan at 99.8 per cent in 2014. (9) Azerbaijan at 99.79 per cent in 2017. (10) Kazakhstan at 99.78 per cent in 2018.

that completed secondary education or NSC only has increased. It rose from 28.7 per cent in 2010 to 33.2 per cent in 2020. This is a commendable improvement since it reflects more people in the Economically Active Population (EAP) having received a basic education and can be more productive members of society.

Though not significant in the proportion of people who attained higher degree qualifications, it is encouraging to see that there has been an increase. This proportion rose to 11 per cent in 2021 compared to 9.2 per cent in 2010. This is also evident in Chapter Five of this publication, revealing that graduates' unemployment rate is low compared to other levels of education. Further, with COVID-19 affecting the economy negatively due to lockdown, some individuals had a reduction in their salaries. However, there is a positive relationship between education level and salary reduction during the lockdown. Workers with higher levels of education had higher chances of receiving a full salary than those with lower levels of education (Stats SA, 2021).

Table 3.4: KZN's levels of education (percentages) for individuals at age 20 and over, 2010 and 2020

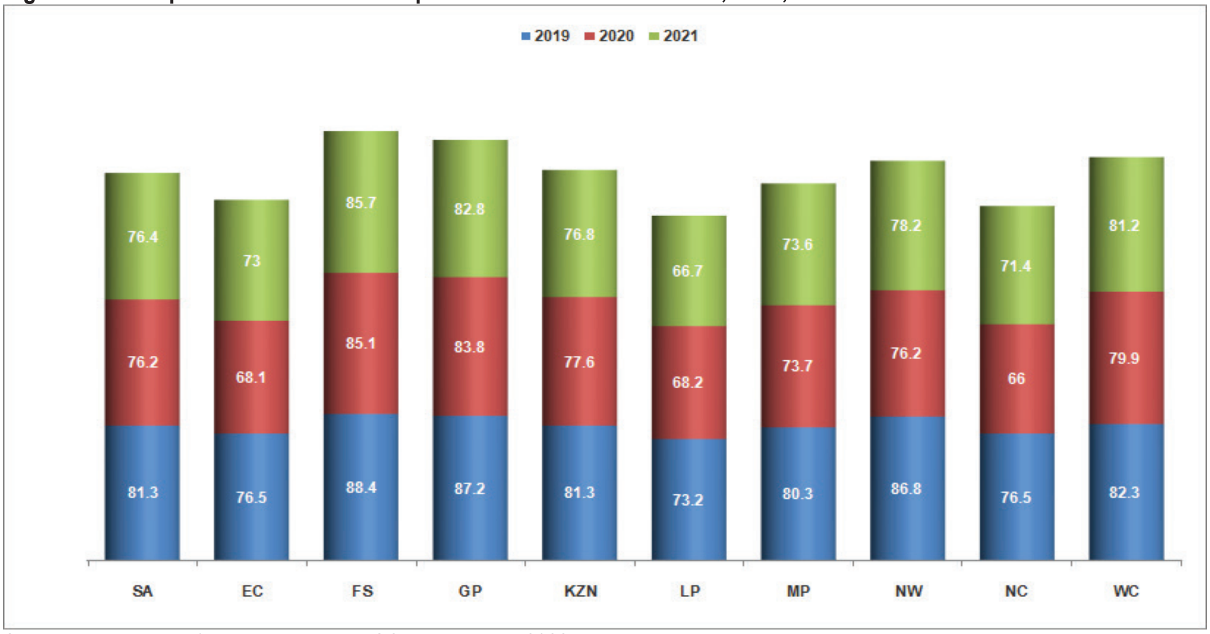
	2010					2020				
	African	White	Coloured	Asian	Total	African	White	Coloured	Asian	Total
No schooling	12.1	0.5	2.5	2.8	10.2	6.8	0.3	0.6	1.9	5.9
Grade 0-6	16.0	1.0	5.7	7.4	14.0	11.8	0.9	3.4	3.9	10.4
Grade 7-11	39.4	18.4	40.8	33.5	37.4	41.6	17.0	43.1	28.7	39.2
Cert/ diploma without matric	0.4	1.6	0.6	0.4	0.5	0.2	1.1	0.4	0.3	0.3
Matric only	26.1	40.7	35.7	41.4	28.7	31.0	42.5	37.7	47.5	33.2
Higher	6.1	37.7	14.6	14.5	9.2	8.6	38.2	14.8	17.7	11.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: IHS Markit, 2022

It is, however, still a concern that the African population still lags behind the other three racial groups with regard to the level of education. Nonetheless, the government has made efforts over the years to ensure access to higher education by providing National Students Financial Aid Scheme (NSFAS) from Technical Vocational Education and Training (TVET) colleges to the university level. This intervention gives rise to opportunities for those who could not attend higher education due to lack of funds and poor educational background, particularly those in rural areas.

For the first time since the advent of democracy, the NSC pass rate in KZN reached the 80 per cent threshold, which shows that efforts to improve the quality of education yield the desired results. In 2019, SA achieved a pass rate of 81.3 per cent, an increase of 3.1 percentage points from 78.2 per cent recorded in 2018. As a result, FS reclaimed its number one spot from GP, leading the charts with 88.4 per cent pass rate, which reflected an improvement of 0.9 percentage points. GP came in second as it obtained an 87.2 per cent pass rate. However, the province recorded a marginal decline of 0.7 percentage points from 87.9 per cent achieved in the previous year.

Figure 3.4: Comparison of national and provincial NSC achievements, 2019, 2020 and 2021



Source: Department of Basic Education, NSC Examination, 2022

However, as expected in 2020, COVID-19 had a more significant negative impact on the learners' performance. All the provinces realised a decline, with overall results declining from 81.3 per cent in 2019 to 76.2 per cent in 2020. The province of KZN, which had the highest number of matriculants, came fourth, with 77.6 per cent. Though this is a significant achievement, there was a decrease of 3.7 percentage points from 81.3 per cent in 2019. The FS province maintained its first position at 85.1 per cent, followed by GP at 83.8 per cent.

Table 3.5: Number of learners who wrote and achieved NSC, 2020 and 2021

	Overall performance 2020		Progressed candidates 2020		Overall performance 2021		Progressed candidates 2021		% Difference (overall performance)	% Difference (progressed learner's)
	Number of learner's wrote	% Achieved	Number of learner's wrote	% Achieved	Number of learner's wrote	% Achieved	Number of learner's wrote	% Achieved		
South Africa	**578 468**	**76.2**	**65 499**	**37.0**	**704 021**	**76.4**	**56 826**	**37.8**	**0.2**	**0.8**
Eastern Cape	72 926	68.1	9 025	25.0	91 500	73	6 542	29.7	4.9	4.7
Free State	27 928	85.1	4 890	54.8	35 055	85.7	3 235	51.5	0.6	-3.3
Gauteng	110 191	83.8	10 698	41.0	127 523	82.8	8 470	41.8	-1.0	0.8
KwaZulu-Natal	**135 225**	**77.6**	**13 851**	**39.7**	**166 570**	**76.8**	**12 135**	**40.3**	**-0.8**	**0.6**
Limpopo	78 695	68.2	11 783	35.6	105 101	66.7	15 065	32.9	-1.5	-2.7
Mpumalanga	53 391	73.7	6 262	42.7	66 756	73.6	6 516	44.8	-0.1	2.1
Northern Cape	11 608	66	2 265	24.5	12 726	71.4	1 064	28.9	5.4	4.4
North- West	36 871	76.2	3 995	32.7	41 081	78.2	1 929	38.5	2.0	5.8
Western Cape	51 633	79.9	2 730	25.2	57 709	81.2	1 870	28.8	1.3	3.6

Source: Department of Basic Education, NSC examination, 2022

Despite the ongoing challenge of COVID-19, the NSC results improved slightly. It increased by 0.2 percentage points from 76.2 per cent in 2020 to 76.4 per cent in 2021. The NSC class of 2021 was the most affected by the COVID-19 pandemic because learners had to endure two consecutive years of harsh exposure to the unrelenting pandemic. The province of KZN, which continues to have the highest number of matriculants, came fifth, with a record of 76.8 per cent, a moderate decrease of 0.8 percentage points from 77.6 per cent in 2020. The FS province maintained its first position at 85.7 per cent, followed by GP at 82.8 per cent.

In 2013 the Minister of Education approved a policy allowing learners that have failed a grade for the second time to be promoted to the next grade. This decision was taken after much consideration, including the international best practices in countries like Finland, Sweden, Denmark, Japan, Korea, Kenya and the United Kingdom. The learners are promoted provided they meet the specified criteria, which indicate that they have a potential of coping in the next grade if provided with the necessary support. When considering the progressed learners, with NSC pass rate of 40.3 per cent, KZN came in the fourth position after FS (51.5 per cent), MP (44.8 per cent) and GP (41.8 per cent). As expected, provinces across the country recorded a significant decline in the pass rate of progressed learners due to COVID-19 in 2020 and 2021. Therefore, the total aggregated national NSC pass rate for progressed learners dropped significantly from 65.3 per cent in 2019 to 37.8 per cent in 2021 (Table 3.5).

Table 3.6: Per learner funding allocation by provinces in 2015 and 2021

	2015			2021		
	Qintiles 1 to 3 (No fee allocation)	**Quintile 4**	**Quintile 5**	**Qintiles 1 to 3 (No fee schools)**	**Quintile 4**	**Quintile 5**
National target amount	**R1116**	**R559**	**R193**	**R1466**	**R735**	**R254**
	Actual funding per learner					
Eastern Cape	R1059	R530	R183	R870	R436	R151
Free State	R1116	R559	R240	R1536	R770	R266
Gauteng	R1116	R559	R559	R1466	R735	R735
KwaZulu-Natal	**R955**	**R522**	**R179**	**R955**	**R522**	**R179**
Limpopo	R646	R320	R130	R1536	R770	R266
Mpumalanga	R1116	R559	R193	R977	R486	R168
Northern Cape	R1070	R663	R309	R1247	R845	R393
North- West	R1116	R605	R193	R1536	R770	R266
Western Cape	R1116	R595	R269	R1536	1267	R417

Source: DBE, 2022

Similar to most countries across the globe, the South African government funds public education through a pro-poor funding model. This means those schools previously classified for blacks receive more funding from the government than former white schools. The funding model creates five categories of schools referred to as quintiles. These quintiles determine how much government funding each school will be allocated. The lower quintiles one to three schools are declared no-fee schools and do not charge fees. As a result, these schools get a significant amount of the government's funding.

On the other hand, schools in quintiles four and five receive a small amount of funding from the government relative to the latter and are therefore allowed to charge school fees. The five quintiles categories are based on the community's socio-economic status in which the school is located. For the 2021/22 financial year, the recommended national funding norm for quintiles one to three schools by the Department of Education is R1 466 per learner. However, no fee schools in KZN had been funded at R955 per learner for more than five years, resulting in a shortfall of R511 per learner (KZN Provincial Treasury, 2017 and 2021). This fixed amount does not consider the inflation rate, which compromises the quality of education due to the real decline in the allocation per learner. The report further shows that the fee-paying schools in quintiles four and five are funded at R522 and

R179 per learner, respectively. This is in stark contrast to the recommended national norm of R735 and R254 for 2021/22.

Similar to the quintiles one to three, these amounts had been in place for more than five years. It is also disturbing that KZN is the only province that has kept this allocation fixed for a long time. Due to the fiscal pressure, provinces such as the EC and MP opted to reduce the allocation per learner in 2021. However, the best performing provinces in the NSC, such as the FS, WC and the NW, increased the allocation per learner above the benchmark for all school quintiles while GP kept it at the recommended benchmark.

Table 3.7 shows that the community's socio-economic status affects the percentage of passes in the different quintiles of schools. This aligns with the schools' performance within the lower quintiles one to three, achieving much lower portions of pass rates than quintiles four and five. Interestingly, 1 729 no-fee schools in quintiles one to three, mainly represented by rural schools, performed at the 80 to 100 per cent category while 958 schools in quintiles 4 and 5 performed at the same level. However, this does not mean that no-fee schools performed better than fee-paying schools of quintiles four and five, given that approximately 75 per cent of South African learners are categorised as quintiles one to three. Therefore, efforts used to assist no-fee schools should be expanded further to continue to address the inequality in the provision of education needs. This can be done by providing more funding while ensuring that physical, material, human knowledge resources are available to enhance quality education irrespective of geographical area.

Table 3.7: Percentage of passes by school (quantile) categories, 2021

Quantiles	0 - 19.9%	20 - 39.9%	40 - 59.9%	60 - 79.9%	80 - 100%
Quantile 1	10	113	371	703	611
Quantile 2	12	56	296	696	610
Quantile 3	9	33	260	663	508
Quantile 4	0	5	37	235	333
Quantile 5	0	3	23	111	625
Total	31	210	987	2408	2687

Source: Department of Basic Education, NSC examination, 2022

Table 3.8 compares the percentage of learners who achieved 30 per cent and above in the selected subjects from 2017 to 2021. There has been a steady improvement in the learners' performance in the gateway subjects such as Accounting, Mathematics, Physical Science and Agricultural Science from 2017 to 2019. The moderate decline for some of these subjects in 2020 and 2021 might be attributed to the disturbance in the education and learning programme due to COVID-19. Compared to the national results in 2019 and 2020, all the subjects showed a moderate decline. However, there was a moderate improvement in Mathematics, Physical Science, Agricultural Science and Life Sciences in 2020 and 2021.

Table 3.8: Percentage of learners who achieved 30 per cent and above in selected subjects, 2018 and 2019

Subjects	2017	2018	2019	2020	2021
Accounting	66.1	72.5	78.4	75.5	74.7
Economics	71.0	73.3	69.3	68.8	67.9
Mathematics	51.9	58.0	54.6	53.8	57.6
Physical Science	65.1	74.2	75.5	65.8	69
Agricultural Science	70.4	69.9	74.6	72.7	75.4
Life Sciences	74.4	76.3	72.3	71.0	71.5

Source: Department of Basic Education, NSC examination, 2022

In order to improve the quality of basic education, the Annual National Assessment (ANA) was introduced by the Department of Basic Education (DBE) in 2011 to enable a systemic evaluation of education performance and thereby enhance learners' achievements. ANA was a pilot study to assess learners in grades one to six and grade nine in order to improve their numeracy and literacy skills. However, arguments against ANA were raised by the teacher unions, more especially the South African Democratic Teachers' Union (SADTU), regarding time constraints that hamper the smooth running of teaching and learning. They further argued that teachers' assessment practices are dominated by recording and reporting learners' scores, with limited focus on the use of assessment to address learning needs.

As a result, ANA was phased out and replaced by the National Integrated Assessment Framework (NAIF), which constitutes three separate yet complementary assessment programmes administered among learners in Grades three to six and nine. The NIAF is structured to offer elements that integrate diagnostic assessment tools, summative examinations and independently administer systemic evaluations. According to the DBE (2003), the term systemic evaluation refers to the determination of the extent to which the education system achieves set social, economic and transformational goals through the measurement of learner performance as well as the context in which learners' experience learning and teaching. NIAF further pays particular attention to the diagnostic assessment administered in the classroom to identify learning gaps and plan remedial measures early in the learning process to avoid learning deficits arising later (DBE, 2017).

Nevertheless, as expected, due to COVID-19, the number of learners who qualify to enrol for the Bachelor programme at institutions of higher learning declined between 2019 and 2020. However, the percentage of bachelor passes was maintained at 36.4 per cent in 2021 in SA. Approximately 37.1 per cent of learners achieved a bachelor pass in KZN in 2021, which is a moderate decline of 0.7 percentage points from 37.8 realised in 2020. Similar to the bachelor pass, the province realised a moderate decrease in the diploma category from 26 per cent to 25.3 per cent. However, for a higher certificate, the province recorded an increase from 13.8 per cent to 14.4 per cent. This indicates that, despite the lockdown and inconveniences affecting teaching and learning during 2020 and 2021, the province of KZN managed to maintain its performance. Encouragingly, learners who complete NSC and do not achieve a bachelor pass can be absorbed by the Technical and Vocational Education and Training (TVET) colleges. As a result, they will gain technical skills that will enable them to qualify as artisans in various fields. Possible skills that could be acquired through TVET include, but are not limited to, boiler-making, plumbing, mechanic, hair-dressing and fitting and turning.

Table 3.9: NSC performance by type of qualification, 2020 and 2021

	2020				2021			
	Number of Learners wrote	Bachelor	Diploma	Higher Certificate	Number of Learners wrote	Bachelor	Diploma	Higher Certificate
South Africa	**578 468**	**36.4**	**26**	**13.7**	**704 021**	**36.4**	**25.2**	**14.8**
Eastern Cape	72 926	30	24.3	13.8	91 500	34.3	24.5	14.2
Free State	27 928	40.4	31.3	13.4	35 055	39.9	30.9	14.8
Gauteng	110 191	45.1	27.8	10.8	127 523	43.8	26.8	12.1
KwaZulu Natal	**135 225**	**37.8**	**26**	**13.8**	**166 570**	**37.1**	**25.3**	**14.4**
Limpopo	78 695	29.1	23.6	15.4	105 101	26.7	22.4	17.6
Mpumalanga	53 391	30.4	27	16.3	66 576	31.5	25.4	16.7
North West	36 871	32.1	27.1	17	41 081	33.8	26.3	18.2
Northern Cape	11 608	28.4	24.1	13.5	12 726	30.3	24.5	16.6
Western Cape	51 633	43.8	24.1	11.9	57 709	45.3	23.6	12.3

Source: Department of Basic Education, NSC examination, 2022

3.6.3 School drop-out rate

The South African Schools Act 84 of 1996, section 3(1) states that all children in SA must attend school from the first school day of the year in which such learner reaches the age of seven years until the last day of the year in which such learner reaches the age of fifteen years or the ninth grade whichever comes first. According to Branson et al. (2013) and Sabates et al. (2010), with this band of compulsory learning from grade one to grade nine, SA has a very high rate of participation which is over 95 per cent. However, the problem of high school drop-out rate, leaving school without obtaining a minimal credential in SA, occurs in grades 10 and 11 (Spaull, 2015). This is evident in Tables 3.5 and 3.10, whereby the number of learners who wrote NSC in 2021 was 704 021. However, the number of learners in grade 10 were 1 033 799 in 2019.

This implies that a potential drop-out of 31.9 per cent happened in the grades mentioned above, which caused them not to complete upper secondary level of schooling. In KZN, the drop-out rate was estimated at 28.8 per cent. This trend was pertinent to all the provinces, whereby the drop-out rate stood at around 30 per cent, except for the FS, NW and NC at above 40 per cent. However, this is an improvement considering that in 2020, the school drop-out rate was more than 40 per cent for almost all the provinces. Except for the WC and MP, which reported 33.4 per cent and 37.9 per cent, respectively. The learners who drop out of the basic education schooling system either proceeded to Technical and Vocational Education and Training (TVET) to pursue their studies while others are looking for employment opportunities. The latter tend to have difficulties in finding employment because they leave schools without National Qualification Frameworks (NQF) with which to navigate the labour market. This, in turn, contributes to them being unemployed and adds to the already high unemployment rate in the country.

Table 3.10: Number of school drop-outs from grade 10 to grade 12 between 2019 and 2021

	Number of Grade 10 Learners (2019)	Number of Grade 12 Learners (2021)	Number of school drop-outs (2019 to 2021)	Drop-out rate (2019 to 2021)
South Africa	**1 033 799**	**704 021**	**329 778**	**31.9**
Eastern Cape	140 936	91 500	49 436	35.1
Free State	60 937	35 055	25 882	42.5
Gauteng	192 483	127 523	64 960	33.7
KwaZulu Natal	**233 941**	**166 570**	**67 371**	**28.8**
Limpopo	153 996	105 101	48 895	31.8
Mpumalanga	89 560	66 576	22 984	25.7
North West	68 515	41 081	27 434	40.0
Northern Cape	23 023	12 726	10 297	44.7
Western Cape	82 033	57 709	24 324	29.7

Source: Department of Basic Education, NSC examination, 2019 and 2021

3.6.4 South African learner's performance in reading and mathematics

SA has participated in several cross-national assessments of educational outcomes to see the progress in reading and mathematics scores across all provinces. These assessments include the Southern Africa Consortium for Monitoring Educational Quality (SACMEQ), the Trends in Mathematics and Science Studies (TIMSS) and the Progress in Reading and Literacy Study (PIRLS). The results for the SACMEQ studies have been held in very high esteem in SA to monitor the education system's state and inform policy decisions. SACMEQ scores as pointers to achieving specific milestones and feature prominently in the NDP. The country has specified that it targets to hit 600 score points in both language and mathematics by 2022. Despite the progress made in access to education, SA still needs to improve its performance regarding mathematics and science to achieve an intermediate benchmark (475-550) following the likes of Singapore, Japan and South Korea (DBE, 2017).

Table 3.11 shows the percentage of grade six learners performing at levels six to eight in reading and mathematics for SACMEQ three and SACMEQ four. The levels from six indicate a concrete problem solving and abstract problem-solving skills. This Table shows that grade six learners have made a great effort in achieving at the higher grade levels. In reading, the advanced reading skills was 26.4 per cent for SACMEQ three and improved by 9.7 percentage points to 36.1 per cent for SACMEQ four. An improvement of 6.5 percentage points was also realised in mathematics from 8.4 per cent to 14.9 per cent in 2017. GP and the WC provinces achieved more than 50 per cent points for reading. A positive change was also realised in KZN for both reading and mathematics.

Table 3.11: Percentage of grade 6 learners who are performing at the advanced level (levels 6-8) in reading and mathematics, 2017

Province	S III Reading	S IV Reading	S III Mathematics	S IV Mathematics
Eastern Cape	9.3	23.9	4.1	8.2
Free state	23.2	37.6	5.5	10
Gauteng	55.1	54	17.3	21.4
KwaZulu-Natal	**22.1**	**31.1**	**6.8**	**11.4**
Limpopo	5.7	17.2	0.9	6.6
Mpumalanga	16.5	32.6	3.1	11.3
Northern Cape	28.6	37	8.4	9.9
North West	28.9	25.8	10.3	10.8
Western Cape	57.1	72.7	21.1	47.3
South Africa	**26.4**	**36.1**	**8.4**	**14.9**

Source: Department of Basic Education, 2017

3.6.5 The provision of scholar transport

The provision of scholar transport services has become a significant issue in the public transportation systems of developing countries. Governments are increasingly recognising the importance of shortening the distance travelled by learners to schools by way of providing them with transport services that are adequate, safe, and reliable. This is understandable because learners, especially those residing in remote rural areas, have to travel long distances to get to the nearest school safe and on time. Following from this perspective, it should be noted that failure to provide scholar transport services has, in most instances, resulted in situations wherein learners arrive at schools late and are often tired. Under such conditions, learners find it difficult to concentrate in class, and their performance will most likely suffer a great deal. Thus, scholar transport is an indispensable part of the primary education system in SA.

According to Stats SA (2020), approximately 10.1 million learners walked to their educational institution in absolute numbers. Across provinces, the highest percentage of learners who walked to their educational institution was recorded in KZN (20.3 per cent), GP (17.7 per cent), followed by the EC and LP, both at 14.6 per cent. Table 3.12 provides the percentage of learners by distance away from school. 15.7 per cent of grade 6 learners stayed more than 5 kilometres (km) away from school in 2017. The WC had the highest percentage of learners (24.9 per cent) who stayed more than 5 km away from the school they are attended, followed by the EC (18.7 per cent), GP (18.4 per cent) and KZN and MP, both at 14.2 per cent. It is essential also to consider other factors such as the ease of accessing transport facilities and the nature of roads. Other critical aspects include infrastructure, mainly as provincial dynamics differ and the South African history that placed people in largely inaccessible areas and far from socio-economic opportunities.

The norms and standards for infrastructure specify where schools may be sited and stipulate that the siting of new school should recognise the need for appropriate topography and location related to access to roads, basic services and other demographic realities. Hence, the South African government instituted the scholar transport policy to regulate and subsidise the transportation of learners.

Table 3.12: Distribution of grade 6 learners by distance away from school, 2017

Province	0 -2 km	2 - 4 km	4 - 5 km	> 5 km
Eastern Cape	37.5	22.9	10.8	18.7
Free state	56.3	13.5	4.8	17.3
Gauteng	56.4	16.7	8.5	18.4
KwaZulu-Natal	**44.7**	**22.3**	**8.9**	**14.2**
Limpopo	56.5	18.9	5.9	8.8
Mpumalanga	48.4	17.7	6.8	14.2
Northern Cape	66.4	19.4	4.1	10
North West	55.1	20.9	8.5	15.5
Western Cape	57	13	5.2	24.9
South Africa	57	19.6	7.8	15.7

Source: Department of Basic Education, 2017

3.7 Health

The World Health Organisation (WHO) defines health as a "state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). The totality of this all-inclusive description covers the entire health and hygiene spectrum from prevention to cure and extends to the management of potential contaminants and health-care waste, the latter being catalysts for illness in their own right (WHO, 2020).

The importance of clean water, simple sanitation, and access to basic health care remain essential. In a health-care facility, the sources of infection and the preceding contamination may be the personnel, the patients, or the inanimate environment (WHO, 2020a). Furthermore, according to the WHO (2020a), the provision of safe water, sanitation, waste management, and hygienic conditions is essential for preventing and protecting human health during all infectious disease outbreaks. Ensuring a consistent supply of water, sanitation, and hygiene (known collectively as WASH) will help prevent human-to-human transmission of pathogens, including the SARS-CoV-2, the virus that causes COVID-19.

The waste management practices in communities, homes, schools, marketplaces and health-care facilities are also critical. WASH is the subject of dedicated targets within the 2030 UN Sustainable Development Goals (SDGs). It falls under SDG 6, which is a testament to its fundamental role in public health and, therefore, in sustainable development. The emphasis on WASH is an indication that access to safe water and sanitation are human rights, as recognised in 2010 by the UN General Assembly (WHO, 2020a).

SA has not achieved the set targets for the SDGs 2030 (Stats SA, 2021). The country's inability to achieve goals one, two, and four related to poverty, zero hunger, and clean water and sanitation, respectively, is an indictment on SA. South Africa, already confronted with high levels of unemployment and social inequalities prior to COVID-

19 has been severely impacted by the loss of 1.5 million jobs and a 10 per cent to 15 per cent contraction in wages paid to those still in employment. The effects thereof could well see the country failing to meet the 2030 SDG Goals.

The COVID-19 pandemic has negatively affected every sector of SA's societal and economic landscape. In particular, the health system – already subject to pre-existing service delivery challenges – has been over-burdened by the virus. For example, a review of data for the first half of 2020 by Pillay et al. (2021) found that during the first wave of COVID-19, which largely coincided with lockdown levels five and four, there was a 30 per cent increase in institutional maternal mortality. This was mainly a result of a reduction in the utilisation of basic essential services such as antenatal care, family planning, and immunisation due to the lockdown, which triggered fear of contracting COVID-19 and deterred people from accessing basic services care.

The South African health situation includes a high risk of COVID-19 coinfections for patients with HIV/AIDS or forms of Tuberculosis (TB). It implies additional challenges concerned with detrimental effects on the criticality of COVID-19 infections or medicine and health care supply. Shröder (2021) cites 2019 WHO report indicating that SA ranks fourth globally in the number of TBC infections per capita and third for those co-infected with TB and HIV (Shröder, 2021). With regard to HIV testing, at a national level, 3.44 million fewer HIV tests were conducted from March to December 2020 compared to 2019. This number reflects a 22.3 per cent decrease over the period under consideration.

Apart from the NW, which recorded a 1.7 per cent increase in the number of HIV tests conducted, all provinces showed significant declines. With nearly 8 million people infected with HIV in SA, testing and initiating people infected with HIV on treatment is particularly important to reduce transmission. However, the decrease in the number of people tested for the virus in 2020 means that fewer people living with HIV were placed on treatment, resulting in the country not achieving the desired targets towards ending the AIDS epidemic (Pillay et al., 2021).

It further concerns that out of 7.7 million HIV-positive people in SA, only 4.9 million are on antiretroviral treatment (ART), with one-third of 1.6 million not virally suppressed. According to Nyasulu (2021), the current evidence indicates that those virally suppressed are not at higher risk. However, in addition to the 1.6 million, there is no information about the other 2 million not on ART, who probably will be at higher risk of severe COVID-19 infection. In addition, SA has existing ARV and vaccine stockout challenges because of supply chain constraints.

According to the routine statistics of the District Health Information System (DHIS), the number of screenings for TB symptoms declined from 87.6 million in 2019 to 70.8 million in 2020. The National Health Laboratory Service (NHLS) reported that the number of GeneXpert tests[20] conducted declined by 26 per cent between 2019 and 2020, and the proportion of positive tests declined by 18 per cent. This drop results in the major problem of finding

20The Xpert MTB/RIF Ultra test is designed to increase the detection of TB cases, particularly amongst patients living with HIV, and still detect resistance to rifampicin using the same volume of specimen and the same GeneXpert instrumentation and test processing.

'missing patients', especially those who are infected but not diagnosed (Pillay. Y. et al., 2021). Nevertheless, in its 2019-2024 Medium Term Strategic Framework (MTSF), the South African government retaliates its commitment to intervening in the prevailing health situation. The interventions include reducing the burden of disease from TB and HIV/AIDS and implementing the 90-90-90 strategy[21].

The strengthening of maternal health programmes to reduce maternal mortality and expanding the screening of users of public health services for priority non-communicable diseases (NCDs) are also on the agenda. The UN 90-90-90 strategy has three targets. The first target is for 90 per cent of all people living with HIV to know their HIV status. Secondly, 90 per cent of all people diagnosed with HIV will receive sustained antiretroviral therapy by 2020. Finally, 90 per cent of all people receiving antiretroviral therapy are to have viral suppression United Nations Acquired Immunodeficiency Syndrome (UNAIDS, 2021).

The UNAIDS Thembisa Model is a mathematical model developed to simulate the demographic profile of SA and the impact of various HIV prevention and antiretroviral treatment (ART) programmes. Progress towards the 90-90-90 targets has been mixed. The model estimates for 2020 suggest that progress towards the first UNAIDS target is good and that progress has been relatively uniform across provinces. However, progress towards the second UNAIDS target is generally poor, varying between 62 per cent in the Western Cape and 81 per cent in KZN.

Most provinces have reached the third UNAIDS target, with viral suppression being the highest in KZN, the FS and the WC, all at 94 per cent. However, LP and the EC both have viral suppression rates of 88 per cent, suggesting that there is still room for improvement in some provinces. ART coverage in 2020 varied between 57 per cent in the WC and 77 per cent in KZN. Overall, KZN is the province that has made the most remarkable progress towards the 90-90-90 targets, while LP and the WC are the provinces that are lagging farthest behind (UNAIDS, 2021). COVID-19 has also disproportionally affected vulnerable individuals and communities. These include persons with co-morbidities, the elderly, the unemployed, low-income earners, and individuals residing in crowded and frequently unsanitary residential conditions. Aside from critically challenging health services, these factors could inhibit the timeous attainment of SDGs (WHO, 2021).

3.7.1 Causes of death and the burden of disease

According to the WHO Global Health Estimates of 2021, the absolute number of reported deaths in 2020 would rank COVID-19 within the top ten causes of death globally. Ischaemic heart disease, strokes, chronic obstructive pulmonary disease (COPD), lower respiratory infections, and neonatal conditions were the only other conditions that ranked higher. The WHO (2020) survey suggests that prevention and treatment services for NCDs have been severely disrupted since the COVID-19 pandemic began. Furthermore, the survey confirmed that the impact was

[21] This UNAIDS strategy aims to ensure that by 2020, 90 per cent of people living with HIV are tested and know their status, 90 per cent of people living with HIV are receiving treatment, and 90 per cent of people on treatment have a suppressed viral load.

global but that low-income countries were the most affected. This assertion is of significant concern as people living with NCDs are at higher risk of severe COVID-19-related illness and death.

Table 3.10 illustrates the ten leading causes of death nationally over 2006, 2010 and 2018. SA is one of the 30 high burden tuberculosis (TB) countries that collectively contribute to 87 per cent of the estimated incident cases worldwide. The country accounts for 3 per cent of cases globally (NICD, 2021). The high rates of TB have been fuelled from the early 1990s by the HIV epidemic that negatively impacted TB control in the country. However, that pattern has now reversed since the aggressive scale-up of antiretroviral treatment. This pattern is evident via the substantial drop in the diseases from 12.7 per cent in 2006 to 6 per cent in 2018.

Table 3.13: Ten leading underlying natural causes of death in South Africa, 2006, 2010, and 2018

	2006		2010		2018	
Tuburculosis	77 009	12.7	62 827	11.6	27 450	6
Diabetes mellitus	19 549	3.2	21 475	3.9	26 879	5.9
Cerebrovascular diseases	25 246	4.2	24 664	4.5	22 997	5.1
Other forms of heart disease	26 628	4.4	25 827	4.7	22 940	5.1
HIV	14 783	2.4	18 325	3.4	21 894	4.8
Hypertensive diseases	0	-	14 890	2.7	20 576	4.5
Influenza and pneumonia	52 791	8.7	39 027	7.2	17 569	3.9
Ischaemic heart disease	13 025	2.1	-	-	13 598	3
Chronic lower respiratory diseases	15 823	2.6	13 099	2.4	13 579	3
Malignant neoplasms of digestive organs	-	-	-	-	10 808	2.4

Source: Stats SA, 2006, 2010 and 2022

The table further shows a relatively significant rise in Diabetes mellitus from 3.2 per cent (19 549 persons) in 2006 to 5.9 per cent (26 879 people) in 2018. The increase results from several factors, including the ageing population, economic transition, and urbanisation associated with nutrition transition and obesity (Pheiffer. C et al., 2018). As with TB, there has been a substantial drop in the prevalence of influenza and pneumonia from 8.7 per cent in 2006 to 3.9 per cent in 2018. One of the main reasons for the decline is that more HIV positive individuals are taking anti-retroviral treatment, hence reducing the propensity to catch other diseases.

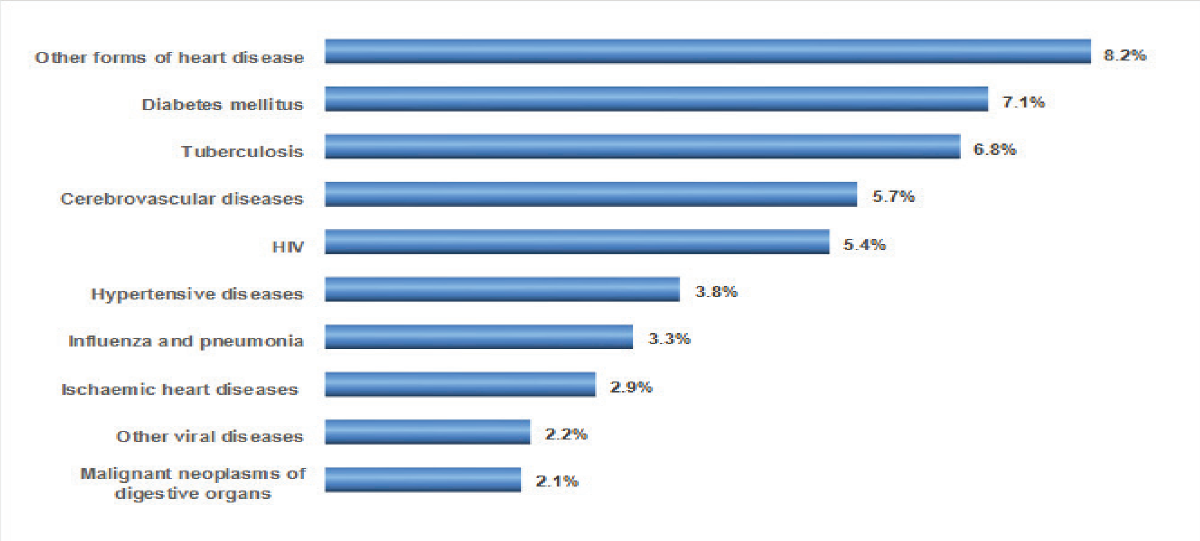
Although HIV/AIDS is no longer a life-threatening condition, with people living with the virus gradually regarding it as a chronic disease, there is still no cure or preventive vaccine. In 2019, an estimated 38 million people were living with HIV worldwide, of which 36.2 million were adults aged between 15 years and older, and 1.8 million were children between 0 and 14 years of age. However, globally new annual HIV infections have reduced by 40 per cent since the peak of the 2.8 million infections in 1998.

However, in 2019, approximately 1.7 million people were newly infected with HIV (WHO, 2021). The report further shows that globally, women and girls accounted for 48 per cent of all new HIV infections in 2019. In sub-Saharan Africa, 59 per cent of all new HIV infections were among women and girls. In addition, women who have experienced physical or sexual intimate partner violence in some regions are 1.5 times more likely to acquire HIV than women who have not experienced such violence.

The report by Stats SA (2021) also shows that over the period 2016 to 2018, HIV was ranked fifth in the ten underlying causes of natural attrition in SA for all three years, with the proportions of death remaining steady at 4.8 per cent. The natural attrition caused by the virus was most prevalent amongst women. Over the period under review, deaths from HIV amongst females showed a fluctuating trend, decreasing from 5 per cent in 2016 to 4.9 per cent in 2017, before rising moderately to 5.1 per cent in 2018.

Meanwhile, natural attrition resultant from the virus amongst males remained constant at 4.6 per cent in 2016 and 2018. Similar to the national average, HIV was the fifth most common cause of death in KZN at 5.4 per cent. In 2018, natural attrition from HIV was ranked as the leading cause of death in uMkhanyakude and Zululand at 12.5 and 7.3 per cent, respectively. Harry Gwala followed at 6.5 per cent, iLembe was ranked the lowest at 3.9 per cent. Figure 3.5 shows the ten leading natural causes of death in KZN in 2018. According to Stats SA (2021), other forms of heart disease[22] was the leading underlying natural cause of death in KZN in 2018 at 8.2 per cent, followed by Diabetes mellitus (7.1 per cent), TB (6.8 per cent), cerebrovascular diseases (5.7 per cent), and HIV at 5.4 per cent.

Figure 3.5: Ten leading underlying natural causes of death in KZN (%), 2018



Source: Stats SA, 2022

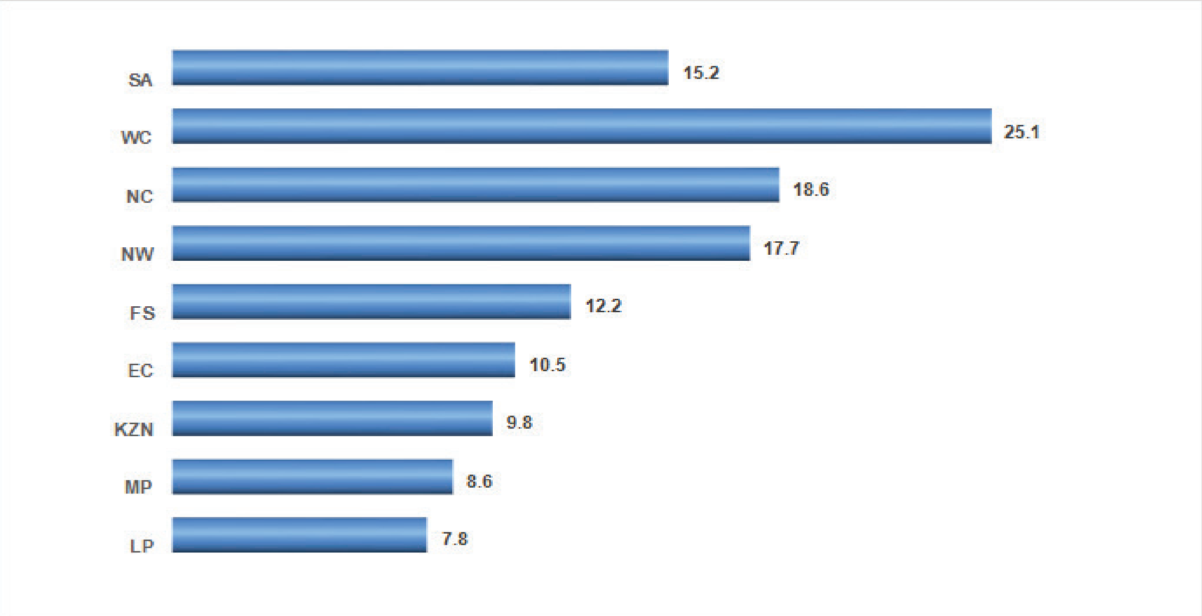
[22] Other forms of heart disease consist of coronary artery disease, heart arrhythmias, heart failure, heart valve disease, pericardial disease, cardiomyopathy (heart muscle disease), and congenital heart disease.

3.7.2 Health Care Financing

Despite efforts by the State to ensure equitable access to health-care services, the application of prophylactic measures regarding preventable diseases remains a challenge, as does administering timeous care in the case of treatable health conditions. Consequently, and primarily for persons unable to afford private health care, conditions worsen, and premature deaths continue to occur.

Figure 3.6 reveals that on a national scale, only 15.2 per cent of citizens belonged to a medical aid scheme in 2020. Again, a lack of affordability primarily drives this phenomenon, as the provinces with the highest prevalence of poverty (refer to Chapter 3, section 3.2) had the lowest proportion of citizens with medical aid coverage. Specifically, LP (7.8 per cent), MP (8.6 per cent), KZN (9.8per cent), and the FS (12.2 per cent). In comparison, the WC and GP had the highest number of persons on medical aid schemes, at 25.1 and 21.2 per cent, respectively.

Figure 3.6: Percentage of individuals who are members of medical aid schemes per province, 2020



Source: Stats SA, 2021

3.7.3 National health insurance

One of the first significant policy documents issued in the democratic era was the 1997 White Paper on the Transformation of the Health System in SA. Notwithstanding, per the While Paper, the State remains committed to affording comprehensive primary health care for all country citizens. The government's commitment is by way of decentralised management and the integration of the public and private health care sectors. Furthermore, with the focus on fostering community participation, it is envisaged that the model would include Non-Governmental Organisations (NGOs) and traditional healers.

In line with the 2019 - 2024 Medium Term Strategic Framework (MTSF), health is part of Priority 3, focussing on education, skills, and health. In addition, the MTSF emphasises the need for the expedition, finalisation, promulgation and implementation of the National Health Insurance (NHI) Bill of 2019 (MTSF, 2021).

Directly in line with the MTSF is the KZN Provincial Growth and Development Strategy (PGDS), which clearly states the need for achieving high quality and accountable universal health coverage in SA, specifically in the Province of KZN. In this respect, one of the key focus areas of the KZN PGDS over 2020/21 to 2024/25 cycle includes improving the quality of and access to care, universal health coverage and readiness for the NHI (KZN Planning Commission, 2021). Further to the above, in his State of the Province Address in February 2021, the Honourable Premier emphasised the province's commitment to health care through the accelerated implementation of the NHI (SOPA, 2021).

The NHI is mandated by Section 27 of the Constitution of South Africa's Bill of Rights. Included therein, the right to health care is effectively a non-negotiable commitment requiring the State - within its available resources – to work towards achieving this end. Aligned thereto is Vision 2030 of the NDP, which by way of a yet to be established common fund, aspires to achieve national access to health care of an equal standard for all, regardless of socioeconomic status.

NHI is being implemented by the NDoH in a phased-in approach (three phases) over a 14-year period which commenced in 2012, ending 2026. It is to be established by creating a single fund that will purchase services on behalf of the entire SA population. Phase 1 commenced in 2012 and was completed in 2017. The first phase did not involve developing new funding arrangements for health care but rather piloted various health system strengthening interventions focused at the primary health care (PHC) level. The interventions implemented were mainly funded by a direct NHI Conditional Grant to provinces and other funding mechanisms. In addition, the NDoH established workstreams to develop and refine NHI-related policy and incorporate the phased NHI implementation feedback. This evaluation focused on the 10 PHC interventions in the 10+1 pilot districts (PWC, 2019).

The ten NHI Pilot districts constituted one district in every province, except for KZN, which had two districts. Subsequently, KZN included a third district which was solely funded through provincial funding. The NHI pilot districts were intended to become sites for innovation and testing throughout the implementation of the NHI Phase 1. The pilot districts were as follows: OR Tambo (EC), Thabo Mofutsanyana (FS), Tshwane (GP), UMgungundlovu and uMzinyathi (KZN), Vhembe (LP), Gert Sibande (MP), Pixley ka Seme (NC), Dr Kenneth Kaunda (NW), and Eden (WC). The Amajuba district was the additional district included by KZN (PWC, 2019).

The ten interventions implemented were Ward Based Primary Healthcare Outreach Teams (WBPHCOTS), responsible for providing promotive and preventative health care to households. The second intervention included the Integrated School Health Programme (ISHP), which aimed to provide a range of health promotion and preventive services to school-going children at their place of learning. Thirdly, the General Practitioner (GP) contracting aimed to increase the number of GPs at PHC facilities to improve the quality and acceptability of care. Finally, another intervention included the Ideal Clinic Realisation and Maintenance Model (ICRM), which aimed to increase the quality of services through the establishment of minimum standards.

The interventions further involved the District Clinical Specialist Teams (DCST) responsible for supporting clinical governance, undertaking clinical work and undertaking research and training Centralised Chronic Medicine Dispensing and Distribution (CCMDD). These programmes are part of the programme interventions aimed to improve the distribution of medicines to patients by providing chronic medication at the designated pick up points closer to the communities. While, the Health Patient Registration System (HPRS), which has the ultimate goal of a fully electronic patient record-keeping system, has started with data capturing of patients and generation of electronic files.

The Stock Visibility System (SVS) aimed to improve oversight of stock through an electronic stock monitoring system and thereby reduce stock outs by allowing for appropriate and timely ordering. Meanwhile, Infrastructure projects were implemented to improve health infrastructure to ensure increased access and quality of Evaluation of Phase 1 implementation of interventions in the NHI pilot districts (Evaluation Report, Final. NDOH10/2017-2018). The final intervention involved the Workload Indicator for Staffing Needs (WISN), a WHO planning tool to assist facility managers in making more efficient staffing decisions (PWC, 2019).

An evaluation of the effectiveness of Phase 1 was conducted by Price Waterhouse Coopers (PWC). The findings highlighted the importance of strong leadership and good governance to drive a successful and effective health system. In many interventions, the presence of solid champions who held the vision of NHI and that specific programme ensured that there was robust implementation. However, this was not evident in some of the interventions. In many cases, managers implemented the interventions in silos. As a result, they seemed to lose the overall objective of the NHI process, which was to improve access to and the quality of services at facilities. In these cases, there was a lack of regular communication at different departmental levels about progress toward meeting the objectives of NHI phase 1.

In addition, while interventions were often well designed to meet objectives, the allocated budgets did not always follow priorities and at times led to the interventions going under-funded. The rationalisation of budget allocations and intentions was not always well-understood or aligned to the contextual needs at a provincial and district level. Some performance management structures were implemented during implementation, but there was not always adequate upward feedback.

Overall there was insufficient monitoring, and course correction was inadequate in some interventions. Finally, the organisational culture within some parts of the Department was perceived by staff as overly bureaucratic. The culture was often not supportive of problem-solving and left little room for creativity or innovation. There is also little recourse for consequences of poor performance, a lack of accountability, and insufficient data to monitor progress. Likewise, there is little incentive for high performance and encouraging staff to produce high-quality data (PWC, 2019).

Further, in respect of district-specific results, with the focus on KZN districts, the following key findings were noted: In the uMzinyathi district, mother and child health care was prioritised; school learner screening coverage declined substantially from 2016 to 2017, with the district ending 2017 as the worst pilot for this indicator; qualitative information indicated that certain areas in the district did not have functioning ISHP's; and there was a vast improvement in the number of antenatal visits before 20 weeks, with the district ending 2017 as the best performing NHI pilot district. In addition, the uMgungundlovu district showed an increase in administering the second dose of the Measles vaccine; there was a lack of capacitated WBPHCOTs, and improvement was established in the OHH headcount in comparison to other piloted districts.

Regarding the Amajuba District, there was an increase in antenatal first visits before 20 weeks. In addition, there was a rise in HIV positive persons on IPT. Thereafter a decrease was evident in 2016 and 2017. Immunisation under one year showed an increase, with the district ending 2017 as the third-best performer of all the pilots. In addition, there was a substantial improvement in the number of OHH visits from 2016 to 2017, with Amajuba ending 2017 as the best performing pilot district (PWC, 2019). At the finalisation of Phase 1, the current funding situation was unchanged as this phase did not involve developing new funding.

Being a vital priority of the Department of Health, R121.3 million was allocated to the Department's health insurance unit for the 2021/22 MTEF period to be transferred to the entity when it is created. Pending the fund's establishment, the bulk of the allocation for activities related to NHI will be channelled through the National Health Insurance Grant, which is allocated R7.5 billion over the 2021/22 MTEF period. This includes R986.3 million to the personnel services component, R2 billion to the non-personnel services component, and R4.4 billion to the health facility revitalisation component (KZN Department of Health, 2021).

In accordance with the NDOH, Phase 2 commenced in the 2017/2018 financial year and is due to reach completion in the 2021/22 financial year. This phase focuses on developing the NHI legislation and amendments to other legislation. In addition, initiatives will be undertaken to establish institutions that will form the foundation of a fully functional NHI Fund. Activities in this Phase will also entail purchasing personal health-care services from Emergency Medical Services (EMS) and National Laboratory Health Services (NHLS) for vulnerable groups such as children, women, people with disabilities and the elderly. In addition, HSS initiatives will continue to be implemented based on lessons learned in NHI phase 1.

Phase 3 will commence in 2022/23 and end in 2025/26. In this Phase, HSS activities are an ongoing process and will be undertaken throughout the lifecycle of the health system in perpetuity. In other words, HSS activities will become "business as usual" in the health system. Other activities will initiate the mobilisation of additional resources, such as fiscal revenue to be allocated to the NHI Fund. In addition, selective contracting of health-care services from private providers will be undertaken. The following activities will be undertaken in the third phase; introduction of mandatory payment for the NHI through NHI-specific taxes into prevailing tax policies and contracting of accredited private hospital and specialist services (National Department of Health, 2017).

In respect of the NHI goals for the 2021/22 MTEF, the main objectives include: ensuring that the NHI fund is fully operational and can make purchases from accredited health service providers by enabling Parliament's enactment of the NHI Bill by March 2022 and facilitating the establishment of the NHI Fund by March 2023. Further aims include retaining chronic patients and improving health outcomes by ensuring that 5.5 million patients are registered on the centralised chronic medicine dispensing and distribution system by March 2024. In addition, the HD aims to ensure that the NHI improves the monitoring of medication availability by ensuring that the national stock management surveillance centre reports accurately on stock availability at all 3 860 health facilities in the country by March 2024. The final objective is to expand the services available to the population by developing service benefit packages for all levels of care by March 2024 (Vote 18: Health, 2021).

At a provincial level, the KZN Department of Health received R38.499 million for the NHI grant in 2019. This increased to R60.945 million in 2020/21. Over the 2021/22 MTEF, the NHI grant receives total funding of R52.117 million, R50.842 million, and R50.860 million is allocated towards this grant. Regarding performance, the grant sees *Compensation of employees* and fiscal consolidation cuts of R7.029 million in 2021/22, R8.717 million in 2022/23, and R8.699 million in 2023/24. These cuts will ultimately result in fewer private doctors being able to be contracted, which will slow down the implementation process of the NHI (KZN EPRE, 2021/22).

3.8 Crime

Crime remains one of the most concerning threats to SA's citizens as it has a direct and negative effect on the basic need for public safety. Therefore, it is a potential and significant threat to the populace's quality of life and can also bear economic ramifications in the form of a loss of skilled workers in the labour market, loss of potential investment revenue, and a resultant decline in educational opportunities and employment opportunities. The SDGs, notably Target 16.4, unequivocally placed organised crime on the development agenda. However, target 16.4 is not the only one to explicitly mention organised crime. Multiple crime types feature as a cross-cutting threat to development.

Target 5.2 proposes to '*eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation*; Target 8.7 pledges to '*take immediate and effective measures to eradicate forced labour, [and] end modern slavery and human trafficking*; and Target 16.2 desires to end trafficking in children specifically. Environmental crime is also addressed. For example, target 14.4 aims to end illegal, unreported and unregulated fishing, and Target 15.7 vows to '*take urgent action to end poaching and trafficking of protected species*.

Table 3.14: Crime levels and growth rates in KZN, 2019 to 2021

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21	
				Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	4 395	4 859	4 825	464	10.6
Sexual Offences	9 308	9 809	8 201	501	5.4
Attempted murder	4 203	4 161	4 391	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	26 878	27 418	23 531	540	2.0
Common assault	23 521	24 900	21 480	1 379	5.9
Common robbery	7 090	7 183	5 459	93	1.3
Robbery with aggravating circumstances	22 110	22 824	20 964	714	3.2
Total Contact Crimes (Crimes Against the Person)	**97 505**	**101 154**	**88 851**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	7 667	8 017	6 685	(331)	(10.9)
Sexual Assault	1 266	1 367	1 172	(81)	(1.9)
Attempted Sexual Offences	235	251	180	96	3.3
Contact Sexual Offences	140	174	164	5	20.0
Total Sexual Offences	**9 308**	**9 809**	**8 201**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	2 764	3 041	2 669	277	(2.9)
Robbery at residential premises	4 182	4 575	4 820	393	(7.5)
Robbery at non-residential premises	3 055	3 072	3 303	17	
Robbery of cash in transit	12	16	22	4	
Bank robbery	-	-	-	-	
Truck hijacking	80	70	77	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	754	762	619	8	1.1
Malicious damage to property	13 704	13 358	12 608	(346)	(2.5)
Total Contact-Related Crimes	**14 458**	**14 120**	**13 227**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	10 863	10 844	10 566	(19)	(0.2)
Burglary at residential premises	38 790	35 290	28 735	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	8 050	8 030	6 073	(20)	(0.2)
Theft out of or from motor vehicle	14 912	14 388	10 621	(524)	(3.5)
Stock-theft	6 380	6 252	6 059	(128)	(2.0)
Total Property-Related Crimes	**78 995**	**74 804**	**62 054**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	40 193	39 647	32 442	-546	(1.4)
Commercial crime	14 899	14 343	13 872	-556	(3.7)
Shoplifting	10 878	10 138	7 631	-740	(6.8)
Total Other Serious Crimes	**65 970**	**64 128**	**53 945**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**256 928**	**254 206**	**218 077**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	3 733	3 719	3 174	(14)	(0.4)
Drug-related crime	35 358	25 990	19 505	(9 368)	(26.5)
Driving under the influence of alcohol or drugs	17 577	21 016	4 915	3 439	(19.6)
Sexual Offences detected as a result of police action	3 615	3 474	1 777	(141)	(3.9)
Total Crime Detected As A Result Of Police Action	**60 283**	**54 199**	**29 371**	**(6 084)**	**(10)**

Source: South African Police Service, 2022

A Global Initiative against Transnational Organised Crime study of 2015 recognised that organised crime could directly and significantly impact the ability to achieve 23 of the 169 SDG targets. However, although the SDGs may recognise organised crime as a cross-cutting threat to development, this still does not fully capture the harm that organised crime poses to SDG achievement. The SDG agenda acknowledges the *'indivisibility'* of the framework. It pertinently observes that the goals and targets are integrated and indivisible. These goals are further divided into three dimensions of sustainable development: the '*economic, social and environmental*. This means that the SDGs' achievement requires progress across the broad spectrum of the agenda and that failure to achieve targets in one goal area may preclude others' achievement.

The SDGs have immense transformative potential, but both, directly and indirectly, organised crime has proven to be a cross-cutting threat to achieving core and essential development objectives. Organised crime directly threatens specific goals, such as reducing poverty, promoting economic growth, and maintaining global biodiversity and sustainable environments. It further affects the building of safe and inclusive societies, promoting public health and peoples' well-being, and even orderly migration management. Moreover, whereas the SDGs are indivisible, organised crime is divisive and destructive.

As outlined in the NDP, the high level of crime in SA has slowed economic and social development. It is noted that there is a link between high crime levels and high poverty levels, although not many people turn to crime. There is a vision in place for citizens to feel safe anywhere in the country by 2030. This vision can be achieved by adjusting the quality of police services, engaging community members to fight against crime, and improving the justice system, amongst other measures.

During the 2020/21 financial year, *all theft not mentioned elsewhere*, followed by *burglary at residential premises*, and were the most prevalent crime categories. Whilst contact *sexual offences* was the crime category which experienced the highest increase of 20 per cent, followed by *murder* (10.6 per cent) and *common assault* (5.9 per cent According to the Alcohol Rehab Guide, some of the most common alcohol-related crimes involve drinking and driving cases. However, there are a variety of other offences that can result from alcohol abuse. Several examples of criminal activities associated with excessive alcohol use are robbery, sexual assault and aggravated assault. Although there were crime categories with increased prevalence rates, there was also a decrease in the number of crime categories. For example, there was a significant decline in the number of drug-related crimes by about 26.5 per cent, followed by driving under the influence of alcohol and drugs (19.6 per cent) (Table 3.14).

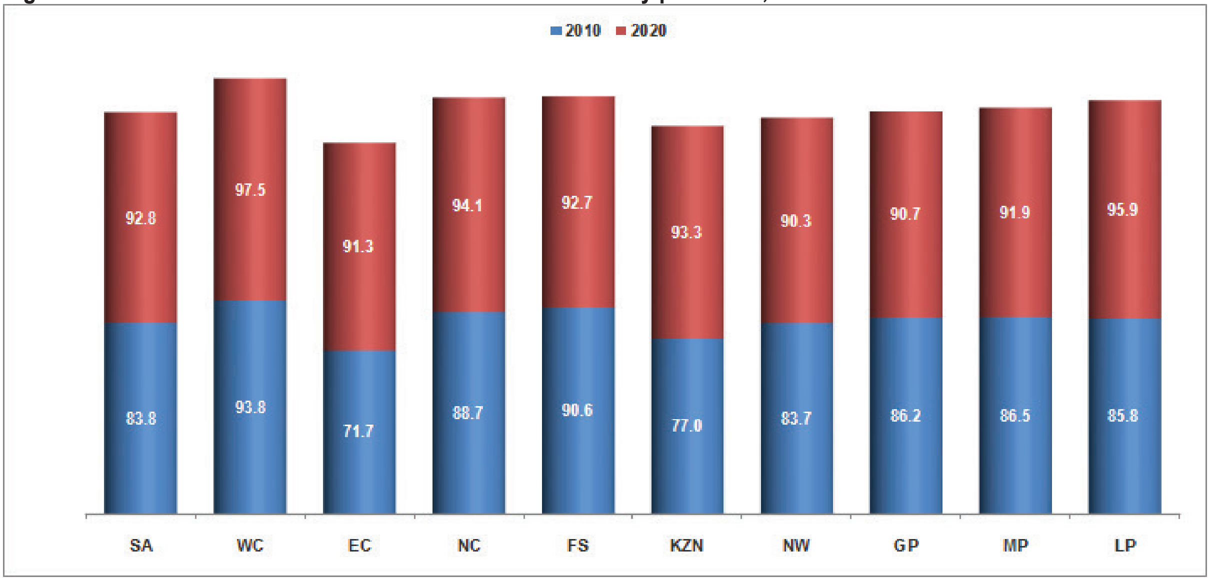
Data related to crime statistics for the main towns and cities in KZN is presented in the Appendix (Table A3.2 to A3.10).

3.9 Access to basic services

3.9.1 Access to electricity

The share of households with electricity in SA increased from 83.8 per cent in 2010 to 92.8 per cent in 2020. KZN's share of electrical connections increased markedly from 77 per cent in 2010 to 93.3 per cent in 2020. In 2020, all provinces had electrical connections above 90 per cent (Figure 3.7).

Figure 3.7: Share of households with electrical connections by provinces, 2010 and 2020



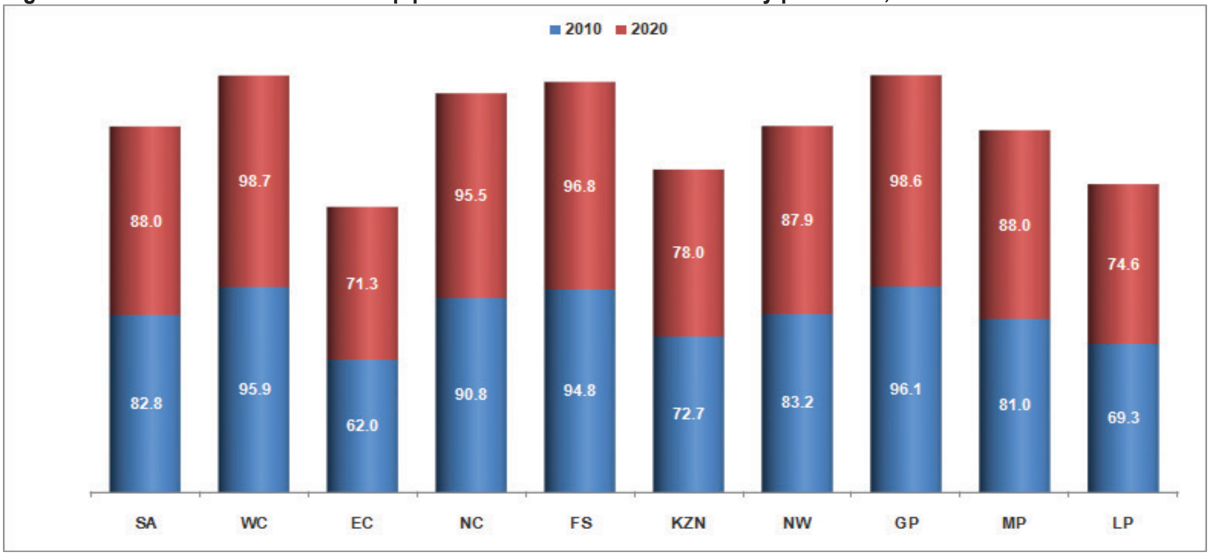
Source: IHS Markit, 2022

3.9.2 Access to water and sanitation

The COVID-19 pandemic has made it clear that investments in providing basic water, sanitation, and hygiene services must be key priorities in the future. However, progress in providing basic water is now threatened by climate change and rising poverty levels. Some of the government's measures to maintain a hygienic environment are pillars of infection control. Clean water, sanitisers and soap, and wearing face masks are essential tools in trying to curb the transmission of COVID-19. In addition, infection prevention and control (IPC) measures can limit human-to-human transmission and protect individuals from exposure to COVID-19.

People should not be cut off from these services during the pandemic regardless of whether they can temporarily pay their bills. The government should prioritise access to people living in vulnerable conditions such as shelters, refugee camps or detention centres and ensure that there are handwashing facilities in, for example, health centres, schools and public spaces. Given the importance of water and sanitation services and the extra pressure on utilities caused by the current crisis, the sector may need additional support. In addition, sanitation workers must be protected from the other risks associated with the pandemic.

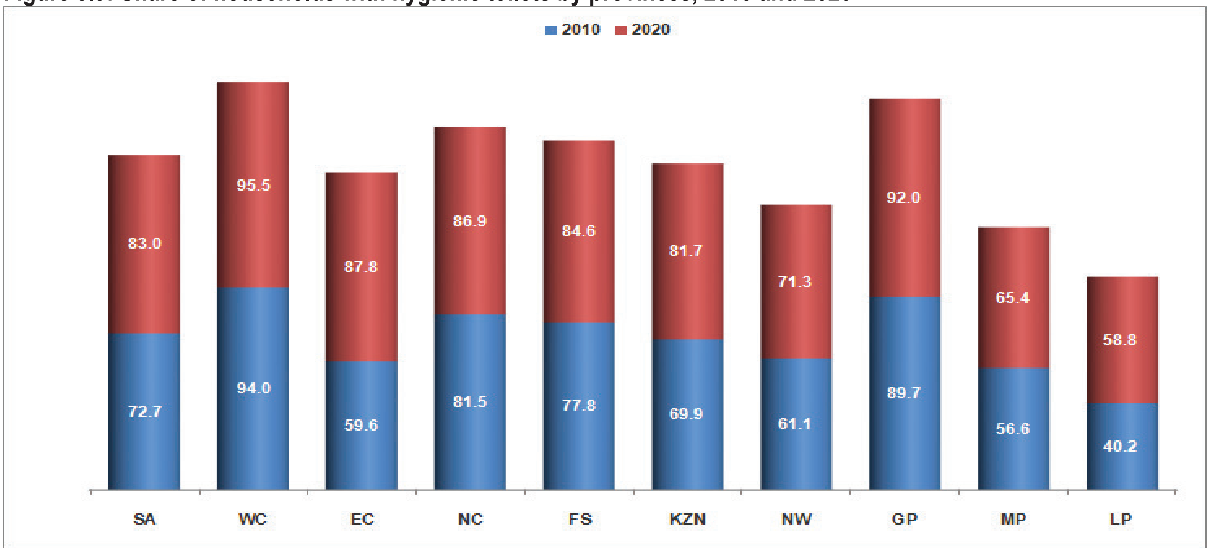
Figure 3.8: Share of households with piped water at or above RDP level by provinces, 2010 and 2020



Source: IHS Markit, 2022

The Global Burden of Disease study undertaken by the Institute for Health Metrics and Evaluation (IHME) (2018) indicates that 15 per cent of all deaths in children below five years of age in low- and middle-income countries are directly attributable to diarrhoeal disease. Close to 90 per cent of the diarrhoeal disease burden is caused by unsafe sanitation, water, and hygiene. The EC had one of the lowest proportions of households with access to piped water in the country, at 62 per cent in 2010 and 71.3 per cent in 2020, whilst KZN has the third-lowest access to piped water at 78 per cent, after Limpopo at 74.6 per cent. KZN's access to piped water from 2010 to 2020 has been minimal, growing from 72.7 per cent in 2010 to 78 per cent in 2020, a mere 6.7 percentage points (Figure 3.9).

Figure 3.9: Share of households with hygienic toilets by provinces, 2010 and 2020



Source: IHS Markit, 2022

Regarding the share of households with hygienic toilets, KZN showed a significant improvement from 69.9 per cent in 2010 to 81.7 per cent in 2020. However, this is still slightly below the national average of 83 per cent in 2020 (Figure 3.9).

3.10 Conclusion and recommendations

As COVID-19's global death toll exceeds 5.6 million people, declines in fundamental areas of human development are being felt across most countries by both the rich and the poor. The drop in human development is expected to be much higher in developing countries that are less able to cope with the pandemic's social and economic fallout than wealthier nations. Moreover, implementing equity-focused approaches would be affordable. For instance, closing the gap in access to the internet for low-and middle-income countries is estimated to cost just one per cent of the extraordinary fiscal support packages the world has so far committed to responding to COVID-19. The importance of equity is emphasised in the United Nations' framework for the immediate socioeconomic response to the COVID-19 crisis, which sets out a green, gender-equal, good governance baseline from which to build a 'new normal". It recommends five priority steps to tackle the complexity of this crisis. These steps include protecting health systems and services, ramping up social protection, protecting jobs for small and medium sized businesses. The informal sector workers, making macroeconomic policies work for everyone; and promoting peace, good governance and trust to build social cohesion are also part of the solution. UNDP (2020) calls on the international community to rapidly invest in developing countries' ability to follow these steps.

The data reported helps identify patterns, facilitating the planning, implementation, monitoring, and evaluation of poverty reduction programmes. Ideally, the poverty line approach's primary purpose is to provide a consistent benchmark against which progress on a money-metric or expenditure-based dimension of poverty can be monitored. Being a worldwide concern for governments, poverty affects everybody, including children. It has explicitly life-long repercussions on children's cognitive and physical development and well-being with a perpetuating nature that could pass on to future generations. Therefore, addressing child poverty needs to be a national policy priority to ensure better life and opportunities for all in the future. The measurement of child poverty and understanding its dynamic nature is crucial to guarantee that relevant, effective, and sustainable policies and strategies geared towards breaking the revolving cycle of poverty are put in place.

The NSC class of 2021 was the most affected by the COVID-19 pandemic because learners had to endure two consecutive years of harsh exposure to the unrelenting pandemic. Despite the ongoing challenge of COVID-19, the NSC results improved slightly. It increased by 0.2 percentage points from 76.2 per cent in 2020 to 76.4 per cent in 2021. The province of KZN, which continues to have the highest number of matriculants, came fifth, with a record of 76.8 per cent, a moderate decrease of 0.8 percentage points from 77.6 per cent in 2020. Although there is an improvement in the NSC results, it should be celebrated with caution given the NSC pass requirements, which is significantly low (40 per cent home language, 40 per cent in two other subjects, 30 per cent for four other subjects and must pass at least 6 out of 7 subjects). It should be also be noted that the number of learners who obtained a bachelor pass at a minimal level do not have the required points for university entrance. This shows poor coordination between what is required in the higher education level and the school level, consequently harming universities' throughput rate. Although alternative academic institutions can accept these matriculants to pursue skills courses at TVET colleges, the bachelor level achieved makes them see themselves as ready for university education as they perceive TVET to be low level. The question also can be raised whether those who manage to complete university, either in a record time or more than the stipulated number of years for the degree programme are ready for the labour market or not.

The decision taken by the DoE to make a full return to schools by all learners is highly commendable given the constraints they have been facing since the emergence of COVID-19. However, maintaining health and safety and a conducive environment for learners and educators will be more critical than ever before. The capacity of the school infrastructure to accommodate all learners should be considered, given that most of the schools, especially in the rural areas, are overcrowded. Therefore, there is a need for mobile classes together with adequate educators in line with the required educator-learner ratio. Furthermore, maintaining the health and safety of people will be more critical than ever before. To make the school environment safe, additional health and hygiene measures should be implemented, and school-based psychosocial and nutritional support should be extended to learners to strengthen their overall health and well-being in the wake of the pandemic.

Chapter Four: Economic Review and Outlook

4.1 Introduction

The world continues to grapple with the uncertainties associated with the Coronavirus Disease 2019 (COVID-19) as it returns in different waves driven by new variants. The social and economic implications of the global pandemic vary greatly across regions. Many countries commenced with vaccinations roll-out campaigns early in 2021, following a breakthrough on vaccines with high efficacy in the later part of 2020. However, there have been challenges with unequal access and distribution of vaccines, which caused fault lines on the economic recovery path across regions. Despite a highly uneven recovery with considerable uncertainty, global growth is estimated to have rebounded significantly by 5.9 per cent in 2021.

The global economy experiences renewed uncertainty in 2022, resulting from the discovery of the Omicron variant (as vaccines uneven access persists), global supply disruptions, and continual rises in inflation. Consequently, global growth is expected to soften marginally to 4.4 per cent in 2022, owing to pandemic resurgence, higher food and energy prices, diminished fiscal support and lingering supply constraints. Moreover, real output is predicted to further deteriorate to 3.8 per cent in 2023 as pent-up demand wanes and supportive macroeconomic policies remain unwound. In addition, global inflation accelerated significantly in the second half of 2021, thereby reaching decade highs in other countries due to the rebound in global demand and economic activity, supply disruptions, and rising food and energy prices.

In South Africa (SA), the recovery softened in the second half of 2021 amid an ongoing rapid surge in infections that warranted stricter lockdown restrictions, continued electricity shortages, a rise in social unrest, and a cyberattack at Transnet. Nevertheless, real output is estimated to have strengthened by 4.8 per cent in 2021, reflecting a resilient rebound in the *mining*, *manufacturing*, and *services* sectors. Growth will be supported further by the recovery in the services sectors, including *tourism*, due to improved control over virus outbreaks as widespread vaccinations progress. However, economic growth is forecast to retreat to 1.7 per cent in 2022 and 1.8 per cent in 2023, partly due to persistent large-scale unemployment, high inequality, and structural impediments to growth that continue to weigh on economic activity.

Considering both the global and national economic performance, this chapter provides an economic review and outlook of the Province of KwaZulu-Natal (KZN). The chapter begins with an economic review and outlook from global, national and provincial levels. This is followed by a brief discussion of the sectorial analysis, including capital formation and tourism. The chapter proceeds by providing a summary of international trade at both national and provincial levels. Finally, it concludes by providing policy recommendations to stimulate economic performance in the country, emphasising KZN.

4.2 Global economic review and outlook

4.2.1 Global economic performance and outlook

Global economic activity continues to expand as the world emerges from the substantial global recession since World War II. However, the world economy dropped sharply by 3.1 per cent in 2020 amid disruptions to activity caused by the COVID-19 pandemic (Table 4.1). The impact of the pandemic on real output had been broad-based on tourism-reliant countries, commodity exporters, and those with limited policy space to respond due to precarious fiscal situations. The global recovery benefited from a significant contribution from improved demand for products that supports working remotely together with pent-up demand for durable goods. However, other sectors such as travel, the arts, entertainment, sports, hospitality, and brick-and-mortar retail continued to operate below capacity. As a result, these sectors are unlikely to see a substantial rebound before the pandemic is brought under control.

The breakthrough on vaccines with a high efficacy rate induced high optimism as it allowed numerous countries to begin roll-outs early in 2021. The approval of vaccines implied that the world would effectively manage the pandemic and normalise faster as activity continued to open up. However, while vaccines roll-out progressed smoothly during the year, fault lines on economic recovery emanated from inequitable vaccine access and distribution. Consequently, in countries with adequate vaccines access, almost all Advanced Economies (AE) continued to realise further normalisation of activity. By contrast, countries with limited vaccine access across the Emerging Market and Developing Economies (EMDEs), predominantly low-income countries, suffered the most and continued to experience resurgent infections and rising COVID-19 death tolls. This caused economic recovery to be highly uneven, with considerable uncertainty about the strength and durability of the upturn beyond 2021. However, global output is estimated to have rebounded significantly by 5.9 per cent in 2021.

Table 4.1: World economic estimates and projections (percentages), 2018 to 2023

	GDP Estimate (Per cent)				GDP Forecast (Per cent)	
	2018	**2019**	**2020**	**2021 e**	**2022 f**	**2023 f**
World	**3.5**	**2.8**	**-3.1**	**5.9**	**4.4**	**3.8**
Advanced economies	**2.2**	**1.6**	**-4.5**	**5.0**	**3.9**	**2.6**
United States	3.0	2.2	-3.4	5.6	4.0	2.6
Euro area	1.8	1.3	-6.4	5.2	3.9	2.5
Japan	0.3	0.0	-4.5	1.6	3.3	1.8
United Kingdom	1.3	1.4	-9.4	7.2	4.7	2.3
Emerging market and developing economies	**4.5**	**3.7**	**-2.0**	**6.5**	**4.8**	**4.7**
Russia	2.5	2.0	-2.7	4.5	2.8	2.1
China	6.8	6.0	2.3	8.1	4.8	5.2
India	6.1	4.0	-7.3	9.0	9.0	7.1
Brazil	1.3	1.4	-3.9	4.7	0.3	1.6
Sub-Saharan Africa	**3.3**	**3.2**	**-1.7**	**4.0**	**3.7**	**4**
Nigeria	1.9	2.2	-1.8	3.0	2.7	2.7
South Africa	0.8	0.2	-6.4	4.6	1.9	1.4

Source: International Monetary Fund, 2022

Note: e represents estimates, and f is forecast

The global economy experiences renewed uncertainty coming into 2022, following the discovery of the Omicron variant as vaccines uneven access persists, global supply disruptions, and continuous rise in inflation, as mentioned previously. While vaccine access and distribution bottlenecks remain significant obstacles, they have been hailed for playing an important role. Over 55 per cent of people have received at least one dose as at the end of January 2022. However, the emergence of the Omicron variant indicates that the COVID-19 pandemic has not dissipated and could emerge with highly contagious variants that put even highly vaccinated countries under pressure and threaten to wreak havoc in those with low vaccination rates.

Although the Omicron variant has less severe symptoms, it is believed to be highly transmissible more so than the Delta variant, as it caused COVID-19 infections to surge rapidly. As a result, it has derailed the momentum of economic recovery as it led to increased mobility restrictions and financial market volatility at the end of 2021. In addition, global growth was also weighed down by global supply disruptions that had hampered global manufacturing, especially in Europe and the United States (US) in the fourth quarter of 2021. As a result, global growth is expected to soften marginally to 4.4 per cent in 2022, owing to pandemic resurgence, higher food and energy prices, diminished fiscal support and lingering supply constraints. Moreover, real output is predicted to further deteriorate to 3.8 per cent in 2023 as pent-up demand wanes and supportive macroeconomic policies remain unwound (Table 4.1).

4.2.2 Economic performance and outlook in advanced economies

Real output across the AE group improved significantly in the first half of 2021. This was supported mainly by continued normalisation as vaccines became widely available and several countries inoculated a significant proportion of the population. The improvement was further boosted by additional fiscal support in the US. As indicated above, almost all advanced economies had broad access to vaccines. Despite vaccines hesitancy that remains a major concern, advanced economies had fully vaccinated approximately 58 per cent of the population at the end of 2021. However, the COVID-19 infections soured significantly later in 2021, driven by the Omicron variant while supply disruptions persist, thereby softening growth momentum in most AEs.

The AE group is estimated to have bounced back by 5 per cent in 2021. This was after it reported a broad-based contraction of 4.5 per cent in 2020. As a result, growth in advanced economies is forecast to retreat somewhat to 3.9 per cent in 2022. The region's performance is set to soften further to 2.6 per cent in 2023. The projected marginal decline in real output in 2022 reflects the negative impact of the Omicron-driven pandemic resurgence, persistent falling pent-up demand, reduced fiscal and monetary policy support, and continued supply bottlenecks. Nevertheless, notwithstanding the predicted slowdown, output in advanced economies is anticipated to surpass its pre-pandemic levels in 2023.

Following a substantial contraction of 3.4 per cent in 2020, real output in the US is estimated to have strengthened by 5.6 per cent in 2021. However, growth in the US was significantly lower than anticipated due to several headwinds that weighed down activity in the second half of the year. Some of the factors that impacted activity include the resurgence of COVID-19 infections, escalating supply bottlenecks, rising energy prices, and a diminishing boost to incomes from pandemic-related fiscal support. As a result, real output is expected to moderate markedly to 3.7 per cent and further drop to 2.6 per cent in 2023, reflecting the impact of earlier withdrawal of fiscal and monetary policy support, an Omicron-driven pandemic resurgence, persistent rise in inflation, and continuous supply disruptions. Nevertheless, real output is projected to regain its pre-pandemic levels by 2022.

Economic growth in the Euro Area (EA) slowed in the final quarter of 2021, from a robust recovery in the second and third quarters. During the fourth quarter, the marked decline in real output emanated partly from rapid COVID-19 flare-ups. Consequently, growth in the EA recorded a substantial uptick at 5.2 per cent in 2021, after a dramatic contraction of 6.4 per cent in 2020. However, real output is forecast to moderate to 3.9 per cent in 2022 and soften further to 2.5 per cent in 2023. This was partly due to a relatively lower-than-anticipated recovery in consumption owing to the emergence of the Omicron variant. As a result, real output is expected to reach its pre-pandemic levels despite the projected moderation in 2023.

In Japan, growth is estimated to have rebounded by 1.6 per cent in 2021, up from a substantial contraction of 4.5 per cent in 2020. Real output was constantly slow, especially during the first part of the year. It gained momentum toward the end of the year amid the relaxation of pandemic-control measures as vaccinations reach high levels. However, economic growth is expected to strengthen further to 2.9 per cent in 2022, reflecting the delay in the release of pent-up demand following a rise in COVID-19 infections later in 2021 and additional fiscal stimulus. Activity is expected to slow to 1.2 per cent in 2023 as the boost from pent-up demand gradually fades.

4.2.3 Performance and outlook of Emerging Market and Developing economies

Despite increased external demand and higher commodity prices, the economic activity showed an uneven recovery among the *EMDEs* group. The tentative recovery emanated mainly from the continuous surge in COVID-19 infections due to lagging vaccinations and the withdrawal of macroeconomic support. Other countries experienced the rapid spread of new infections and ultimately enforced mobility restrictions to control the virus. As external demand moderated and global supply disruptions persisted, real output was also weighed down by declining industrial production and subdued manufacturing exports. As a result, a marked acceleration has constrained private consumption in inflation in many economies.

Given these headwinds, growth in the EMDEs bounced back by an estimated 6.5 per cent in 2021, following a considerable contraction of 2 per cent in 2020. Economic growth is forecast to decelerate to 4.8 per cent in 2022, reflecting the effects of Omicron-driven pandemic resurgence and constrained domestic demand thereof, withdrawal of macroeconomic and fiscal policy support in most countries. Further, private consumption is expected to remain depressed amid the persistent inflationary risks, which signal an upcoming tighter monetary policy stance. Growth is expected to be further dampened by weak external demand and retreating prices of non-oil commodities. As a result, the GDP growth rate is expected to soften further to 4.7 per cent in 2023 partly due to moderating private consumption growth, continued slow investment, and declining commodity prices.

Economic performance in China experienced headwinds and moderated substantially. The most apparent factors that weighed heavily on the growth prospects included continuous mobility restrictions related to the COVID-19 and diminishing consumer spending and residential investment due to regulatory curbs on the property and financial sectors. However, some adverse effects have been offset by a resilient manufacturing activity and significant growth in exports despite lingering supply bottlenecks and power supply challenges.

The Chinese economy was further supported by the macroeconomic policy action in the form of short-term liquidity injections and reduced cash reserve requirements implemented by the People's Bank of China. In addition, the government accelerated infrastructure investment and has stepped up efforts to support homeowners and creditworthy developers. Nevertheless, growth in China expanded by a robust 8.1 per cent in 2021, from a relatively subdued rate of 2.3 per cent in 2020. However, real output is projected to moderate to 4.8 per cent in 2022, reflecting the prolonged effects of the pandemic and stringent regulations on certain sectors of the economy.

Economic activity in Sub-Saharan Africa (SSA) showed a stronger-than-anticipated recovery in the first half of 2021, supported mainly by improved external demand and a robust pickup in commodity prices. However, the recovery was short-lived by stabilising non-energy commodity prices and resurgence of the pandemic, which necessitated the reinstatement of lockdown restrictions in other countries. The upsurge in COVID-19 infections reflected the slow vaccine roll-outs in the region. As of the end of December 2021, the number of fully vaccinated people stood at merely 6.2 per cent of SSA's population compared to an average vaccination rate of over 44 per cent across other EMDEs. Consequently, real output in SSA is estimated to have strengthened by 4 per cent in 2021, picking up from a contraction of 1.7 per cent in 2020.

The region realised a significant spike in COVID-19 outbreaks following the discovery of the Omicron variant. Most countries reported a rapid upsurge in new cases toward the end of the year. Therefore, the recovery remains uncertain due to the persistent risk of COVID-19 flare-ups, which would warrant new restrictions. As a result, growth in SSA is projected to soften to 3.7 per cent in 2022 before improving marginally to 4.0 per cent in 2023. The forecast economic growth reflects the expected continuous rise in commodity prices supported by improving economic activity across the region's major trading partners such as China, the Euro Area, and the US. Real output is also expected to be supported by a modest recovery in tourism. However, this is subject to vaccinations in some tourism-reliant economies that already proceed faster.

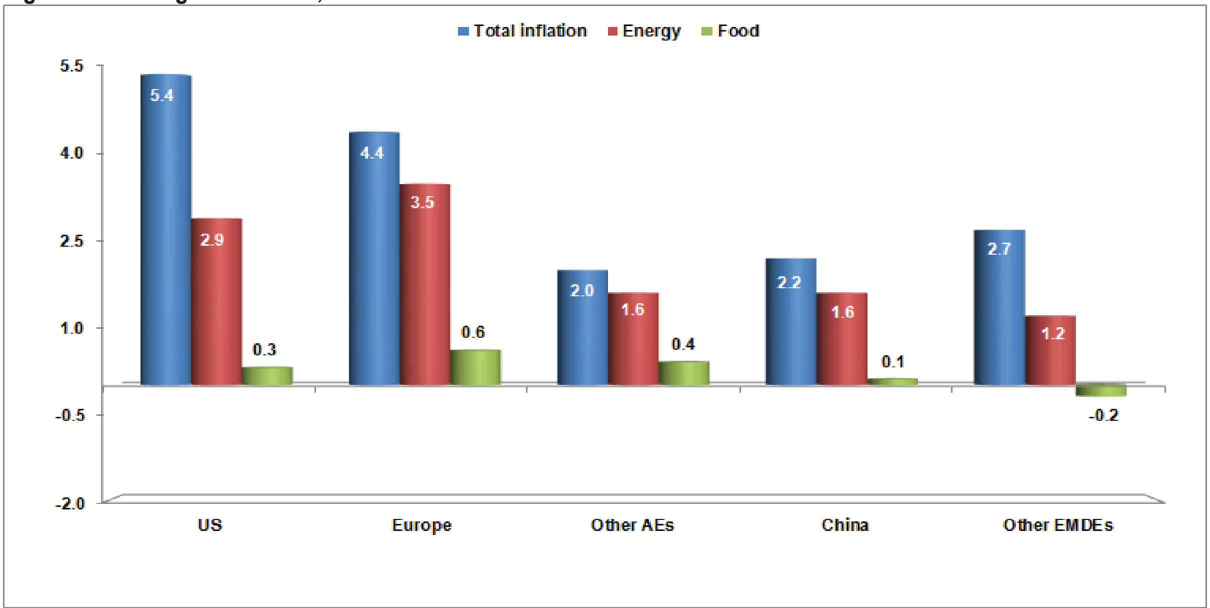
4.2.4 Global inflation outlook

Global inflation took a significant jump throughout the second half of 2021 owing to several factors with varying importance across regions. The median headline consumer price inflation reached 4.6 per cent on an annual basis in October 2021, up from a pandemic-related low of 1.2 per cent in May 2020. The notable rise in headline inflation to decade highs in other countries emanated from the rebound in global demand and economic activity, exacerbated by supply disruptions and rising food and energy costs. In addition, the increase in inflation has partially led to various central banks unwinding their accommodative monetary policies.

In the US, the annual headline inflation rate accelerated substantially by 5.4 per cent. The enormous rise in inflation in the US was driven mainly by the persistent supply chain bottlenecks, congested ports, land-size constraints, and high demand for goods. The country also realised a considerable rise in energy prices at 2.9 per cent, followed by food prices at 0.3 per cent.

Another region that reported a higher headline inflation rate was Europe, where it increased markedly by 4.4 per cent. The marked increase in headline inflation in Europe was induced by a rebound in the economy from the shock of the pandemic, easing of restrictions that supported activity, and supply disruptions, driving up energy costs and creating shortages of many materials. Energy costs were also pushed up by increasing fossil fuel prices which almost doubled. Consequently, energy prices climbed sharply by 3.5 per cent while food prices increased by 0.6 per cent. The startling increase is likely to put pressure the European Central Bank (ECB) to reduce its monetary stimulus quicker than anticipated.

Figure 4.1: Change in Inflation, December 2020 – December 2021



Source: International Monetary Fund, 2022

In EMDEs, increases in headline inflation have been broad-based across countries and components. Several countries within the EMDEs group, particularly in Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), and SSA, recorded a marked rise in headline inflation driven mainly by food, energy, and core components. Thus, the figure shows that other EMDEs groups experienced an uptick in headline inflation by 2.7 per cent. Wage pressures have remained contained in many EMDEs, reflecting ample slack in labour markets. Market-based measures of medium-term inflation expectations have edged up, although investors still expect inflation to moderate gradually over time toward central banks' targets.

The IMF (2021) expects headline consumer inflation to remain elevated in the near term and moderate at 3.9 per cent in AEs and 3.9 per cent in EMDEs in 2022 before tempering in 2023. The forecast moderation in headline inflation in 2023 considers the anticipated easing of supply chain bottlenecks, coupled with the tightening of monetary policy and a shift away from goods-intensive consumption towards demand-driven services. In addition, the rapid increase in fuel prices is also expected to moderate during 2022–23, which will help contain headline inflation.

4.2.5 Risks to the global economic outlook

The global growth bounced back significantly in 2021, following a substantial contraction induced by COVID-19. However, it remains tentative, with risks to growth skewed to the downside. The Omicron variant remains a major health risk, and the pandemic resurgence could devastate health systems and trigger the simultaneous imposition of additional pandemic control measures across the globe. While the Omicron variant has less severe symptoms, increased transmissibility could still add to labour shortages and put extra pressure on hospitals, prompting tighter and longer-lasting mobility restrictions. Moreover, the health risk imposed by the Omicron variant could persist as long as the EMDEs continue to lag in terms of vaccination programs. The sluggish progress in vaccination programmes has been a major contributing factor weighing on the recovery in under-vaccinated countries.

Another risk to the global outlook is supply bottlenecks that contributed to downward revisions on projections in several countries. The shift toward goods consumption, particularly in advanced economies, overloaded global supply chain networks during the pandemic. This problem was compounded by pandemic-related obstacles to transportation and staffing and the inherently fragile nature of just-in-time logistics and lean inventories. The resulting disruption to global trade led to shortages and higher prices for imported consumer goods. Disruptions in the US have been particularly severe, consistent with the more significant switch into goods consumption.

In the longer term, the global economy faces the risk of a more pronounced softening of the fundamental drivers of growth. This risk is especially acute in EMDEs. Their subdued economic recovery, particularly the weakness of fixed investment and the dislocation of much employment and education, may well lead to more severe scarring of potential output. For example, the pandemic's adverse impact on human capital accumulation could be more significant if skills and education were to atrophy due to prolonged unemployment and extended school closures.

Moreover, subdued aggregate demand and tighter financial conditions could weigh heavily on business confidence, further sapping investment and curtailing productivity growth by reducing the willingness to adopt new technologies.

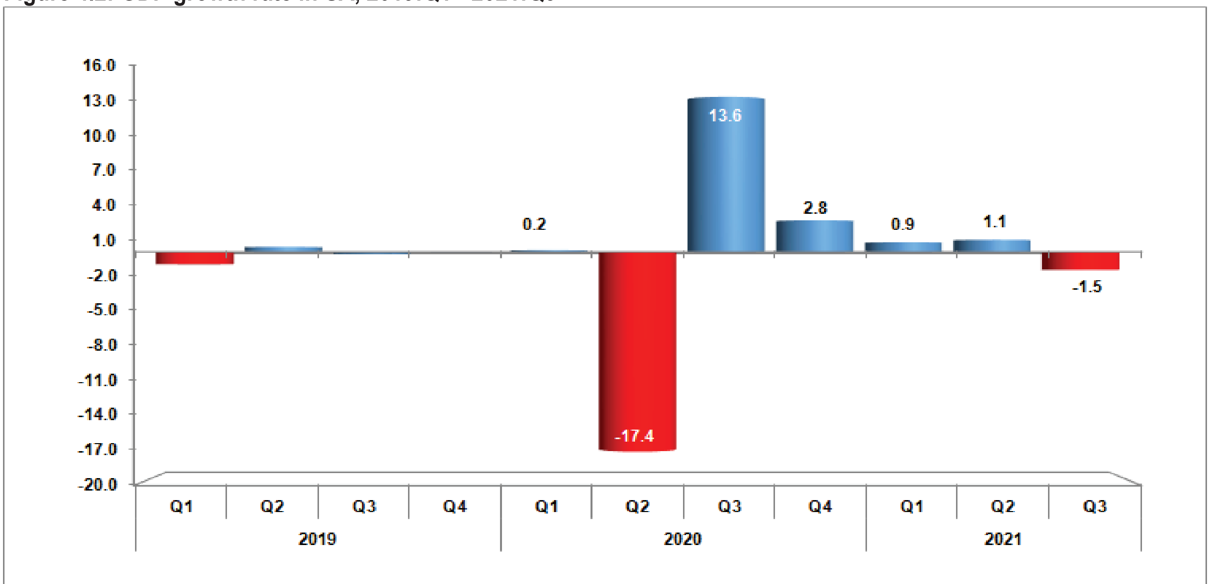
4.3 South African economic review and outlook

4.3.1 Performance of the South African economy

South Africa's economy has risen from the depths of the COVID-19 induced contraction estimated at 6.4 per cent in 2020. As a result, real economic activity continued to accelerate, albeit at a slower pace in the first quarter of 2021, following a marginal increase in the final quarter of 2020. As a result, real GDP grew by 0.9 per cent in the first quarter on a seasonally adjusted and not annualised basis, down from 2.8 per cent in the preceding quarter (Figure 4.2). The weaker-than-anticipated growth in the first quarter reflects the negative impact of the second wave of COVID-19 infections, which resulted in the reinstatement of lockdown restrictions to curb the spread of the virus.

Despite the resurgence of COVID-19 in a different variant, the country commenced with its first phase of the vaccination roll-out drive in 2021, targeting healthcare personnel, which brought optimism about the effective management of the virus. Nevertheless, the vaccination campaigns began at a relatively slow pace due to the inaccessibility of sufficient vaccines, a prevalent challenge across many EMDEs, including SA. However, the country managed to secure more jabs as time progressed, allowing the vaccination campaigns to accelerate.

Figure 4.2: GDP growth rate in SA, 2019:Q1 - 2021:Q3



Source: Stats SA, 2021

The figure further shows that real economic activity expanded by 1.1 per cent in the second quarter of 2021 on a seasonally adjusted and annualised basis, up from 0.9 per cent reported in the preceding quarter. The significant expansion on the real gross domestic product (GDP) was supported by increased activity for the primary and tertiary sectors while the secondary sector contracted moderately. It should be noted that real economic activity remained buoyant despite the third wave of infections that resulted in the reinforcement of lockdown restrictions in July 2021. The lockdown restrictions imposed during the third wave (Delta variant) did not weigh much on economic activity than those enforced in the first two waves. This could be attributed to the observation that the lockdown restrictions were tailored in a manner that could not restrict most economic activity. As a result, businesses and consumers had successfully adapted to living with the COVID-19 virus.

As the COVID-19 surge further reached the third wave's peak, the country was moved to marginally stricter "adjusted alert level 4" restrictions at the beginning of July 2021. The sectors that were most severely affected by the restrictions were most notably the travel and tourism (including the food, drink, hospitality and events centres). In addition, during the same period, at the height of a third wave, the country experienced unprecedented social unrest, riots, and looting that disrupted economic activity. This culminated in violence and destruction of property where shopping centres and warehouses were looted, vandalised and in some cases burnt down, trucks set alight, roads blocked, and communication towers damaged. The unrest was severe in most parts of KZN, whilst Gauteng (GP) suffered damage only in certain areas.

As a result, these provinces realised a sharp fall in small business revenues during the week of the lootings while truck volumes on key routes dropped to near zero. Although the recovery was quick, as indicated by both the Yoco turnover index[23] and truck volumes returned to normalcy as soon as the situation ultimately calmed down, the estimated total damages to property and businesses approximated R50 billion.

The short-run impacts to 2021 GDP are estimated at 0.4 percentage points and possibly have a far-reaching economic impact, especially if investment sentiment is negatively affected. In addition, while the civil unrest was beginning to calm down, the economy suffered an additional setback when an Information Technology (IT) security breach at Transnet severely disrupted operations at SA's major ports.

The adverse effects of the third wave and civil unrest and coupled with the cyberattack at Transnet were evident in real economic activity as it dropped by 1.5 per cent in the third quarter of 2021. However, real economic activity is expected to revert from the contraction with a significant increase of about 2.6 per cent in the fourth quarter of 2021, supported by low restrictions during the entire period and high consumer demand driven by the festive season. The lockdown restrictions remained at an "adjusted alert level 1" despite the fourth wave driven by the *Omicron* variant, which caused a significant rise in infections. Although economic activity has bounced back from the downfall caused by the global pandemic, the risk of COVID-19 coming back in different waves with a new variant that could undermine the efficacy of vaccines remain high. However, vaccines continue to play a vital role

[23] The Yoco turnover index shows how turnover of small businesses has been affected, the total amount of sales of money small businesses are making on sales through their card machines or online payments. Available online: https://www.yoco.com/za/blog/covid-19-recovery-monitor/.

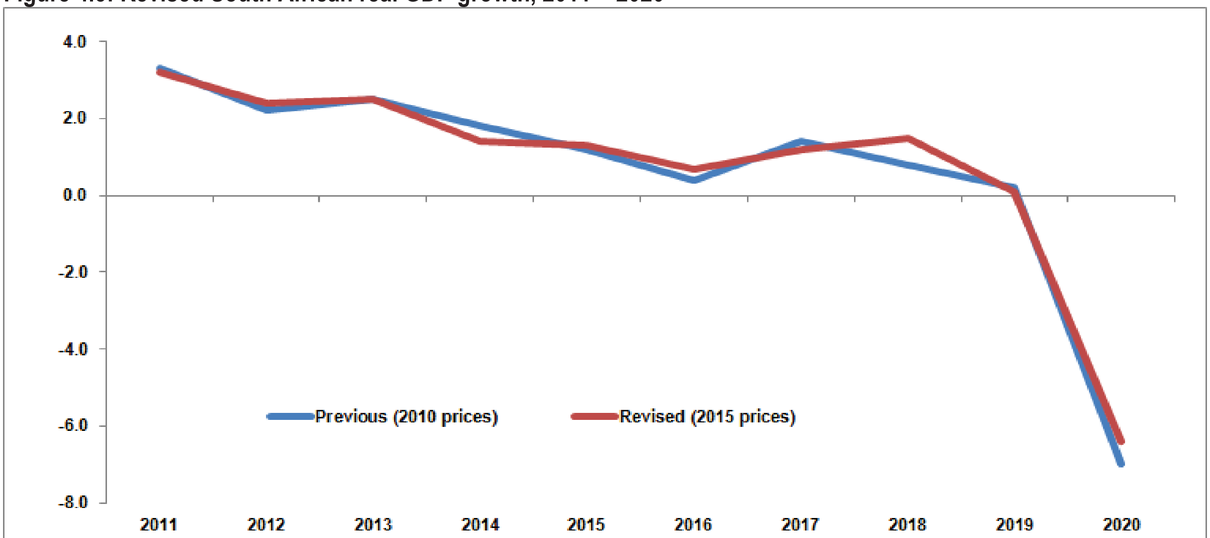
as the country battles with the virus. As of 31 January 2022, the country has administered more than 29 million vaccines, with about 27.3 per cent share of people fully vaccinated and 5.1 per cent share of people partly vaccinated against COVID-19.

Rebasing and benchmarking GDP estimates

Rebasing and benchmarking of statistics is an internationally acclaimed process that countries undertake periodically to review and update the estimates of the economy's size, structure, and performance. Stats SA conducted its comprehensive rebasing and benchmarking process for the national accounts and published estimates of real GDP in August 2021. The rebasing and benchmarking exercise enabled Stats SA to review the methodology used to compile national accounts statistics by incorporating new information sources and updating the classification of economic activities. As a result, the base year was updated from 2010 to 2015, which necessitated a revision of the entire set of GDP-related time series. In addition, the size of the economy was revised upward due to the changes effected on the composition of the supply and demand sides of economic activity. As a result, the revised estimate of GDP in 2020 increased by 11 per cent to R5.521 billion, compared with the previous estimate of R4.973 billion. Thus, the annual GDP growth rate for 2020 was revised from a contraction of 7 per cent to 6.4 per cent.

Historically, benchmarking GDP has resulted in estimates that show an increase in the size of the economy. Over the last two decades, and using the new base year in each case as a measure, these increases have ranged between 1.8 per cent (2005 new base year, published in 2009) and 13.5 per cent (1995 new base year, published in 1999). In this benchmark cycle, the size of the economy is 9.2 per cent larger in the new base year of 2015, as measured by GDP at current prices (based on the production approach, which is the official measure of GDP). In the ten years between 2011 and 2020, the percentage difference between the previous and revised levels averaged 9.6 per cent based on current prices.

Figure 4.3: Revised South African real GDP growth, 2011 – 2020



Source: Stats SA, 2021

The impact of the revision to the estimates has improved the accuracy of GDP. Which will improve indicators that use GDP as a source. For example, the upward revision of the size of the economy means that the value of how much is produced per person is improved. It is now slightly higher than previously estimated, increasing GDP per capita. Another example is gross fixed capital formation (GFCF) as a percentage of GDP, which shows how a country is investing in infrastructure and other fixed assets. The ratio drops by about two percentage points with the revised GDP series.

A third example is SA's debt-to-GDP ratio. This will also be smaller using the new GDP values. Other examples of ratios that will be affected include equity-market capitalisation to GDP, government spending to GDP, and household debt to GDP, to name a few. Although these ratios will change, the trends and patterns will remain largely unaffected. Regarding purchasing power parity (PPP), the World Bank[24] (2021) currently ranks SA as the third-largest economy on the continent after Egypt and Nigeria. Egypt's GDP (PPP$ in current prices) was PPP$1 290 billion according to the World Bank's estimate, higher than that of Nigeria (PPP$1 069 billion) and SA (PPP$717 billion). If the 2020 World Bank figure for SA is adjusted by Stats SA's upward revision of 11 per cent (i.e. to PPP$796 billion), the South African economy still lags behind Nigeria and Egypt. Encouragingly, the revision pushes SA above Colombia.

Credit ratings

The largest global rating agencies, namely, Moody's Investors Service, Standard and Poor (S&P) and Fitch Ratings, all rate SA's creditworthiness at speculative[25]. On 21 May 2021, S&P affirmed the country's long term foreign and local currency debt ratings at 'BB-' and 'BB' with a stable outlook, respectively. The agency cited numerous factors that will continue to hamper medium-term economic growth and impact negatively the government's ability to keep control of the debt-to-GDP ratio. This includes structural constraints, a weak pace of economic reforms, and slow vaccination rates. An issue rated 'BB' is regarded as having speculative characteristics. While such obligations will likely have some quality and protective factors, these may be outweighed by large uncertainties or exposure to adverse conditions.

Fitch affirmed South Africa's long term foreign and local currency debt ratings at 'BB-' on 15 December 2021. In addition, the agency revised the outlook to stable from negative owing to a faster than expected economic recovery, the surprisingly strong fiscal performance this year and significant improvements in key fiscal indicators following the rebasing of national accounts. Fitch warns, however, that the pandemic continues to weigh on economic performance and remains a source of downside risk for public finances. However, the likelihood of severe adverse effects on creditworthiness has declined over the last year despite the recent emergence of the omicron variant of Covid-19 and the associated rapid surge in new cases in SA. Accordingly, Moody's kept SA's foreign and local

[24] World Bank, Open Data portal, GDP, PPP *(current international $)*

[25] The speculative-grade is the rating scale that indicates a high probability of defaulting debt; hence, bonds rated in this category have an increased risk.

currency ratings unchanged at Baa2, with a negative outlook in May 2021. The analysis of the credit rating profile mainly was unchanged compared to the November 2020 rating, when another one-notch downgrade, with a negative outlook in the speculative-grade region, was announced.

Table 4.2: South African sovereign credit ratings, May 2021

Description	S&P	Moody's	Fitch	Grade
Prime	AAA	Aaa	AAA	**Investment**
High Medium Grade	AA+	Aa1	AA+	
	AA	Aa2	AA	
	AA-	Aa3	AA-	
Upper Medium Grade	A+	A1	A+	
	A	A2	A	
	A-	A3	A-	
Lower Medium Grade	BBB+	Baa1	BBB+	
	BBB	Baa2	BBB	
	BBB-	Baa3	BBB-	
Speculative	BB+	Ba1	BB+	**Speculative**
	BB	Ba2	BB	
	BB-	Ba3	BB-	
Highly Speculative	B+	B1	B+	
	B	B2	B	
	B-	B3	B-	
	Stable outlook			
	Negative outlook			

Source: World Government Bonds, 2021

4.3.2 Sector performance and outlook

The sectoral analysis reveals that real output in the primary, secondary, and tertiary sectors contracted during the third quarter of 2021, where overall real GDP dipped by a seasonally adjusted rate of 1.5 per cent, down from a revised expansion of 1.2 per cent in the second quarter. Moreover, real economic activity by the primary sector plummeted enormously by 5.6 per cent in the third quarter of 2021, thereby contracting for the first time after four consecutive quarterly output expansions. The marked contraction by the primary sector reflects a broad-based decrease in gross value added (GVA) by both the *agricultural* and *mining* industries.

The *agricultural, forestry and fisheries industry* dropped sharply by 13.6 per cent in the third quarter subtracting 0.4 percentage points from overall real GDP, after it had reported a revised expansion of 6.2 per cent in the second quarter. The broad-based contraction in the third quarter emanated from the lower-than-anticipated production of field crops and animal products owing to fires during the civil unrest in KZN in July. In addition, the positive effects of rising agricultural commodity prices and good weather conditions had been offset by higher input costs emanating from supply constraints, bottlenecks in logistics services and higher fuel prices.

Real GVA by the *mining sector* receded by 0.9 per cent in the third quarter of 2021 as production plunged in eight subsectors. This follows two successive quarters in which production expanded marginally. The subsectors reported the most significant decrease, including coal, platinum group metals (PGMs), other metallic minerals, and gold and manganese ore. The decline in coal production reflects lower demand by industrial coal users. In contrast, the production of diamonds, iron ore, and other non-metallic minerals expanded. The iron ore production was supported by higher demand for steel as global activity continued to strengthen. Further, electricity supply challenges coupled with global supply chain disruptions also weighed heavily on mining activity.

The *secondary sector* recorded a second consecutive quarterly contraction when it dropped sharply by 3.0 per cent in the third quarter of 2021 after it had plummeted by a revised 0.8 per cent in the second quarter. The marked contraction by the secondary sector emanated from a broad-based decrease in economic activity in the *manufacturing* and *construction sectors*, which outweighed the increase in real output by the *electricity, gas and water supply sector*. As a result, real GVA by the *manufacturing sector* plunged by a further 4.2 per cent in the third quarter and subtracted 0.5 percentage points from overall real GDP, following a revised contraction of 0.8 per cent in the preceding quarter.

Table 4.3: Growth rates in industry value added for SA, 2020: Q1 and 2021: Q3

	Quarterly (q-o-q) percentage change						
	2020:Q1	2020:Q2	2020:Q3	2020:Q4	2021:Q1	2021:Q2	2021:Q3
Primary sector	**0.1**	**-21.4**	**25**	**1.8**	**1.0**	**2.9**	**-5.6**
Agriculture, forestry and fishing	9.8	-4.3	-0.1	6.6	-1.0	6.2	-13.6
Mining	-4.7	-31.1	45.0	-0.9	4.3	1.9	-0.9
Secondary sector	**-1.0**	**-28.5**	**28.3**	**4.0**	**0.4**	**-0.8**	**-3.0**
Manufacturing	-0.6	-31.4	35.3	5.3	0.5	-0.8	-4.2
Electricity, gas and water	-0.9	-11.6	12.6	-0.1	-0.3	0.7	0.4
Construction	-2.5	-29.9	16.0	1.9	0.5	-1.4	-0.5
Tertiary sector	**0.6**	**-13.1**	**9.1**	**2.0**	**1.0**	**1.4**	**-0.6**
Trade, catering and accommodation	-0.8	-26.7	25.1	1.5	2.6	2.2	-5.5
Transport, storage and communication	-1.3	-26.7	17.3	2.9	-1.1	6.9	-2.2
Finance, real estate and business services	2.7	-10.5	6.6	2.9	1.3	-0.4	1.2
General government services	0.2	-0.3	0.2	0.2	0.3	-0.9	0.4
Personal services	-0.3	-5.9	4.1	1.7	0.6	2.5	0.5
GDP	**0.1**	**-17.4**	**13.9**	**2.5**	**1.0**	**1.2**	**-1.5**

Source: Stats SA, 2021

Real output by the *electricity, gas, and water* sectors continues to expand relatively slowly. It increased by a further 0.4 per cent in the third quarter of 2021 after it had risen by 0.7 per cent in the preceding quarter. The marked increase in the third quarter emanated from a notable rise in electricity consumption. However, the sector is expected to continue to decline in production in the foreseeable future due to increasingly ageing coal-fired power plants, rising electricity costs, the recurrence of electricity load shedding, infrastructure theft and vandalism. This notwithstanding, real output by the in the third quarter was still 0.9 per cent higher than in the same period in 2020.

Real output by the *electricity, gas, and water* sectors continues to expand relatively slowly. It increased by a further

0.4 per cent in the third quarter of 2021 after it had risen by 0.7 per cent in the preceding quarter. The marked increase in the third quarter emanated from a notable rise in electricity consumption. However, the sector is expected to continue to decline in production in the foreseeable future due to increasingly ageing coal-fired power stations, rising electricity costs, the recurrence of electricity load shedding, infrastructure theft and vandalism. Notwithstanding being subdued, real output by the electricity, gas and water services sector in the third quarter was still 0.9 per cent higher than in the same period in 2020.

Real GVA by the *construction* sector dropped by 0.5 per cent in the third quarter of 2021 as non-residential building and civil construction activities continued to tumble. This marked a second successive quarterly contraction as it receded by 1.2 per cent in the previous quarter. Real output in the *construction sector* continues to be weighed down by enduring effects of the pandemic, subdued investor sentiment and the constrained fiscal position. However, average output by the construction sector in the third quarter was still 1.2 per cent higher than the corresponding period in 2020.

Real GVA by the *tertiary sector* receded marginally by 0.6 per cent in the third quarter of 2021, following an expansion of 1.4 per cent in the preceding quarter. The reported decrease emanated mainly from the *trade, catering and accommodation, transport, storage and communication services* sectors. While the real output of the *finance, real estate and business services*, and *government services* expanded during the same period, it remained lower than the decreases in the sectors mentioned above. Real GVA by the *trade, catering and accommodation sector* plummeted significantly by 5.5 per cent in the third quarter and subtracted the most from overall real GDP at 0.7 percentage points after it had expanded over four consecutive quarters. It increased by 2.2 per cent in the second quarter. The marked decrease reflects the negative impact of the civil unrest, which disrupted economic activity in most subsectors such as wholesale, retail and motor trade, and catering and accommodation services. In addition, economic activity in retail activity was negatively affected by the civil unrest, the cyberattacks on Transnet and supply disruptions. However, it should be noted that the real output of the *trade, catering and accommodation sector* in the first three quarters of 2021 was still 7.3 per cent higher than the same period in 2020.

Real output by the *transport, storage and communication services sector* moderated at 2.2 per cent in the third quarter. It subtracted 0.2 percentage points from overall real GDP after it had expanded markedly by 6.9 per cent in the previous quarter. The decrease in real GVA by this sector was driven by constrained economic activity for rail and land transport as well as transport services. *Transport* services were affected mainly by the technical challenges at transport and the civil unrest that occurred at the beginning of the third quarter. The poor state of the national rail infrastructure also hampered activity in rail freight transportation. As a result, the *transport sector's* average level of real output in the first three quarters of 2021 was 5.1 per cent higher than a corresponding period in 2020.

The real economic activity by the *finance, real estate and business services sector* reverted from a contraction of 0.4 per cent in the second quarter. It increased by 1.2 per cent in the third quarter, contributing 0.3 percentage points to overall real GDP. The modest increase in the finance sector was boosted by improved monetary intermediation and financial auxiliary services. Despite stagnant growth, real output by the finance sector in the first quarter of 2021 was still 4.6 per cent higher than the same period in 2020. Real GVA by the *general government services sector* increased by 0.4 per cent in the third quarter of 2021 after it had plunged by 0.4 per cent in the preceding quarter. The expansion reflected an increase in the number of temporary employees to assist with the local government elections.

Structural reforms to support recovery

In October 2020, the government published an economic recovery plan which outlined various reforms required to support growth. Several key reforms have been implemented through Operation Vulindlela, and remarkable progress has been made. The currently in progress reforms include the procurement of additional electricity generation capacity through the bid window of the Renewable Energy Independent Power Producer Programme, which is anticipated to add 6 800 Megawatt (MW) of renewable energy over the medium term. In addition, for *Transport*, Transnet Freight Rail will allow third-party access to the freight rail network by end-2022 to increase system volume and capacity.

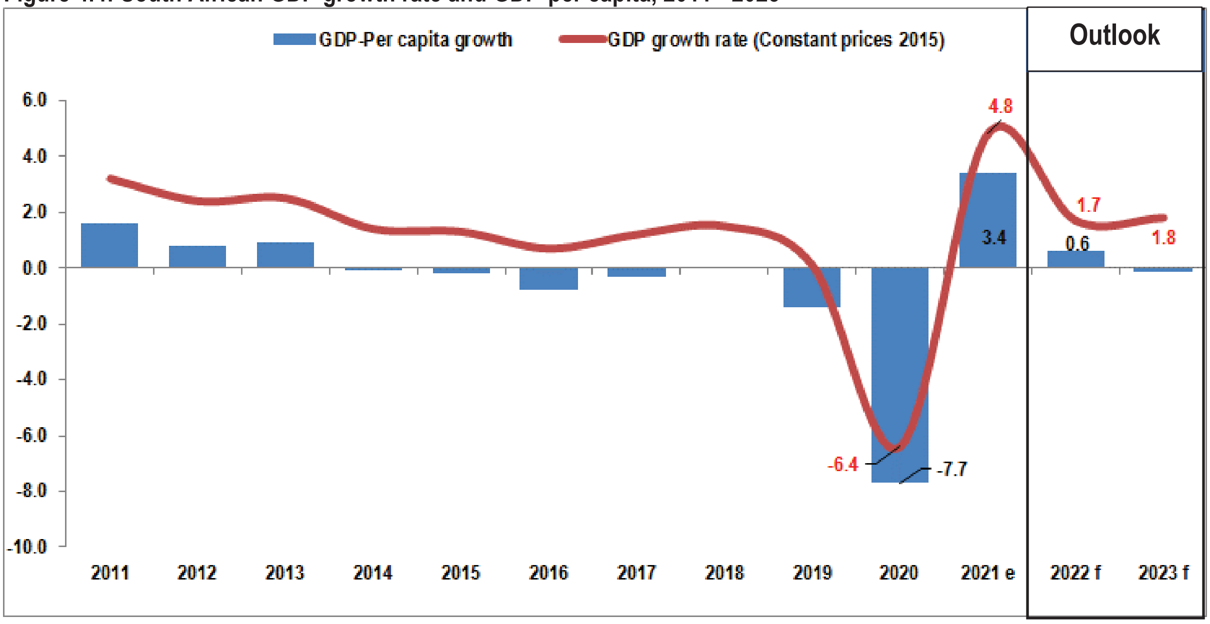
The roll-out of eVisa will support the *Tourism sector* to 15 countries by March 2022. Regarding *Telecommunications*, the government is working on the process to standardise and improve processes for applications to use property in rolling out towers and fibre to expand digital communications infrastructure. As for infrastructure, a review of the public-private partnership regulations was completed in May 2021. Its recommendations include simplifying the regulations, eliminating delays in approval and implementation, standardising project preparation, and building capacity at all levels of government.

4.3.3 Outlook for the South African economy

The economic activity showed a robust upturn in the first half of 2021 as the local economy continued to recover from the global pandemic. Activity remains buoyant amid the COVID-19 flare-ups driven by the Delta variant and related reinforcement of lockdown restrictions to curb local transmissions. However, the recovery softened in the second half of 2021 amid an ongoing rapid surge in infections that warranted stricter lockdown restrictions, continued electricity shortages, a rise in social unrest (which weighed heavily on investor and consumer confidence), and a cyberattack at Transnet. Consequently, growth in SA is estimated to have bounced back by 4.8 per cent in 2021, following a substantial contraction of 6.4 per cent in 2020. The significant recovery in 2021 reflects a resilient rebound in the *mining, manufacturing*, and *services sectors*. Real output will be further supported by the recovery in the *services sectors*, including tourism, due to improved control over virus outbreaks as widespread vaccinations progress. The country had approximately 27 per cent of the population fully vaccinated by the end of 2021.

The government is easing mobility restrictions as the Omicron wave subsides and the levels of vaccination increase. As a result, private consumption and investment are projected to rise somewhat, recovering from last year's virus restrictions and social unrest. However, economic growth is forecast to retreat to 1.7 per cent in 2022 and 1.8 per cent in 2023, reflecting persistent large-scale unemployment, high inequality, and structural impediments to growth which will continue to weigh heavily on economic activity. It should be noted that numerous constraints to long-term growth in SA existed prior to COVID-19, and some of the structural impediments are identified in the National Development Plan (NDP). These internal factors include, but are not limited to, the legacy of weak public finances and the slow implementation of reforms needed to boost productivity and employment growth. In addition, rising government debt and debt service costs will continue to constrain policy space and curtail public spending, leaving gaps in essential public services and infrastructure as a significant obstacle to more substantial potential growth.

Figure 4.4: South African GDP growth rate and GDP-per capita, 2011 - 2023



Source: Stats SA, 2021 and SARB, 2022

Note: e represents estimates, and f is forecast

The modest edge down on recovery later in 2021 was also indicated by the seasonally adjusted Absa Purchasing Managers' Index (PMI)[26] which dropped slightly to 54.1 index points in December 2021, from 57.2 in November. The reading, which is marginally above the 50 index points, suggests that growth remained in expansionary territory. Excluding inventories, all the significant subcomponents were lower in December. Another high-frequency

[26] PMI is an indicator of economic health for the manufacturing and service sectors. It provides company decision-makers, analysts, and purchasing managers with information about current business conditions.

indicator that shows a subdued economic recovery during the second half of 2021 was the composite leading business cycle indicator[27] which increased by a mere 0.6 percentage points in November, following a generally downward movement since reaching a low-base-induced peak in May, which was related to the onset of COVID-19.

The largest detractors were a decrease in the US dollar-denominated export commodity price index and a reduction in the composite leading business cycle indicator for SA's main trading partner countries. The composite coincident business cycle indicator decreased by 0.2 per cent in October 2021, as industrial production and retail and new vehicle sales decreased. On the other hand, the composite lagging business cycle indicator increased by 0.3 per cent in October 2021. The lagging indicator was upwardly revised after including unit labour cost statistics up to August 2021 following the release of national accounts statistics for the third quarter of the year.

4.3.4 Final household consumption expenditure

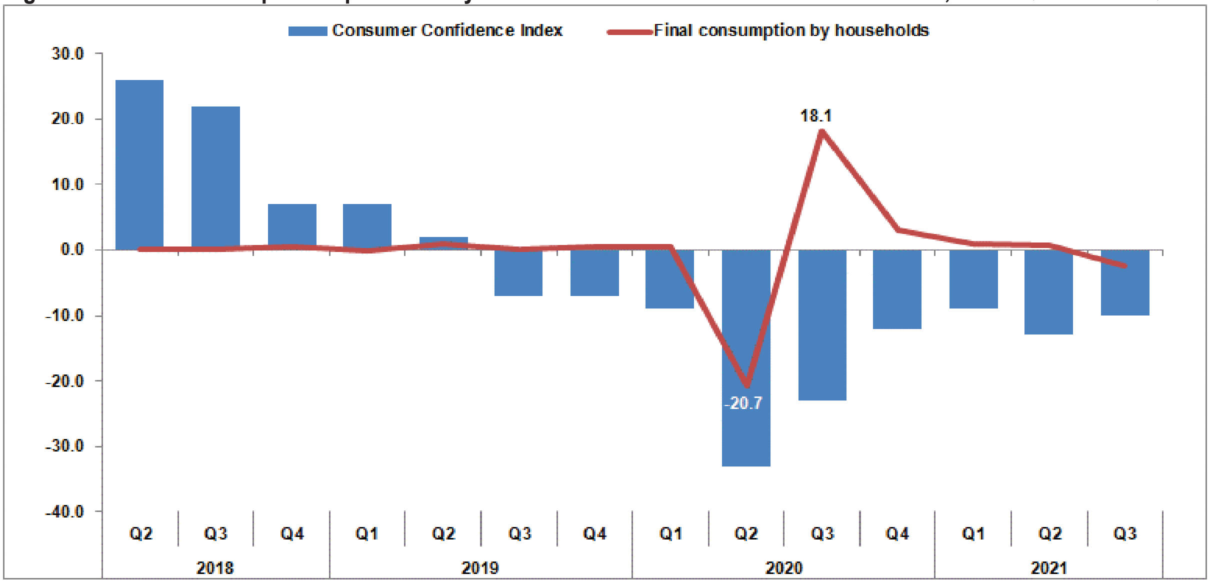
Real final consumption expenditure by households contracted enormously by 6.5 per cent on average at a seasonally adjusted but not annualised rate in 2020. Following an expansion of 1per cent in the first quarter of 2021, growth in final consumption expenditure by households deteriorated further to 0.8 per cent in the second quarter of 2021 at a seasonally adjusted but not annualised rate. The downward trend on real final consumption expenditure growth was attributable to the weak recovery in employment coupled with concomitant record-high unemployment levels and falling consumer confidence. Furthermore, as the country experienced unprecedented civil unrest in July 2021, consumer spending was disrupted, especially in the affected areas, thereby contributing to a significant contraction of 2.4 per cent in real final consumption expenditure by households in the third quarter of 2021. Real consumer spending dropped markedly on durable, semi-durable and non-durable goods, while spending on services was an exception as it remained broadly unchanged.

Real consumer spending on durable goods plummeted significantly by 9.3 per cent in the third quarter of 2021, with an enormous decrease reported for furniture and household appliances, computers and related equipment, and recreational and entertainment goods. The second-largest contraction in real consumer spending was reported on the semi-durable goods category at 5.2 per cent in the third quarter. While real spending declined for all semi-durable goods categories, household textiles, furnishings and glassware, and recreational and entertainment goods reported a massive decrease (Figure 4.5). Real final consumption expenditure by households on non-durable goods receded by 3.1 per cent in the third quarter. This was primarily driven by a notable decline in consumer spending on food and beverages and tobacco. There was also a substantial decrease in household fuel,

[27] The business cycle indicators (BCI) are a composite of leading, used to forecast changes in the direction of a country's overall economy. For example, see the SARB (2021): *Composite business cycle indicators for SA*, released on 29 January 2022.

power and water, and petroleum products in the third quarter of 2021, reflecting the impact of the three successive monthly fuel price increases and the marked increase in electricity prices in July.

Figure 4.5: Final consumption expenditure by households and consumer confidence index, 2018: Q2 to 2021: Q3



Source: Stats SA, 2021 and BER, 2021

The First National Bank/Bureau of Economic Research (FNB/BER) Consumer Confidence Index[28] (CCI) continue to trend on the negative territory that has been prolonged since the third quarter of 2019. The CCI recovered marginally to -10 index points in the third quarter of 2021, after it dipped further to -13 index points in the second quarter. The marginal improvement in the third quarter can be attributed to an increase in the household financial position and time-to-buy durable goods sub-indices. The civil unrest did not weigh much on consumer confidence as the negative impacts were offset by the fiscal in the form of the Social Relief of Distress (SRD) grant that was reintroduced and cash allowances for government employees. Instead, the confidence level was boosted somewhat by the roll-out of the COVID-19 vaccinations to the 35-49 age group from 15 July and subsequently to the 18-35 age group from 20 August. The latest reading reflects a level of resilience among consumers and consumer spending during the third quarter of 2021.

4.3.5 Gross fixed capital formation

Real gross fixed capital formation (GFCF) reported no growth in the third quarter of 2021 after it had expanded by 1.2 per cent in the preceding quarter. During the third quarter, the subdued growth in real GFCF could be attributed to the most considerable negative contribution of 1.4 percentage points by the transport equipment subsector that subtracted the most from the overall real GFCF. However, the negative contribution by the transport equipment

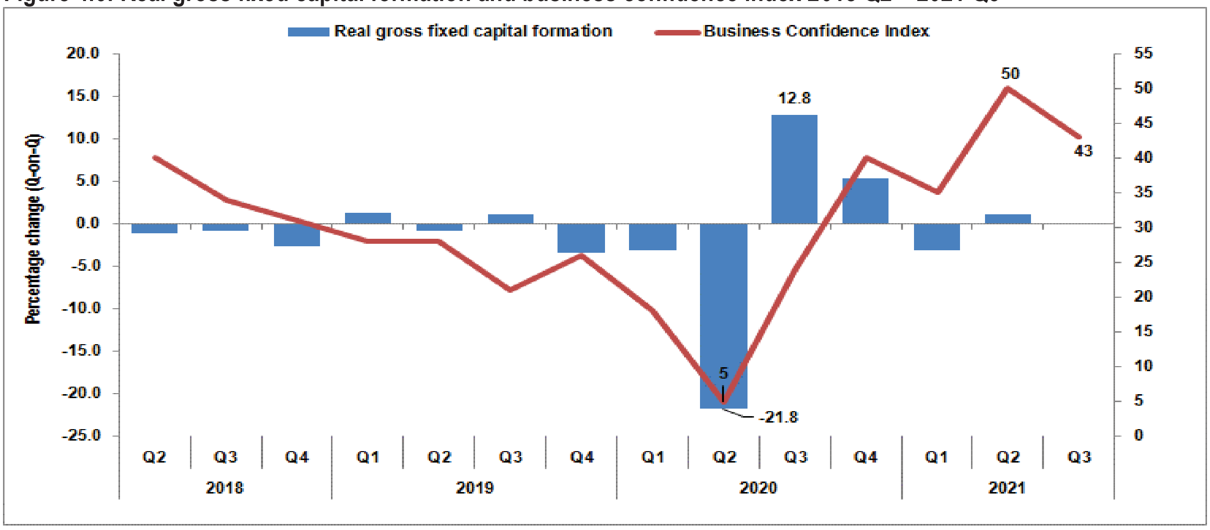
[28] FNB/BER (2020): *FNB/BER Consumer confidence index,* issued by FNB, 14 December 2021. Available online: https://www.ber.ac.za/BER%20Documents/FNB/BER-Consumer-Confidence-Index/?doctypeid=1054, Accessed on 05 January 2022

subsector was partly neutralised by positive growth and contribution by machinery and other equipment as well as other assets. The most significant increase was reported by other assets at 8.8 per cent, thereby contributing 1 percentage point to the overall real GFCF (Figure 4.6).

This was followed by machinery and equipment that expanded by 1.8 per cent and contributed 0.7 percentage points and residential buildings with 1.5 per cent, contributing 0.2 percentage points to overall real GFCF. However, it is evident from the figure that growth in real gross fixed capital formation remained tentative as it began with an enormous decrease of 3.1 per cent in the first quarter. Consequently, the average real GFCF in the first three quarters of 2021 was 1.9 per cent higher than in the corresponding period in 2020.

The RMB/BER Business Confidence Index (BCI) moderated to 43 indices in the third quarter of 2021, following a significant jump to 50 indices in the second quarter. The moderate retreat in BCI during the third quarter reflects the adverse effects of the unexpected shock of the civil unrest in July 2021. However, it should be noted that the developments in the third quarter are likely to have an insignificant setback to the economic recovery. As a result, the retail and wholesale trade confidence dampened the setback, while manufacturing confidence only fell by five points after the 21-point solid gain in the preceding quarter.

Figure 4.6: Real gross fixed capital formation and business confidence index 2018 Q2 – 2021 Q3



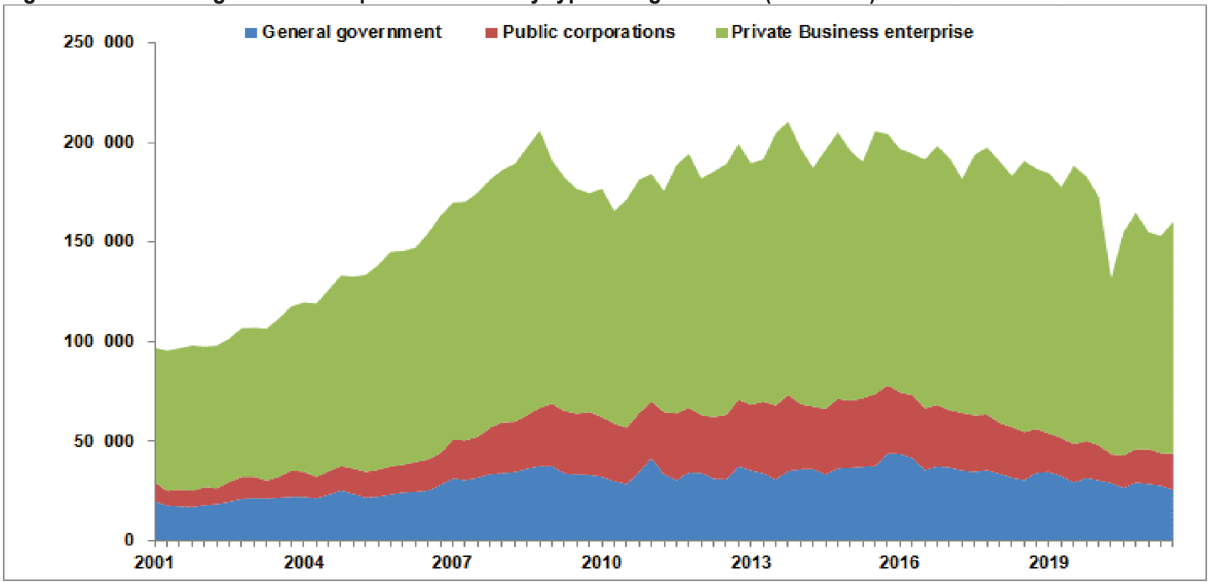
Source: Stats SA, 2021 and BER

Real GFCF by private business enterprises reported a decrease of 1.2 per cent in the third quarter of 2021, after expanding significantly by 3.3 per cent in the second quarter. The contraction reflects constrained capital spending on construction works that outweighed the increased investment in machinery and equipment. Despite the contraction, private sector capital investment remains the most significant contributor to total nominal gross fixed capital formation.

On the other hand, capital spending by the general government declined by 0.9 per cent in the third quarter, down from an expansion of 0.8 per cent in the preceding quarter. The contraction emanated from continuous delays in the implementation of projects. Following a contraction of 4 per cent in the second quarter of 2021, real GFCF by the public corporations increased by 9.5 per cent in the third quarter. The increase in capital spending by public corporations was supported by higher investment in transport equipment by the electricity subsector and in construction works by the transport subsector.

Figure 4.7 shows that private business enterprises have the largest nominal GFCF with about R116 billion, followed by the general government with more than R25 billion and public corporation with R18.1 billion. Real inventory holdings decreased by a further R0.9 billion at seasonally adjusted and annualised 2015 prices, in the third quarter of 2021, after declining by R36.9 billion in the second quarter. The marked downward trajectory in inventory reflects shortages of raw materials and some finished goods due to ongoing global supply chain disruptions. The most significant decreases in inventory during the third quarter were reported in the mining, manufacturing, trade and transport sectors, while the electricity and construction sectors continued to accumulate inventories.

Figure 4.7: Nominal gross fixed capital formation by type of organisation (R billions) 2001 Q1 – 2021 Q3



Source: South African Reserve Bank, 2021

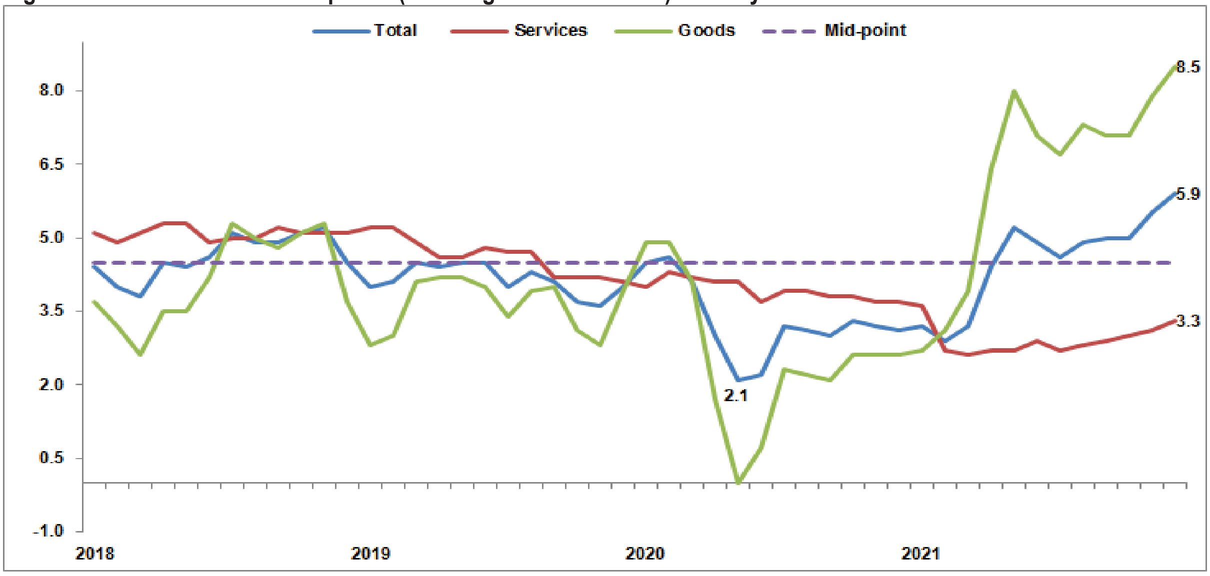
4.3.6 Inflation and interest rate

The headline inflation rate continues to rise due to a significant increase in transport costs primarily driven by fuel prices. Although the inflation rate remains contained within the South African Reserve Bank's (SARB's) inflation target of 3 to 6 per cent, it surpassed the mid-point of the target in May 2021. It is estimated that the headline consumer price index (CPI) accelerated by a further 0.4 percentage points from 5.5 per cent in November to 5.9 per cent in December 2021. Therefore, the headline inflation rate remained contained within the target as it average at 4.5 per cent in 2021, as predicted by the SARB, marginally higher than 3.3 per cent recorded in 2020. The persistent rise in headline CPI reflects the notable quickening in goods inflation, which remains above the upper band of the target range at 8.5 per cent in December, following a moderate increase from 7.9 per cent in

November. On the other hand, service inflation slightly surpassed the lower target band at 3.3 per cent in December, up from 3.1 per cent in the previous month.

The items that contributed significantly to the annual inflation rate in November 2021 included *transport, food and non-alcoholic beverages; housing and utilities; and miscellaneous goods and services*. Transport reported the highest increase at 16.8 per cent year-on-year, contributing 2.3 percentage points to the overall CPI annual rate. The largest contributor to higher transport costs was *private transport operation* at 32.4 per cent driven mainly by the fuel prices at 40.5 per cent. This was followed by the cost of public transport, which grew by 9.9 per cent.

Figure 4.8: Headline consumer prices (% change over 12-month) January 2018 – December 2021



Source: Stats SA, 2022

The costs of food and non-alcohol beverages accelerated by 5.5 per cent year-on-year, translating to a contribution of 1 percentage points to the overall CPI annual rate. The increase reported in this group reflects the effect of elevated food inflation, which grew by 5.9 per cent, whereby *oil & fats (20.8 per cent); meat (8.6 per cent);* and *unprocessed (6.4 per cent)* food items were the fastest-growing items. Non-alcohol beverages increased by 1.4 per cent year-on-year, driven mainly by cold beverages with a 2.1 per cent growth. The third-largest contributor to the CPI annual rate was *Housing utilities*, as it increased by 4.2 per cent year-on-year, contributing 1.0 percentage points to the overall CPI annual rate. The main contributors to the growth in the costs of housing and utilities were *electricity & other fuels; water & other services* at 14.0 per cent, 4.4 per cent; and maintenance and repair at 4.2 per cent year-on-year, respectively. Lastly, *miscellaneous goods and services* increased by 4.3 per cent year-on-year, contributing 0.7 percentage points to the overall CPI annual rate. The costs of *miscellaneous goods and services* reflect a rise in *insurance and financial services* at 5.0 per cent and 4.7 per cent year-on-year, respectively.

The annual Producer Price Index (PPI) (final manufacturing) continues to increase faster. The PPI indicates changes in producer prices of locally produced commodities, including exports[29]. In November 2021, the annual headline PPI jumped by 1.5 percentage points to 9.6 per cent, up from 8.1 per cent in October. The most significant contributor to annual PPI in November was *coke, petroleum, chemical, rubber and plastic products* at 4.5 percentage points emanating from an increase of 22.8 per cent year-on-year. This was followed by *food products, beverages and tobacco products*, which increased by 5.4 per cent and contributed about 2.0 percentage points. Lastly, *metals, machinery, equipment and computing equipment* contributed 1.8 percentage points following a 12.6 per cent growth year-on-year.

The SARB revised its forecast for headline inflation slightly upward by 0.1 percentage points to 4.3 per cent in 2022 and 4.6 per cent in 2023. The revised inflation outlook reflects the effects of inflationary risks that remain elevated amid persistent rise in global producer price and food price inflation. Other inflationary factors contributing to the forecast upside inflation risk include a sharp upsurge in international oil prices coupled with numerous internal risks such as higher electricity prices and other administered prices that continue to present short- and medium-term risks. This is further exacerbated by a weaker currency, higher domestic import tariffs, and escalating wage demands.

Despite inflation projected to remain contained closer to the mid-point of the target, the Monetary Policy Committee (MPC) decided to raise the repurchase rate (repo rate)[30] by 25 basis points to 3.75 per cent per annum with effect from November 2021. The decision to increase policy rates emanated from higher inflation risk while the level of policy accommodation remains high. This marks the first hike in the repo rate since it dropped significantly by 300 points between January and July 2020.

4.4 KwaZulu-Natal economic review and outlook

4.4.1 Performance of KZN economy

The provincial economy withstood the second wave of COVID-19 infections driven by a highly infectious *501Y.V2* variant toward the end of 2020 and early 2021. As indicated above, the country was moved to adjusted level 3 at the height of the second wave of infections. Encouragingly, the regional gross domestic product (GDP-R) was stronger than-anticipated at 2.1 per cent in the first quarter of 2021, down from 11.6 per cent in the final quarter of 2020. It is evident from the marginal increase in GDP-R that the lockdown restrictions enforced during the second

[29] The PPI is defined as "A measure of the change in the prices of goods either as they leave their place of production or as they enter the production process."

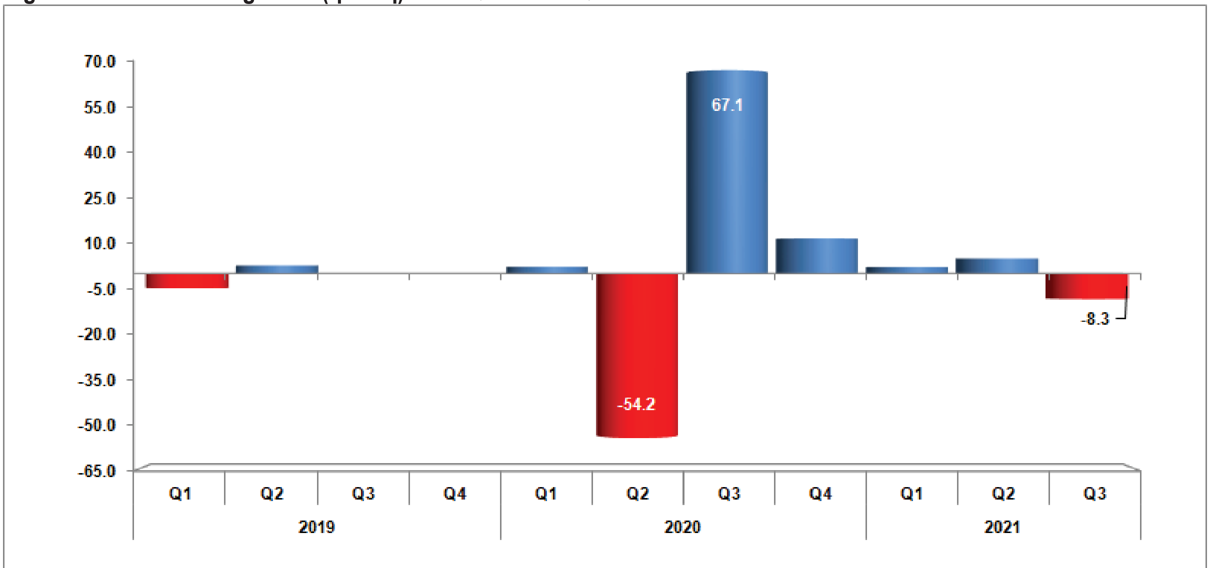
[30] Repo is the rate at which the central bank of a country (SARB) lends money to commercial banks. Repo rate is used by monetary authorities to control inflation.

wave in December 2020 had minimal impact on most sectors, given its lower magnitude compared to the great lockdown in April 2020.

Further, businesses and households were also beginning to adapt to operate under COVID-19 restrictions, with strict adherence to face masks and social distancing. The first quarter of 2021 also marked a significant milestone as the province commenced the vaccination roll-out campaign targeting healthcare workers in line with the national vaccines roll-out strategy. Similar to the national trend, the provincial vaccine roll-out began at a relatively slower pace due to limited vaccinations available, but it accelerated as the country secured more jabs.

The provincial economy also remained strong amid the looming third wave of infections which necessitated the reinstatement of moderate lockdown restrictions toward the end of the second quarter of 2021. As a result, real GDP-R expanded by 5 per cent in the second quarter of 2021 as the lockdown regulations were less restrictive and could not significantly affect the provincial economic activity. However, the COVID-19 infections continued to surge at an alarming rate heading toward the peak of the third wave. Therefore, the lockdown restrictions increased marginally to "adjusted level 4" early in July 2021.

Figure 4.9: KZN's GDP growth (q-on-q) 2019 Q1 – 2021 Q3



Source: IHS Markit, 2022

During the same period, in the second week of July 2021, civil unrest erupted in the province and spread to some parts of Gauteng. The ripple effect has been enormous, with infrastructure destroyed, supply chains disrupted, food security threatened, racial tensions inflamed, and the country's reputation and investment taking a knock. The combination of the third wave and public violence severely affected various sectors to the extent that the real GDP-R contracted markedly by 8.3 per cent in the third quarter of 2021. The broad-based decrease in overall GDP-R during the third quarter was primarily driven by *agriculture, trade, manufacturing, and transport sectors*.

Economic impact of the civil unrest

Over the period 9 to13 July 2021, the country suffered the unprecedented civil unrest that started in KZN and spread to some parts of Gauteng and Mpumalanga. The violent protests were characterised by extensive looting, vandalism, destruction and burning of private and public properties. The damage was acute in KZN, where Durban and Pietermaritzburg were the hardest hit, followed by Nongoma, Eshowe and Boston. Given the extent of destruction to property, the looting of goods, and violence, resulted in the closure of businesses which reduced working hours. In addition, the economic impact of the civil unrest escalated into billions of rand, reduced investor confidence in the province (ultimately blocking foreign direct investments (FDI)) , and tarnished KZN as a holiday destination.

In addition to the above, there were real threats to food security and health of KZN due to damage to food manufacturing plants disrupting productions in many economic sectors, logistical value chains distorted, thereby hampering delivery of supplies to retail stores and supermarkets. Consequently, there were food shortages, and people in areas such as Pietermaritzburg and Durban began to rush to buy food as most supermarkets were destroyed and burnt.

The preliminary reports released during the aftermath of the unrest by the South African Property Owners Association (SAPOA) revealed that the cost of the unrest was estimated to exceed R20 billion in KZN. At the same time, the overall impact on the national GDP would amount to R50 billion. Over 200 shopping malls were targeted, and 1 787 retail stores were impacted and damaged. The eThekwini Economic Development and Planning Committee (ECOD) indicated that the cost to the municipality was estimated to be more than R20 billion as it combines more than R1.5 billion loss of stock and above R15 billions of damage to property and equipment. In addition, the crisis has negatively impacted more than 50 000 informal traders and more than 40 000 businesses, many of which may never come back. The ECOD also noted that more than 150 000 were at risk.

4.4.2 Sector performance analysis

As the provincial economy rebounds from the substantial contraction induced by COVID-19, economic sectors have shown noticeable improvement in economic activity, but the performance varies across sectors. Real output by the agricultural sector plummeted significantly by 44.7 per cent in the third quarter of 2021. It subtracted the most from overall GDP-R at 3.1 percentage points, following a revised expansion of 24.8 per cent in the second quarter. The marked contraction in the third quarter reflects the negative impact of the civil unrest on the production of field crops and animal products. The social unrest also affected logistics services, thereby hampering agricultural commodities' transportation for exportation. Another important factor that impacted agricultural commodities during the third quarter as global supply disruptions induced by the pandemic.

Real GVA by the *mining* sector decreased marginally by 3.7 per cent in the third quarter of 2021, after two consecutive quarters of output expansion. Mining production was weighed down by uncertain power supply and global supply disruptions. Consequently, several subsectors such as coal, PGMs, other metallic minerals, and gold and manganese ore reported the largest production decrease. The *manufacturing* sector reported the third-largest decrease. It dropped by a further 15.6 per cent in the third quarter of 2021, following a revised contraction of 3.1 per cent in the previous quarter. During the third quarter, the decrease in output resulted in the sector being among those that subtracted the most from overall real GDP-R at 2.5 percentage points.

Economic activity in the *manufacturing* sector was negatively impacted by numerous factors, including stricter lockdown restrictions at the height of the third wave. In addition, civil unrest erupted in the province, continuous electricity challenges, and global supply disruptions. Consequently, several subsectors such as motor vehicles, food, and beverages reported a significant decrease in production. As a result, real GVA by the *electricity* sector maintained a positive trajectory but moderated marginally to 2.4 per cent in the third quarter of 2021. The sector contributed 0.1 percentage points to real overall GDP-R after it had expanded by 4.6 per cent in the second quarter. Economic activity in the electricity sector was supported mainly by electricity consumption due to low temperatures during most of the quarter.

Table 4.4: Growth rates in industry value added for KZN, 2020: Q1 – 2020: Q3

	Quarterly (q-o-q) percentage change						
	2020: Q1	**2020: Q2**	**2020: Q3**	**2020: Q4**	**2021: Q1**	**2021: Q2**	**2021: Q3**
Agriculture	36.3	-18.9	-2.9	26.9	-5.8	24.8	-44.7
Mining	-9.4	-76.4	354.1	-2.8	17.3	8.6	-3.7
Manufacturing	-2.5	-77.9	235.6	23.5	2.6	-3.1	-15.6
Electricity	-4.6	-38.8	62.4	1.8	2.6	4.6	2.4
Construction	-9.9	-76.0	80.1	7.3	1.2	-5.7	-2.2
Trade	-2.9	-71.1	144.3	5.5	10.0	8.8	-20.4
Transport	-4.6	-71.2	89.2	12.0	-4.8	30.2	-8.6
Finance	11.0	-35.9	29.2	12.2	5.2	-1.7	4.9
Community services	-0.4	-14.8	11.2	4.6	2.0	5.2	1.8
GDP at market prices	**1.7**	**-54.4**	**67.3**	**11.6**	**2.4**	**5.3**	**-8.3**

Source: IHS Markit, 2022

Note: y q-o-q represents quarter-on-quarter

The *construction sector* contracted further by 2.2 per cent in the third quarter of 2021. As a result, it subtracted 0.1 percentage points from overall GDP-R, following a revised contraction of 5.7 per cent in the previous quarter. The subdued growth in the *construction sector* reflects slow economic activity in civil construction and residential building. In addition, the reported contraction was induced by a decrease in building activity in the residential and non-residential subsectors and civil construction due to the lasting impact of the pandemic and weak investor sentiment.

Following four successive quarters of output expansion, the *trade sector* recorded the second-largest decrease of 20.4 per cent in the third quarter of 2021, subtracting 2.6 percentage points from overall real GDP-R, after it had increased by 8.8 per cent in the previous quarter. The trade sector's substantial decrease in real output emanated from a broad-based contraction in several sectors affected by the tighter lockdown restrictions, civil unrest, and cyberattacks on Transnet and global supply disruptions. The subsectors that recorded the most significant decrease include *wholesale, retail & motor trade* and *catering & accommodation* services. In addition, the *catering and accommodation* subsector was weighed down by lockdown restrictions that prohibited sit-ins at restaurants and alcohol sales.

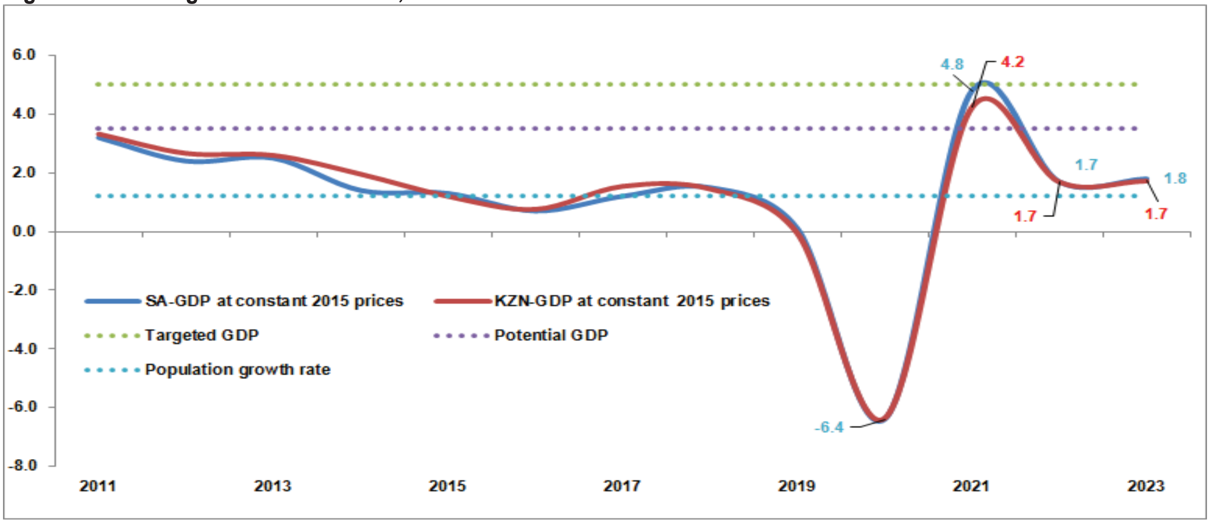
After expanding significantly by 30.2 per cent in the second quarter, the *transport* sector contracted markedly by 8.6 per cent in the third quarter of 2021. As a result, it subtracted 0.9 percentage points from overall real GDP-R. The contraction recorded in this sector reflects the effects of reduced activity in subsectors such as *rail & land transport* and transport services. A poor state of rail infrastructure weighed down economic activity in the rail subsector due to vandalism which impeded transportation of bulk goods and travellers. *In addition, transport* services were primarily affected by the technical challenges at transport and the civil unrest that occurred at the beginning of the third quarter.

Real economic activity in the *finance* sector reverted from a contraction of 1.7 per cent in the second quarter. It expanded moderately by 4.9 per cent in the third quarter of 2021, contributing 0.9 percentage points to overall real GDP-R. The sector benefited from improved monetary intermediation and auxiliary financial services. The community services sector moderated to 1.8 per cent in the third quarter of 2021, down from 5.2 per cent in the preceding quarter, contributing 0.4 percentage points to overall real GDP-R. The expansion reflected an increase in temporary employees to assist with the local government elections. The continuous increase in government employees, especially in health-related services in the provincial government, supported the sector.

4.4.3 Economic outlook for KZN

The provincial economy continues to rebound from the contraction of 6.4 per cent induced COVID-19 in 2020. The economic recovery remains resilient despite the risk imposed by COVID-19 as it continues to come back in different waves driven by new variants. The buoyant recovery is supported by numerous factors, including fiscal policy measures executed to varying tiers of government, accommodative monetary policy stance pursued by the central bank; provincial economic recovery plans; and less restrictive COVID-19 regulations. However, it should be noted that KZN's economic recovery path, like in many countries globally, depends heavily on the effective management of the virus.

Figure 4.10: GDP growth: KZN and SA, 2011 - 2023



Source: IHS Markit, 2022 and Stats SA, 2021

Vaccines have been hailed for improving the management of the virus by reducing severe illness and hospitalisation related to COVID-19. This implies that strong economic recovery to reach pre-COVID levels of real output would require sufficient vaccines take-up by the population. While vaccinations campaigns continue in the province, it has yet to achieve the desired proportion of the population. Among the factors that hold back vaccinations in order to reach herd immunity could be counted inadequate access and distribution of vaccines across EMDEs and vaccines hesitation by the population, which is also a global phenomenon. The province has inoculated more than 4.3 million citizens as of January 2021.

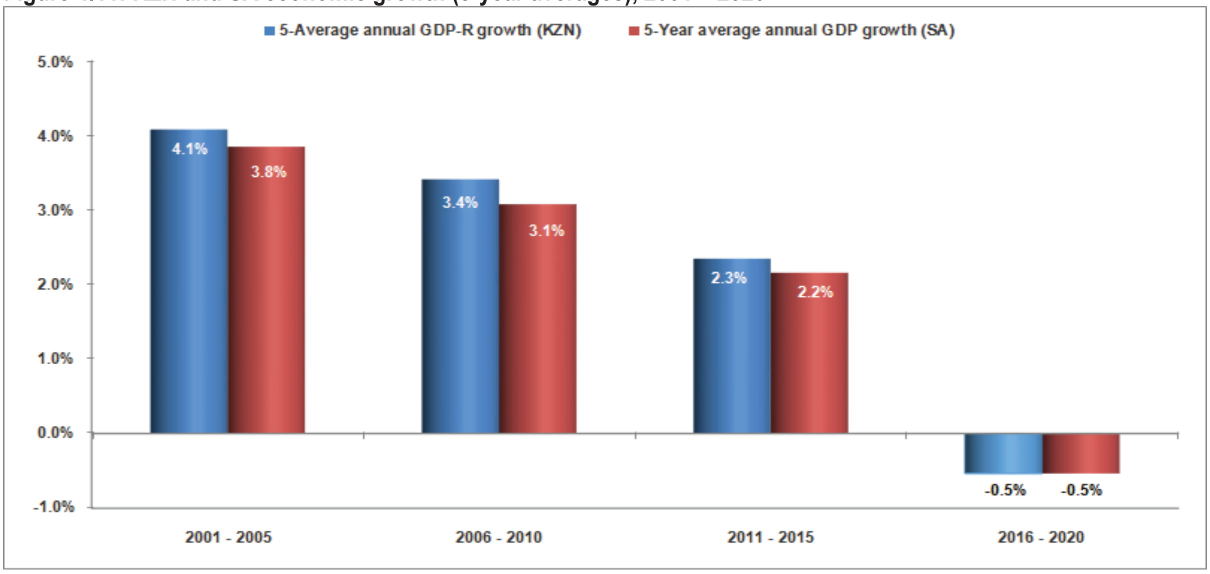
Figure 4.10 shows that KZN's economy is estimated to have expanded by 4.2 per cent in 2021. However, it is expected to retreat to 1.7 per cent in 2022 and 2023. The provincial economic performance for 2021 dropped moderately as the civil unrest, the third wave, cyberattack to Transnet, and global supply disruptions took a tremendous toll on economic activity, thereby inducing a contraction on GDP-R outturn for the third quarter. However, as the negative impacts of these factors dissipate and the lockdown restrictions remain at adjusted level one for the entire festive season despite the fourth wave of infections driven by the *Omicron* variant, real GDP-R is expected to revert from the contraction in the third quarter. The risk for COVID-19 to come in highly controversial variants that could undermine the efficacy of vaccines remain high.

KZN Five-year average growth

The emergency of COVID-19 exacerbated the challenges of sluggish economic growth that KZN had been experiencing over the past decade. Figure 4.6 depicts the average annual GDP growth rate over four blocks of five years from 2001 to 2020. The provincial economy began a downward trend in 2011, and it strengthened in 2016 owing to the severe drought that engulfed many parts of the country, KZN included. However, during this period, real GDP-R growth remained significantly below 5 per cent that is envisioned in the Provincial Growth and Development Strategy (PGDS). Moreover, real GDP-R contracted by 0.1 per cent in 2019, before it dropped sharply by 6.4 per cent in 2020 amid disruption to economic activity caused by COVID-19. However, KZN realised robust economic growth prior to the global credit crunch of 2008, but it deteriorated significantly in subsequent periods after the financial crisis.

The provincial economy grew an average of 4.1 per cent on a five-year between 2001 and 2005. This growth rate was slightly higher than the national average of 3.8 per cent. Despite losing momentum, the average annual GDP-R growth expanded by 3.4 per cent between 2006 and 2010, surpassing the national average by 0.3 percentage points. This period includes the highest growth rate of 6.1 per cent recorded in 2007, which remains a peak for the KZN's economy. However, it contracted by 1.4 per cent in 2009 due to unfavourable economic implications associated with the financial crisis. A consistently downward trajectory has characterised the post-financial crisis period as the provincial economy realised an average of 2.3 per cent between 2011 and 2015. This growth rate is marginally higher than the national average of 2.2 per cent over the same five-year period.

Figure 4.11: KZN and SA economic growth (5-year averages), 2001 – 2020



Source: Stats SA, 2020 and IHS Markit, 2022

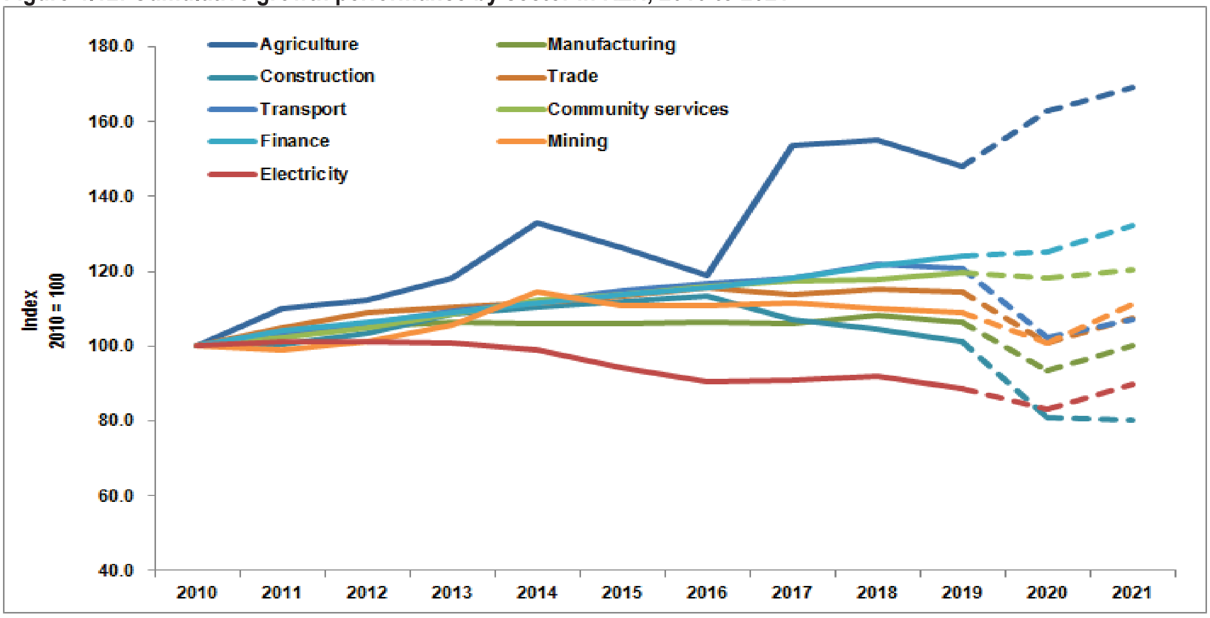
Despite a rebound of 3.6 per cent in 2010, economic growth could not reach the pre-financial crisis levels. Growth in the province averaged at 3.7 per cent over a decade between 2001 and 2011, slightly surpassing the national rate of 3.4 per cent (Figure 4.11). The downward trend continued in the last five-year period from 2016 to 2020, where provincial and national GDP growth reported a negative average growth rate of 0.5 per cent. This period includes severe drought in 2016 across the country and the COVID-19 pandemic that caused a substantial contraction as it hit the global economy since 2020.

Cumulative sector performance in KZN

Figure 4.12 depicts the cumulative growth performance of sectors in KZN between 2010 and 2011. Agriculture remains the fastest growing sector in the province. It remained resilient during the COVID-19 pandemic, disrupting economic activity across numerous sectors. The sector realised a noticeable decline in cumulative growth in 2016 amid the severe drought across the country, KZN included. However, it recovered strongly as the drought dissipated, particularly in 2017 and has maintained a robust cumulative growth coming into 2020. The Figure shows that agriculture grew by 162.7 index points and is expected to rise by a further 169.1 index points in 2021.

The finance sector showed a resilient upward trend over the period under review and reported a cumulative growth of 125.2 index points in 2020, which is expected to climb progressively to 132.1 index points in 2021. Other sectors maintained marginally stable trends overtime before a significant fall in 2020 due to the COVID-19 pandemic. On the other hand, the construction sector has declined gradually since 2016 with no significant improvement. As a result, it plummeted significantly to 80.8 index points in 2020 and is expected to remain flat at 80.2 index points in 2021.

Figure 4.12: Cumulative growth performance by sector in KZN, 2010 to 2021

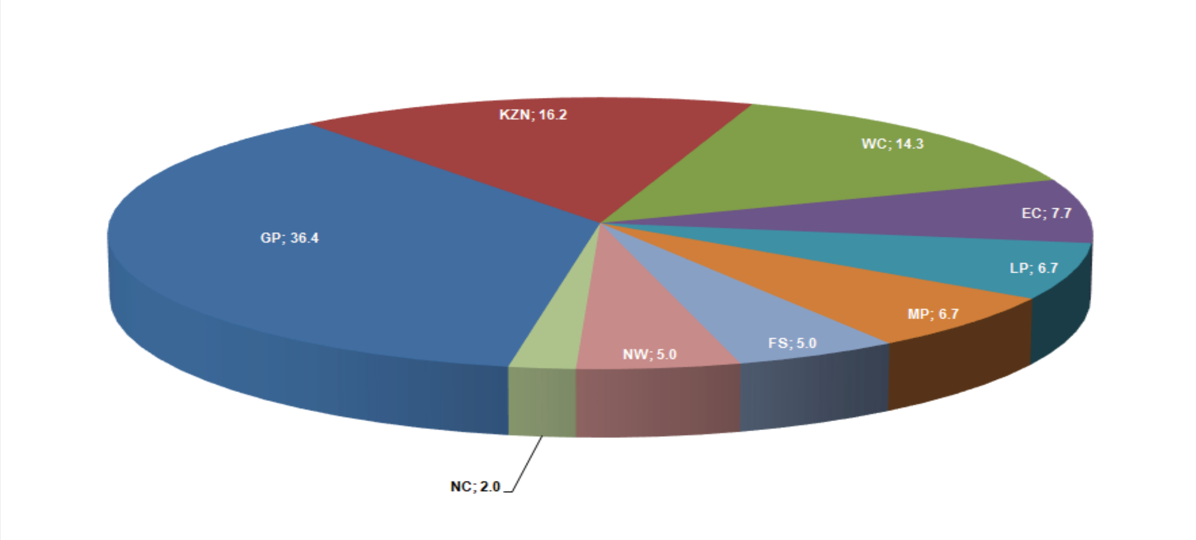


Source: IHS Markit, 2022

Regional economic growth comparison

In 2020, Stats SA undertook rebasing and benchmarking GDP estimates, resulting in a marginal change to provincial GDP estimates as the base year shifted to 2015. As a result, KZN's real output contraction induced by COVID-19 was revised downward to 6.4 per cent. Consequently, total real GDP-R estimates also changed dramatically. In absolute terms, KZN produced real GDP-R amounting to about R693.158 billion in 2020, translating to 16.2 per cent of the national real GDP. This real GDP-R was significantly lower than that of GP, estimated at R1.558 trillion, approximately 36.4 per cent of the national real GDP, but higher than Western Cape (WC) at R612.556 billion or 14.3 per cent cent. The least contributors to the real national GDP include Free State (FS), North West (NW) and Northern Cape (NC) at 5.0 per cent and 2.0 per cent, respectively (Figure 4.13).

Figure 4.13: Percentage share of the national real GDP by provinces, 2020

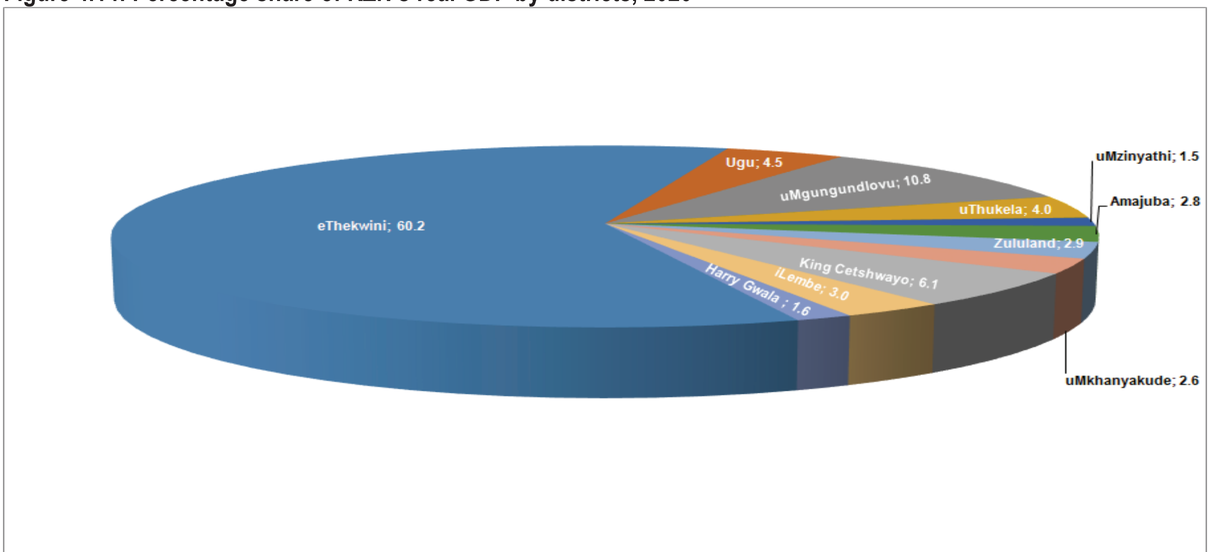


Source: IHS Markit, 2022

Municipal economic contribution

An excess of 60 per cent of the KZN's real GDP-R in 2020 was generated by the eThekwini Metro, the key economic hub of the province. The significant contribution by eThekwini could be attributed to various economic activities, and the Metro is home to the most prominent and busiest harbour port. The Durban port is the largest and most active shipping terminal in sub-Saharan Africa as it handles up to 31.4 million tons of cargo per year. It is also noted that districts with urban settings significantly contribute to the provincial economy. In this regard, uMgungundlovu and King Cetshwayo were the most critical contributors after the Metro, with 10.8 per cent and 6.1 per cent, respectively. On the other hand, Districts that are characterised by rural settings such as uMzinyathi (1.5 per cent), Harry Gwala (1.6 per cent), and uMkhanyakude (2.6 per cent) contribute the least toward the GDP-R due to limited economic activities and low employment rates (Figure 4.14).

Figure 4.14: Percentage share of KZN's real GDP by districts, 2020

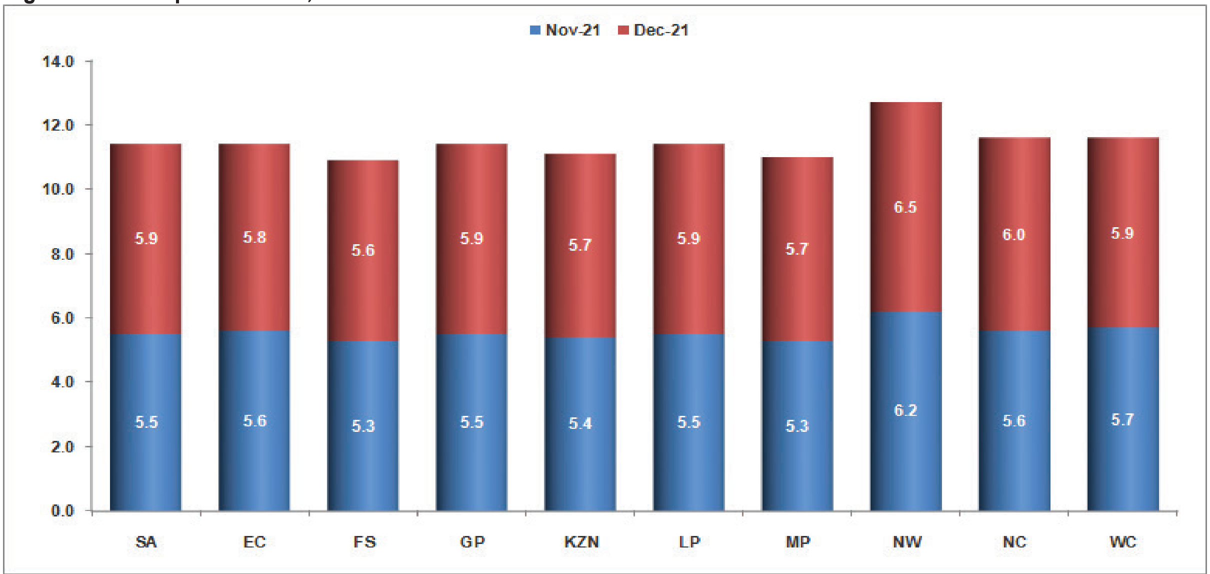


Source: IHS Markit, 2022

4.4.4 Regional inflation

The NW (6.5 per cent) was the only province with regional headline inflation above the SARB's targeted range of 3 to 6 per cent in December 2021. Over the same period, headline inflation in the NC was at the upper end of the targeted band. On the other hand, the remaining provinces had their headline inflation slightly below the national average of 5.9 per cent. On the other hand, with 5.7 per cent up from 5.4 per cent in November, KZN was among the provinces that reported headline inflation slightly below the national average, such as the FS at 5.6 per cent, Mpumalanga (MP) at 5.7 per cent, and Eastern Cape (EC) at 5.8 per cent in December.

Figure 4.15: CPI per Province, November – December 2021



Source: Stats SA, 2022

4.5 International trade

International trade is an engine of growth that creates better jobs, reduces poverty, and increases economic opportunity. Without international trade, it would be difficult for countries to benefit from the uneven distribution of resources. Hence, international trade has strengthened substantially over the past decades as most countries increasingly joined the World Trade Organization (WTO), which promotes trade liberalisation and free trade[31]. A study by World Bank (2021) shows that trade liberalisation increases economic growth by an average of 1.0 to 1.5 percentage points, resulting in 10 to 20 per cent higher income after a decade. Trade has increased income by 24 per cent globally since 1990. As a result, since 1990, over one billion people have moved out of poverty because of economic growth underpinned by better trade practices.

The report also shows that trade is linked to higher female labour participation with greater formality and higher wages. Exporters in developing countries employ more women than non-exporters, and women comprise up to 90 per cent of the workforce in export processing zones. Furthermore, fostering cooperation through trade and

[31] Trade liberalisation involves removing trade barriers or restrictions to ensure a free flow of goods between countries.

business is pivotal in helping countries escape conflicts. In addition, the COVID-19 pandemic has highlighted the need to keep critical goods flowing through borders. The World Bank Group also supports country-led reforms to limit the pandemic's impact and foster economic recovery. There is a need to strengthen the global trading system to promote greater inclusiveness and help developing countries address trade-related constraints to growth. The international trade rules system nurtured unprecedented economic growth across multiple generations facing tensions. These tensions should not prevent all countries from looking at the unique, untapped benefits further trade reform can bring to the global economy[32].

Despite being a developing nation, South Africa (SA) has made significant progress towards improving international trade since adopting trade liberalisation in 1995 by joining the WTO. In addition, the country has diversified and reinforced strong relationships with other regions through, for example, engaging in regional trade agreements and trade blocs like the Southern African Customs Union (SACU) and the Southern African Development Community (SADC). These regional trade blocs have the primary aims of economic cooperation, removal of tariffs, and trade barriers.

SA has further developed strong partnerships by joining Brazil, Russia, India and China (BRICS). At the same time, the European Union (EU) is still SA's major trading partner through a Preferential Trade Agreement (PTA), whilst BRICS is still catching up (Onyekwena, 2014). These partnerships support firms and consumers in SA to gain from imports through lower prices and a greater variety of goods and services. At the same time, exporters achieve economies of scale and increased competition due to trade, spur innovation and productivity growth.

Most Africans, including SA, have joined together to a free trade agreement called the African Continental Free Trade Area (AfCFTA)[33] formation. This agreement is regarded as an economic transformation engine for Africa. [34]The main goal of this bloc is to create a unified, liberalised market for goods and services, enhance the competitiveness of African economies, and encourage sustainable socio-economic development and industrial development, gender equality and structural transformation.

Trading under the AfCFTA Agreement began on 01 January 2021, in line with a Decision and Declaration adopted during the 13th Extraordinary Session of the Assembly of the Union. As of 05 February 2021, 36 countries have deposited their instruments of ratification, including SA. It is, however, too soon to assess the performance of the union. This joint venture offered a diversified export basket containing transformed goods rather than raw commodities, representing a solid basis for sustainable economic growth. Overall, intra-African trade appears promising in this regard. The share of processed and semi-processed goods in intra-African trade is 61 per cent,

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[32] https://www.worldbank.org/en/topic/trade/overview#1. [Accessed December 10 2021]

[33] Except for Eritrea, 54 out of 55 African countries are part of the AfCFTA group as of July 2020.

compared to 37 per cent in exports to the rest of the world. African countries trade with each other is also more technologically advanced and more diversified than exports to other regions (International Trade Centre (ITC) & United Nations Conference on Trade and Development (UNCTAD), 2021).

The joint research by ITC and UNCTAD (2021) depict that regional trade integration is already relatively high given the continent's small share in international trade and the lack of overlap between African countries' export profile and import basket. Moreover, there are substantial opportunities for export growth in Africa, and these are expected to increase through tariff reductions under the AfCFTA. As a result, African countries can leverage untapped export potential, create further opportunities, and foster sustainable and inclusive growth with the right policy choices.

Under the AfCFTA, intra-regional trade contributes to be transformative and inclusive growth through its best export traits of a higher level of processing, a higher share of technologically advanced products and a higher level of exports diversification than the region's exports to the rest of the world. In addition, intra-regional exports more often involve small businesses and, due to their sectoral composition, are characterised by more considerable employment and participation of women. In summary, regional trade can play an essential role in contributing to African exports' transformation and inclusive growth on the continent.

African countries are economically diverse, as are opportunities for regional trade. Therefore, the analysis at the national level is required to identify the most promising opportunities. In combination with indicators for structural transformation and inclusiveness, export potential assessments can guide targeted trade policy for sustainable development through regional trade. Moreover, the implements of the AfCFTA are there to leverage regional trade opportunities for sustainable and inclusive growth on the continent and African policymakers.

In addition, businesses and development partners can follow complementary approaches, which are necessary to identify and address frictions that prevent trade flows in the present and invest to ensure that supply meets demand in the future. Another approach is through creating additional export potential by reducing tariffs further than required under the AfCFTA. In addition, it is imperative to implement other policies to monitor trade and encourage the business climate, such as increasing regulatory transparency, cutting red tape, and investing in infrastructure. Lastly, aiming for specific sectors for trade support can focus on industries that support structural transformation, inclusiveness, or both (ITC & UNCTAD, 2021).

Despite AfCFTA's promising opportunities, most African economies entered a phase of a cyclical recovery in 2021 after the pandemic brought an unprecedented recession of 3.4 per cent, which wiped out years of development gains. In this context, the entire continent is anticipated to have reported a growth rate of 3.2 per cent in 2021. This was after slowing to 2.9 per cent in 2020. It is within this backdrop that international trade is one of the factors that makes KZN a pivotal contributor to SA's economy. Therefore, this section analyses international trade, the effects of COVID-19 to trade, exports, imports, percentage share of the South African exports by provinces, and exports as a GDP-R percentage. This is no surprise, given that the province is home to Durban and Richard's Bay's busiest and largest ports. Thus, this section predominantly concentrates on KZN, the second-largest contributor to the country's economy; it further reflects the national policy issues related to international trade.

4.5.1 COVID-19 and international trade

The world means of monitoring the pandemic has been one of the challenges ever experienced. The adjustments have been varying through different aspects to try and limit the spread of the virus. National Centre for Biotechnology Information (NCBI, 2020) reported that the World Health Organisation (WHO) declared COVID-19 the outbreak a Public Health Emergency of International Concern on 30 January 2020, and a pandemic on March 11 2020.

Subsequently, the global trade and world economy have been hindered by COVID-19 pandemic unexpected disruption. The World Trade Organisation (WTO) estimates worldwide trade declined by between 13 per cent and 32 per cent in 2020. This drop is driven mainly by demand and supply forces, with the production and consumption of goods and services being scaled down across the globe as countries have shut down their economies to facilitate the pressing concerns of COVID-19 health emergencies. In addition, the global value chains (GVCs) weaknesses have been exposed together with the necessity of logistics to get trade moving with the evolution of the crisis from China and then spreading to other key economic centres in Europe and the United States (US) (South African Institute of International Affairs (SAIIA), 2020).

The report asserts that GVCs and trade facilitation were concepts at the core of trade policy debates in the last decade, but they now require rethinking as weaknesses are highlighted. For example, the disturbances due to lockdowns in response to COVID-19 have addressed the vulnerabilities of industries that rely on dispersed supply chains based on a 'just in time'[35] approach, including high-tech manufacturing. In the future, businesses may adopt more of a 'just in case system that puts less emphasis on supply chain efficiency. While transport options remain restricted, there is scope to focus more on regional value chains and opportunities in the immediate neighbourhood (SAIIA, 2020).

Table 4.5 illustrates a moderate decline in trade flow being consistent across the globe. The region with the most significant drop in its exports was the US, which depicted -10.9 per cent, followed by the euro area, at -8.2 per cent. Despite the devastative effects of COVID-19, China was the only country reporting positive growth rates in the value of exports and imports at 1.3 per cent and 1.7 per cent, respectively, in 2020. Notably, China was the first country to report cases of COVID-19. However, the country successfully managed to monitor the flow of vaccination roll-outs. Subsequently, China has seen its output surpassing pre-pandemic levels, whilst Covid-19 infections remain low. Its recovery broadened from public investment to consumption, goods export growth has been strong, and import growth has accelerated, boosted by domestic demand. Other regions that recorded the

[35] Just in time (JIT) approach: is an inventory management method in which goods are received from suppliers only as they are needed.

highest drop in exports are Africa and the Middle East with -6.8 per cent, and Asia (excluding China) had a similar decline in the volume of imports at -11.6 per cent.

Table 4.5: World and selected groups and countries: change in the volume of global trade in goods, 2020

Group/ country	% change in volume of exports			% change in volume of imports		
	2018	**2019**	**2020a**	**2018**	**2019**	**2020a**
World	**3.1**	**-0.3**	**-5.3**	**3.8**	**-0.3**	**-5.2**
Advanced economies	**2.7**	**-0.2**	**-6.7**	**2.7**	**-0.2**	**-5.5**
Japan	2.6	-1.6	-7.8	3.1	0.8	-6
United States	4.2	-0.5	-10.9	5.1	-0.4	-4
Eurozone	1.9	-0.1	-8.6	2.1	0	-8
Emerging economies	**3.9**	**-0.5**	**-2.7**	**6.4**	**-0.5**	**-4.6**
China	5.5	0.5	-0.1	7	0.2	3.4
Asia (excl. China)	4.3	-1.3	-3.8	11	-2.4	-11.5
Latin America and the Caribbean	3	0.4	-3.2	4.7	-1.5	-11.1
Africa and Middle East	1	-4.1	-7.1	0.8	-0.1	-3.1

Source: UNCTAD secretariat calculations based on CPB World Trade Monitor, August 2021.

The ongoing pandemic continues to shape the path for global economic activity, with severe outbreaks continuing to weigh on growth in many countries. The latest wave of COVID-19 is centred in some emerging markets and developing economies (EMDEs), where more where virulent transmissible strains are spreading, and vaccine aces remain limited. Moreover, vaccination remains exceedingly feeble in low-income countries (LICs). On the contrary, advanced economies have generally seen substantial vaccination progress, which has assisted in limiting the spread of COVID-19 (World Bank, 2021).

As the global economy recovers from the COVID-19 induced global recession, the accompanying strength in global trade offers an opportunity to kick-start the recovery in EMDEs. Lowering cross-border trade costs could help revive growth. On average, trading costs are high, which doubles the costs of goods traded internationally over domestic goods. Tariffs account for only one-fourteenth of average trade costs. The bulk of trade costs is incurred in logistics and shipping. This is cumbersome to trade procedures and processes at and behind the border. Despite a decline since 1995, EMDEs remain to experience one half higher trade costs than in advanced economies, which is about one-third of the gap that may be accounted for by higher shipping and logistics costs and another one-third by trade policy (World Bank, 2021).

4.5.2 Current account of the balance of payments

Table 4.6 reflects SA's current account from quarter three of 2020 to the third quarter of 2021. The country's trade surplus narrowed drastically to R455 billion in the third quarter of 2021 from R582 billion in the preceding quarter. The value of merchandise exports declining reflected lower volumes, with the sideways movement in the value of merchandise imports reflecting the offsetting effect of higher prices and lower volumes. As a result, the narrowing of trade surplus exceeded the deficit on the services, income and current transfer account in the third quarter of 2021. Therefore, the current account of the balance of payment surplus declined to R226.4 billion or 3.6 per cent as a percentage of GDP in the third quarter from R311.1 billion in the second quarter of 2021.

The value of merchandise exports contracted by 7.3 per cent in the third quarter of 2021 as mining, manufacturing and agricultural exports dropped. Manufacturing exports decreased the most, weighed down by vehicles and transport, chemical products, equipment, as well as textiles and articles thereof. This reflected a considerable impact of the July 2021 cyberattack on national ports operations and Transnet's declaration of force majeure. The number of vehicles exported declined sharply by 47.7 per cent, from around 89 000 in the second quarter of 2021 to about 47 000 in the third quarter (not seasonally adjusted or annualised). The base effects were reflected by a decrease in chemical exports, following a sharp increase in the second quarter (SARB, 2021).

Table 4.6: Balance on the current account, 2020: Q3 and Q4 to 2021: Q1 to Q3

	2020		Year	2021		
	3rdQrt	4thQrt		1stQrt	2ndQrt	3rdQrt
Merchandise exports	1 357 741	1 466 077	1 285 686	1 614 061	1 796 191	1 665 288
Net Gold exports	128 964	127 744	108 301	106 922	100 251	104 978
Merchandise imports	1 036 481	1 188 634	1 104 513	1 270 170	1 314 532	1 315 640
Trade balance	**450 224**	**405 187**	**289 474**	**450 813**	**581 910**	**454 626**
Net service,income and current transfer payment	- 162 447	- 218 942	- 179 688	- 189 659	- 270 800	- 228 227
Balance on current account	**287 777**	**186 244**	**109 786**	**261 154**	**311 110**	**226 400**
As percentage of GDP						
Trade balance	**8.1**	**6.9**	**5.2**	**7.5**	**9.5**	**7.3**
Balance on current account	**5.1**	**3.2**	**2.0**	**4.3**	**5.1**	**3.6**

Source: SARB, 2021

In the third quarter of 2021, the mining exports value realised a decline which followed the increases since the third quarter of 2020. The United States (US) dollar price of a basket of domestically produced non-gold export commodities declined by 11.9 per cent in the third quarter of 2021, following a sharp increase since the third quarter of 2020. This reflected a sharp shortfall in the value of Platinum group metals (PGMs) as the prices of these metals declined markedly over the period. This outweighed increases in the exports values of mineral products and base metals and articles thereof. The higher value of base metals reflected increased ferrochromium exports. Over the same period, the value of agricultural exports also declined, weighed down by decreases in vegetable products and live animals and animal products. (SARB, 2021).

4.5.3 International commodity prices

Commodity prices are considered useful economic indicators since they possess significant information to attract foreign direct investments (FDIs) properties. For example, they can provide a valuable indication of the likely future price or cost pressures in the economy. Moreover, the commodity price movements indicate shocks' nature facing an economy since they are determined on the international market (Rangasamy, 2008). The metals receiving much attention are gold, silver and platinum group metals. Precious metal can be used as an industrial commodity or as an investment. The significant application areas include technology, car-making, industrial manufacturing and jewellery making.

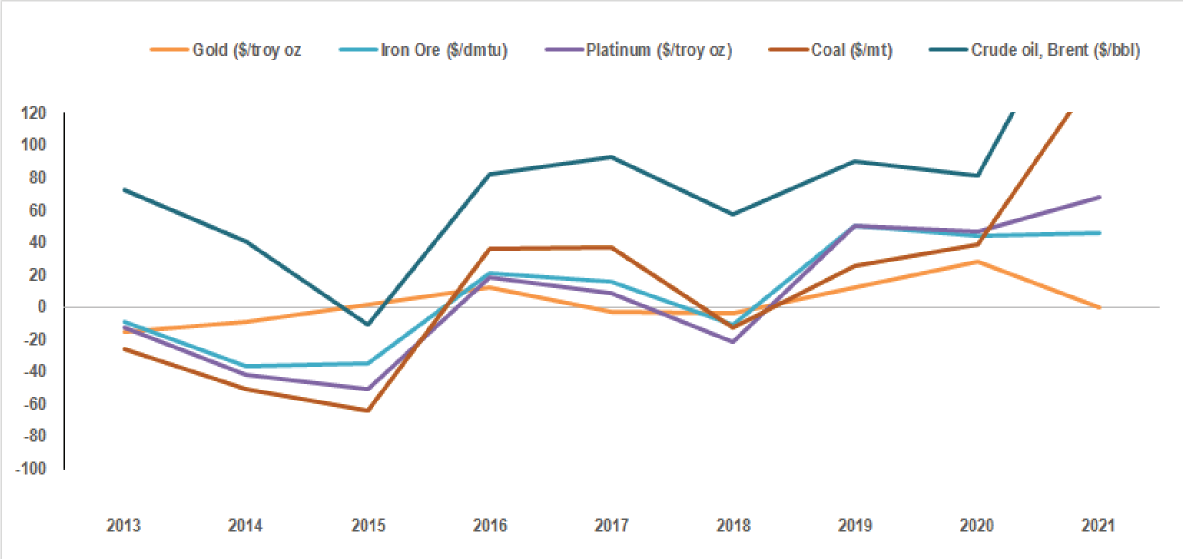
According to the United Nations Commodities and Development Report (2017), commodity price shocks and volatility directly impact poor households' livelihoods in developing countries. This is regardless of whether they depend on commodity exports or imports. The report suggests that diversifying the economy away from the commodity sector may not be the only policy needed to strengthen resilience and promote development. The key challenge lies in a lack of structural transformation and economic diversification by commodity export-import dependent developing countries to achieve sustainable and inclusive growth.

Gold and silver are further used as coinage metals, and the central banks of many countries hold gold reserves worldwide to store value or use as a medium of exchange. The intention of storing the value is to maintain gold reserves to help secure and stabilise the countries' respective currencies. Unfortunately, the prices of these selected commodities took a downward slippery between 2011 and 2015 before gradually recovering. According to Baffes et al. (2015), the sharp decline in commodity prices may have caused large post-crisis swings in trade. However, notable increases for coal, gold, iron ore and platinum were recorded for 2016. The significant increase of 17 per cent in coal price for the third export and import of commodities among countries are settled using monetary values. It is against this background that the figure illustrates the international commodity prices for gold, iron ore, platinum and coal from 2012 to 2021.

The World Bank (2021) report depicts a decrease in gold prices by 1.4 per cent in the third quarter of 2021. This was mainly affected by a slump in investment demand amid a rise in interest rate yields. In September 2021, the 10-year Treasury Inflation-Protected Security (TIPS) yield increased by ten basis points. The US dollar strengthened after the US Federal Reserve signalled that it would begin to taper off its bond purchases before the end of the year. Holdings of gold-backed exchange-traded funds (ETFs) declined sharply in the quarter, led by outflows from North American investors. Central banks have also reduced gold purchases over the past half of 2021. On the other hand, firm jewellery demand in China and India provided some reprieve to gold prices. As a result, gold prices are anticipated to have averaged nearly 1.5 per cent higher in 2021 before falling by 2.5 per cent in 2022, weighed down by higher yields.

Iron ore prices declined to $125/mt in September 2021, down by 40 per cent since reaching an all-time high in June 2021. The plunge depicted a sharp drop in steel production and easing supply constraints among key ore exporters. Since July 2021, China has curtailed steel production to meet government orders to fix steel output at 2020 levels to limit emissions and energy consumption. Meanwhile, iron ore exports increased, especially from Brazil, where exports reached an 11-month high in August 2021 and are expected to continue strengthening. Similarly, Australian authorities project mine production to increase by 7 per cent in coming quarters from new mines in the Pilbara region. As a result, iron ore prices are forecast to fall by 21 per cent in 2022 after an estimated surge of 51 per cent in 2021.

Figure 4.16: Real percentage change in selected commodity prices, 2012 to 2021 (US dollar indices: 2010 = 100)



Source: World Bank, 2021 and Own calculations

According to the World Bank (2021) report, Natural gas and coal prices are expected to fall in 2022 and decline further in 2023, as demand growth eases (especially outside of Asia) and production and exports increase, which influenced mainly by the US. Moreover, price spikes are likely, as inventories remain low, and production is not expected to increase materially until 2022.

A decrease in platinum prices by 14 per cent was due to weak demand from the auto sector in the third quarter of 2021. A shortage of semiconductors has resulted in a slump in global auto production, hence auto catalyst demand, accounting for more than a third of platinum demand. Regarding the supply side, South African mines normally functioned after hampered production by pandemic-related shutdowns and outages towards the end of March 2020. The rebound in supply alongside warning demand will likely exert downward pressure on prices. As a result, platinum prices are forecast to decline by 9 per cent in 2022, following an estimated increase of 25 per cent in 2021.

Lastly, the price of crude oil has shown a rapid rise in 2021, with the prices of Brent reaching a seven-year high of almost $85 a barrel by mid-October 2021. Production disruptions in the US have lifted prices due to Hurricane Ida and an Organization of the Petroleum Exporting Countries (OPEC) announcement at its meeting that the group intends to maintain its previously announced production increases. Some oil-importing countries called for larger increases as the group holds significant production capacity off the market. Higher natural gas prices have also assisted oil prices as oil is becoming more competitive as a substitute in heating and electricity generation (World Bank, 2021).

World crude oil consumption continued to recover, increasing by an estimated 3 per cent in 2021 in the third quarter. Rapid growth was more visible in Canada and some European countries such as France, having lockdown measures eased, and transport usage rose. However, demand remains below its pre-pandemic level in non-OECD and OECD countries, excluding China. In contrast, China had a demand higher than its pre-pandemic level at 10 per cent due to its faster economic recovery in the third quarter in 2021. Nevertheless, the recovery in consumption still holds vulnerability to the pandemic, as renewed outbreaks of COVID-19 in the third quarter in 2021 weighed on oil consumption growth, especially in Asia.

South African Reserve Bank (SARB, 2021) reported that the value of crude oil imports increased by 17.7 per cent in the third quarter of 2021 due to an increase in the price and physical quantity thereof. As a result, the average realised rand price of crude oil imports increased by 13.8 per cent, from R941 per barrel in the second quarter of 2021 to R1 071 per barrel in the third quarter of 2021. Although during the third quarter of 2021, the spot price of Brent crude oil fluctuated widely before declining in August, the average monthly price rose in July. The decline in August showed a slowdown in demand from Asia, particularly China, and the increasing volume of unsold crude oil cargo for September and August loading.

Nevertheless, the price rebounded in September 2021, supported by, among other factors, a recovery in demand and the easing of COVID-19 restrictions in several Asian economies and supply disruptions related to Hurricane Ida, which affected the critical US Gulf Coast oil-producing region. On balance, the spot price of Brent crude oil increased by 6.9 per cent to the US $73.47 per barrel in the third quarter of 2021, from an average of US $68.70 per barrel in the second quarter. The price increased sharply further in October 2021 to a monthly average of US $83.70 per barrel, supported by an increase in substitute demand due to higher gas and coal prices as well as supply concerns, following the weather-related damage to oil infrastructure in the Gulf of Mexico (SARB,2021).

4.5.4 South Africa and KwaZulu-Natal exports

Net exports contributed negatively to growth in expenditure on the national GDP in the third quarter of 2021. Exports of goods and services decreased by R6.49 billion (4 per cent), primarily influenced by reduced trade-in prepared foodstuff, precious metals and semiprecious stones, vehicles and other transport equipment (SARS, 2021). Table 4.7 illustrates national and KZN values and proportions of exports in 2010 and 2020. The total estimation of South African exports in 2010 was valued at R668.8 billion, which increased extensively over ten years to R1.39 trillion in 2020.

The value of net gold and merchandise exports increased to a new all-time high and outpaced the increase in the value of imports. The higher value of exported goods reflected a marked increase in prices and a lesser increase in volumes, while the rise in imports primarily reflected higher prices. This resulted in a further improvement in SA’s terms of trade in the third quarter of 2021. The value of mining exports increased strongly in the second quarter of

2021, boosted by especially platinum group metals, which continued to benefit from the surge in the prices of these commodities. Manufacturing and agricultural exports also increased over this period (SARB, 2021)

Encouragingly, the South African Revenue Service (SARS) recorded a trade surplus of R30.14 billion in December 2021. The cumulative trade surplus from January 2021 to December 2021 was R440.8 billion, which was an increase of 62.3 per cent from R271.6 trade surplus recorded in 2020. This was a result of an overwhelming increase in the value of export by 30.5 per cent from R1.39 trillion in 2020 to R1.82 trillion in 2021. These values include the trade data with Botswana, Eswatini, Lesotho and Namibia (BELN) (SARS, 2021).

Table 4.7: South African exports by provinces, 2010 and 2020

	2010			2020		
	Exports (R1000)	% Share of South African exports	Exports as % of GDP	Exports (R1000)	% Share of South African exports	Exports as % of GDP
South Africa	668 856 000	**100.0**	21.9%	1 394 345 999	**100.0**	25.3%
Eastern Cape	31 366 350	4.7	13.0%	92 643 509	6.6	21.9%
Free State	4 002 366	0.6	2.5%	7 822 570	0.6	2.8%
Gauteng	441 627 021	66.0	40.6%	949 434 902	68.1	48.5%
KwaZulu Natal	80 152 930	**12.0**	16.5%	133 975 760	**9.6**	15.4%
Limpopo	11 218 626	1.7	5.3%	22 044 169	1.6	5.6%
Mpumalanga	11 182 028	1.7	5.3%	26 844 428	1.9	6.7%
North West	17 263 480	2.6	10.2%	9 936 026	0.7	3.1%
Northern Cape	6 161 964	0.9	9.8%	13 032 936	0.9	11.8%
Western Cape	65 881 235	9.8	15.4%	138 611 700	9.9	18.1%

Source: IHS Markit, 2022

Regional distribution of value exports by province shows that GP remained the most significant contributor to the total national value of exports at R949.4 billion or 68.1 per cent in 2020. Despite improvement from R80.2 billion in 2010, KZN is the third-largest exporter, contributing to the total national value of exports. However, given that KZN is the second largest contributor to the national GDP, a share of 9.6 per cent in 2020 is still below expectations, especially when compared to the WC at 9.9 per cent. Regarding the national GDP contribution, the ratio of exports to GDP in GP increased from 40.6 per cent in 2010 to 48.5 per cent in 2020. Other provinces were doing well towards contributing to national GDP exports like WC (18.1 per cent) and EC (21.9 per cent). However, KZN has not been doing well, as it has contributed about 15.4 per cent, which is less than the record from 2010 of 16.5 per cent (Table 4.7).

4.5.5 South Africa and KwaZulu-Natal imports

Table 4.8 reflects the aggregated value of national imports in 2010 and 2020. Despite the pandemic's impact, imports have shown some growth over the past ten years. In 2010, SA imported goods and services were worth about R609 billion; this value rose to R1.1 trillion in 2020, it further increased to R1.3 trillion in 2021, which is 22.8 per cent more than the previous period. The month-to-month (November to December 2021) data shows a decrease of imported goods and services by R0.79 billion 0.6 per cent, driven mainly by a reduction of chemical products, machinery and electronics; and prepared foodstuff. Goods and services imported in December 2021 constituted 22.8 per cent of the total value. Most countries dominating SA imports are from outside Africa. The total value of imports for SA stood at R1.38 trillion, a 22.8 per cent increase compared to R1.12 trillion in 2020 (SARS, 2021).

Table 4.8: South African imports by provinces, 2010 and 2020

	2010		2020	
	Imports (R1000)	% Share of South African imports	Imports (R1000)	% Share of South African imports
South Africa	609 111 999	**100.0**	1 109 458 999	**100.0**
Eastern Cape	31 262 366	5.1	73 918 938	6.7
Free State	4 339 942	0.7	6 036 463	0.5
Gauteng	386 942 478	63.5	677 485 327	61.1
KwaZulu Natal	70 566 735	**11.6**	141 025 690	**12.7**
Limpopo	1 122 670	0.2	2 755 799	0.2
Mpumalanga	3 055 622	0.5	11 101 703	1.0
North West	2 964 809	0.5	5 760 462	0.5
Northern Cape	528 138	0.1	850 463	0.1
Western Cape	108 329 240	17.8	190 524 153	17.2

Source: IHS Markit, 2022

The table further shows that KZN is one of the top three largest importers after GP and the WC, with a value of R141 billion in 2020, up from R70.567 billion in 2010. Therefore, the province contributed 12.7 per cent and 11.6 per cent to the national value of imports in 2020 and 2020, respectively. GP continues to be the first largest importer for both periods, with R386.942 billion in 2010 (63.5 per cent of national imports) and R677.485 billion in 2020 (61.1 per cent). WC is the second-largest importer, valued at R108 billion in 2010 and R190 billion in 2020, translating to 17.8 per cent and 17.2 per cent of national imports, respectively. The least contributor to the national imports was the NC with a mere 0.1 per cent.

4.6 Travel and tourism

The decades after 1970 have seen travel and tourism internationally evolving into a leading economic sector by contributing to gross domestic product (GDP), employment, social and economic development, poverty reduction, and investment. However, the COVID-19 pandemic and the subsequent restrictions to international mobility have taken a significant toll on the sector worldwide. The World Travel and Tourism Council (WTTC, 2021a) maintains that the industry suffered a decline in global GDP of a staggering 49.1 per cent from $9.2 trillion in 2019 to

$4.7 trillion in 2020. The report further indicates that in 2020, the sector contributed 5.5 per cent or $4.7 trillion of global GDP and created 272 million jobs, both directly[36] and indirectly.[37]

As indicated by the WTTC (2021), over the period 2014 to 2019, the sector created one in four of all net jobs. In addition, prior to the pandemic, the industry employed 54 per cent of women – the sector having almost twice as many women employers than other sectors. Further, Canada, the United States (US), and the United Kingdom (UK) employed 30 per cent of youth, more than double that of the broader economy, over the same period.

Generally, there is a positive correlation between growth in tourism and employment creation. According to the WTTC's report, the industry employed a cumulative 334 million jobs globally, either directly, indirectly, or induced in 2019. However, this number dropped by a substantial 62 million in 2020 (due to the onset of COVID-19), with the sector only employing 272 million persons as alluded to above. Following the outlined brief background, this subsection covers the contribution of tourism to GDP and employment at global, national, and provincial levels, particularly in KZN.

4.6.1 World travel and tourism

As the tourism sector involves human-to-human interaction and the movement of people from one destination to another, the onset of COVID-19 resulted in tourism businesses being amongst the first to be closed in order to contain the virus. This resulted in an immediate and immense shock to the industry, ultimately affecting the wider economy.

As indicated above, travel and tourism contributed considerably towards global GDP in 2020. However, with the rapid spread of COVID-19, the world economy continues to suffer sizeable losses and setbacks in the *tourism* sector. Many countries continue to implement strict travel restrictions[38], with 90 per cent of the world's population adjusting to life under the *"new normal"*. Businesses worldwide suffered zero revenue burden, and millions of people were put on leave, *furlough*[39] or lost their jobs completely. *Travel and tourism* was no exception job losses in 2020 are estimated at 62 million, a decrease of -18.5 per cent from 2019. This decrease was felt across the entire *travel and tourism* ecosystem, with Small and Medium-Sized Enterprises (SMMEs), which constitute 80 per cent of all global businesses in the sector, being mostly affected (WTTC, 2021a).

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[36] The direct contribution to GDP, as per the WTTC, includes accommodation, transportation and travel, entertainment, visitor attractions, food and beverage, cultural activities, and sport and recreation.

[37] The Indirect contribution to GDP extends to the spill-over effect of purchasing goods and services external to the sector, such as printing and publishing, marketing and promotion, construction and others.

[38] Although COVID-19 restrictions remain tight, some countries as of February 2022 have commenced relaxing restrictions – i.e. the UK, and the US

[39] Furlough is when an employee is placed on leave without pay, but their respective job is secure.

As a result of COVID-19 and the ongoing restrictions to international mobility, the *travel and tourism* sector suffered losses of almost USD 4.5 trillion, with its global contribution to GDP declining by 49.1 per cent compared to 2019, ultimately resulting in a GDP of $4.7 trillion in 2020; relative to a 3.7 per cent GDP decline of the global economy. Domestic visitor spending decreased by 45 per cent, whilst international visitor spending fell by an unprecedented 69.4 per cent (WTTC, 2021a).

To counteract these adverse effects, a strategic approach must be taken to build on experience and ensure that business continuity remains in place. In respect of strategic approaches undertaken by countries to try and mitigate the negative effects of COVID-19 on the sector, governments and industry within the Organisation for Economic Co-operation and Development (OECD) countries[40] have focussed their efforts on lifting travel restrictions and working with businesses to access liquidity supports, apply new health protocols for safe travel, and help to diversify their markets. In addition, the focus has been placed on restoring traveller confidence and stimulating demand with new safe and clean labels for the sector, information apps for visitors and domestic tourism promotion campaigns (OECD, 2020).

Furthermore, at the G20 summit hosted in Saudi Arabia in 2020, the *travel and tourism's* private sector, under the leadership of Saudi Arabia and its Presidency, was requested to formulate a plan to support the sector's recovery and create 100 million jobs. In this regard, WTTC members, private sector leaders, and international organisations identified several actions that would be undertaken to achieve this target. These included, amongst others: the implementation of standardised global health and safety protocols; developing and adopting digital technologies; offering flexibility for bookings, offering promotions, more affordable products or greater value to incentivise domestic and international travel; cooperation with governments in the promotion of destinations; and continuing to invest in crisis preparedness and resilience to equip the sector better to respond to future risks or shocks (WTTC, 2020b).

Regarding SA, the government adopted a tourism recovery plan that focuses on rejuvenating the sector. The Tourism Sector Recovery Plan highlights three dimensions of the pandemic determining how the *tourism* industry can recover. These are the shape of recovery, geographic variation, and new equilibrium conditions. While many variables remain fluid, it is necessary to develop scenarios that enable planning while retaining the ability to adapt dynamically to new inputs as fresh data becomes available.

Regarding regional performance in 2020, North America suffered a substantial decrease of 42.2 per cent in GDP compared to 2019, and the region lost 7.1 million jobs. Over the same period, Europe reported a drop of 51.4 per

[40] OECD countries include: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the UK, Canada, Chile, Colombia, Costa Rica, Mexico the US, Australia, Japan, Korea, New Zealand, Israel and Turkey

cent in GDP, and 3.6 million jobs were lost. The Caribbean suffered a substantial decline of 58 per cent in GDP, and 700 000 jobs were lost. In Latin America, GDP plunged by an overwhelming 41.1 per cent, coupled with over 4 million people losing their jobs. Furthermore, GDP plummeted by a substantial 51.1 per cent in the Middle East, while job losses were estimated at 1.2 million. Africa reported a staggering decline in GDP of 49.2 per cent, and 7.2 million jobs were lost. Finally, economic activity decreased by a massive 53.7 per cent in Asia Pacific's GDP, while job losses were approximated at 34.1 million (WTTC, 2021a).

Despite there being an awareness on the part of local, national, and international governments and tourism authorities, a concerted and enhanced effort is required to safely restore domestic and international tourism's economic contribution to pre-COVID-19 levels. Interventions on the part of authorities should include broad support, the dissemination of precise information, restoring traveller confidence and cooperation between countries – the focus being to re-build a resilient and sustainable industry. Aside from the adverse effects of the past 22 months, Covid-19 could yet be an opportunity to re-invent and re-vitalise the industry by re-establishing from a low or zero base. This is particularly pertinent in the 'new' world where there is increasing reliance on digitalisation, efforts to reduce carbon footprints and structural transformation.

4.6.2 Travel and tourism in South Africa

According to the WTTC (2021c), *travel and tourism's* total contribution to SA's GDP was R182.5 billion or 3.7 per cent of the total national economy in 2020, down from R363.2 billion recorded in 2019. The sector employed 987 000 people in 2020, accounting for 6.5 per cent of the total employment. The total number of jobs created was 1.460 million in 2019. However, due to COVID-19, the country lost an estimated 32.4 per cent of jobs in 2020. Regarding international visitor spend, foreign tourists expended by R45.7 billion or 3.1 per cent of total exports[41], compared to R134.6 billion, equating to 8.5 per cent of total exports in the preceding year. Over the same period, leisure spending accounted for 62 per cent, whilst business spending totalled 38 per cent, compared to leisure spending of 65 per cent and business spending of 35 per cent in 2019. Finally, domestic spending amounted to 67 per cent in 2020, whilst international expenditure was 33 per cent in the same year (WTTC, 2020c).

According to the Bureau of Economic Research (BER), a million tourism jobs have been lost between the periods 2018 through 2021. From approximately 1.6 million jobs supported in 2018, the number has fallen by approximately 60 per cent, many in the informal sector. The BER's research further shows that there was a decline in domestic tourism and inbound visitor numbers from 10.2 million in 2019 to 3.2 million and that there was a decrease in tourist spend of R164 billion from 2018 to 2020 (BER, 2021). Despite the devastation caused by COVID-19 on the tourism industry, the SA government developed a Tourism Relief Fund amounting to R200 million with a capped sum of R50 000 per entity in 2020. The fund aims to assist SMMEs in the tourism and hospitality industry under stress

[41] Tourist exports refers to the monetary amount spent by visitors to a country.

due to travel restrictions. The R200 million relief has successfully supported 4 000 businesses across the country, of which 607 companies were from KZN (SA Government, 2020).

Further to the Tourism Relief Fund, the government introduced the Tourism Equity Fund (TEF) to support small-scale stakeholders in the travel industry. TEF is a collaborative initiative between the Department of Tourism and the Small Enterprise Finance Agency (sefa). As part of SA's Economic Reconstruction and Recovery Plan, this fund aims to drive transformation by advancing equitable opportunities in the sector. The fund totals approximately R1.2 billion comprised of grant and debt financing. The Department of Tourism capitalises the TEF to the value of approximately R540 million over three years. This implies that about R180 million will be disbursed annually over three years (Parliamentary Monitoring Group (PMG), 2021). This funding will be utilised as a capital injection of a grant contribution in funding acquisitions to a maximum of R20 million per enterprise. In addition, this capital injection will be used to leverage at least 50 per cent of additional funding per transaction from Sefa (capped at R15 million per enterprise) and the private sector (major banks to the value of approximately R540 million) (National Department of Tourism, 2021).

The eligibility and scoring criteria for applicants places significant weight on majority black ownership (>51 per cent) and level of black management control as critical developmental factors. Other factors considered include women ownership, youth ownership, jobs facilitated, location, and business cycle stage (National Department of Tourism, 2021). The fund focuses on several accommodation areas such hotels, lodges, etc., hospitality and related services, e.g. conference and convention, privately owned attractions in already developed tourism nodes, and travel and related services, e.g. tour operators. It further promotes tourism-related products and initiatives and economic impact on job creation. It also stimulates any other tourism-related products and initiatives not referred to above, which support tourism development imperatives and economic impact in terms of job creation, geographic spread, and strengthening the tourism offering of SA.

SA has many initiatives to mitigate the effects of the COVID-19; these include and are not limited to the TEF and the Tourism Relief Fund. As alluded to earlier, the Tourism sector has been hard hit across the globe. The ubiquitous national-level restrictions have sharply curtailed tourism activity everywhere, and the local industry has not been spared (Tourism Sector Recovery Plan, 2020). While a gradual re-opening of society is underway, the pandemic continues. As alluded to earlier, the South African government has adopted a tourism recovery plan which focuses on rejuvenating the sector. In this regard, three strategic themes are central to the *tourism* industry's recovery: reigniting demand, re-vitalising supply, and strengthening enabling capability. Underlying these themes, ten strategic recommendations are proposed along with specific actions, timeframes, and accountabilities.

The following strategic interventions form part of the plan: implement norms and standards for safe operations across the value chain to enable safe travel and re-build traveller confidence; stimulate domestic demand through targeted initiatives and campaigns; strengthen the supply-side through resource mobilisation and investment facilitation; support for the protection of core tourism infrastructure and assets; execute a global marketing programme to reignite international demand; tourism regional integration; and review the tourism policy to provide enhanced support for sector growth and development (Tourism Sector Recovery Plan COVID-19 Response, 2020).

On October 1 2021, the South African government introduced two new tourism government funding initiatives, namely the Tourism Transformation Fund (TTF) and the Green Tourism Incentive Programme (GTIP) (Tourism Update, 2021). Both the TTF and GTIP initiatives are aligned to the objectives of the National Tourism Sector Strategy that elevates inclusive growth and transformation as fundamental drivers of the tourism sector. The primary rationale underlying the establishment of the TTF is to afford assistance to small and micro-owned operations involved in tourism. The initiative is managed by the National Empowerment Fund (NEF), which also oversees the granting of approvals (NEF, 2021). The grant funding from the department is used to reduce the approved loan finance and/or equity contribution by the NEF for tourism projects. The grant component is capped at 50 per cent of the total funding approved by the NEF up to a maximum value of R5 million per applicant (NEF, 2021).

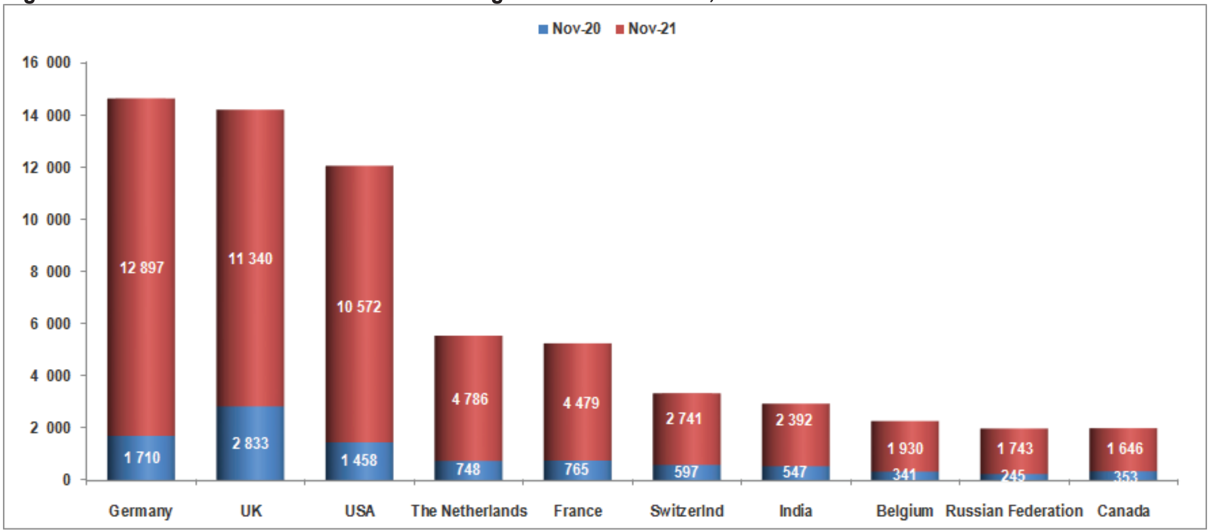
With the focus being on assisting the private-sector tourism industry in adopting cost-effective, sustainable and environmentally friendly energy and water consumption measures, the GTIF, being a funding mechanism, is utilised. On behalf of the Department of Tourism, the programme is managed by the Industrial Development Corporation (IDC) regarding applications and approvals (IDC, 2021). The GTIP offers the following to qualifying tourism enterprises: the full cost for a new resource-efficiency audit or the review of an existing resource efficiency audit; and grant funding to qualifying small and micro enterprises on a sliding scale from 50 to 90 per cent of the total cost of implementing an approved water and energy resource efficiency intervention, capped at R1 million (IDC, 2021).

Per the WTTC (2021d), in 2019, the United Kingdom contributed in excess of 430 000 visitors annually to the South African tourism mix. However, this number has been subject to a significant contraction following travel restrictions implemented to manage the effects and spread of the Covid-19 virus. September 2021 saw a significant relaxing of international travel restrictions. However, despite their having been no reported cases of the Beta variant during the period 1 through September 30, SA, by way of a questionable rationale, remained on the United kingdoms 'Red list'. This effectively prohibited travel between the two countries unless the returning visitor agreed to submit to strict and costly quarantine procedures. Based on 2019 UK visitor numbers and the resultant spend, the cost of deterring visitors from the UK equated to over R790 million each month, or R26 million per day. The country remained on the 'Red list' until October 11 2021.

Just as the country was recovering from being removed from the 'Red list', a new form of the virus, known as Omicron, was discovered in November 2021, which effectively placed SA back on the UK's 'Red list'. The 'Red list' countries, requiring citizens to quarantine (at extreme costs) in hotels or ten days at their own cost, were SA, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, Nigeria, Zambia, and Zimbabwe. These countries were not only placed on the UK's 'Red list' but were also banned from entering various other countries. SA was removed from the 'Red list' on December 15 2021.

Figure 4.17 shows the number of foreign tourists visiting SA and the ten leading countries they came from in November 2020 and 2021. It further illustrates the substantial increase in tourist numbers resultant from the partial relaxation of restrictions regarding the COVID-19 pandemic. As is evident from the figure, the most significant number of tourists visiting SA came from Germany at 12 897 in 2021, followed by the UK at11 340 visitors and the USA at 10 572 tourists.

Figure 4.17: Number of tourists from ten leading overseas countries, November 2020 and November 2021



Source: Stats SA, 2021

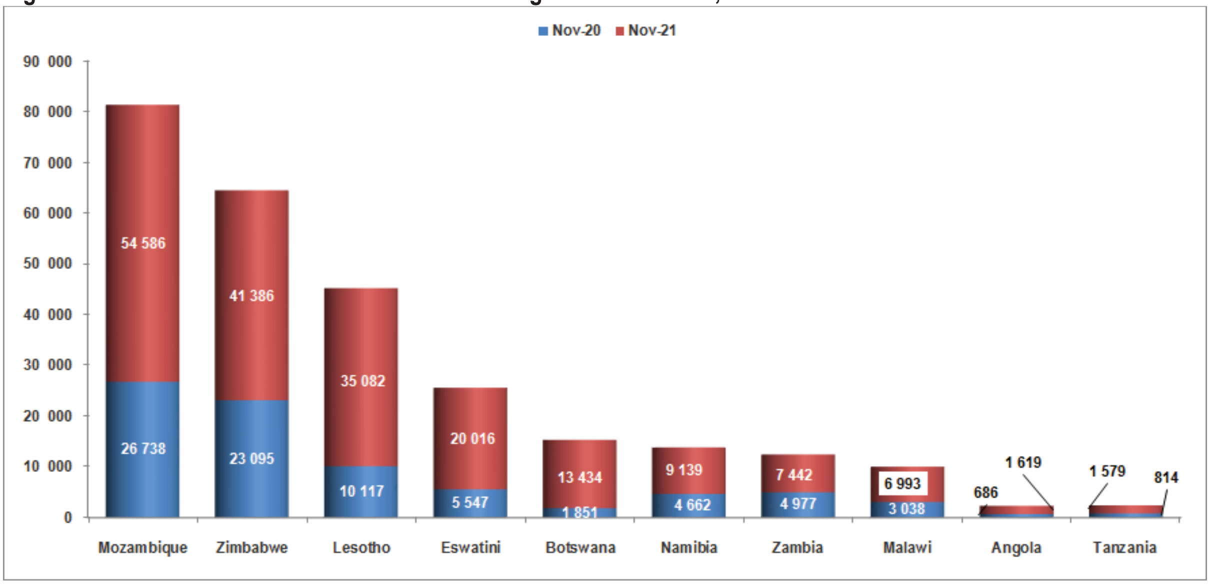
Figure 4.18 shows the number of tourists visiting SA from the ten leading Southern African Development Community (SADC[42]) countries in November 2020 and November 2021. As with the number of foreign tourists, a substantial increase is evident in the number of travellers visiting the country over the same period. As is evident from the figure, Mozambique had the highest number of tourists visiting SA in November 2021 at 54 586 travellers, followed by Zimbabwe at 41 386. When evaluating the benefits accruing to SA from tourism, cognisance must be taken of both the intention and the available spend underlying that of the visitor. As opposed to guests from the developed countries, where the primary rationale is leisure, and the available spend is relatively high. Pecuniary and other considerations primarily drive SADC countries. The spectrum extends from formal commercial business, including conference attendance through the job seeking, and extending in many instances to the procurement of goods and provisions for personal consumption and/or sale on return.

The sole benefit of tourism to the host country, be it for business, pleasure or an alternative reason, accrues from the physical spend. Here there is a marked dichotomy within the SADC region driven substantially by the relative

[42] SADC countries include Angola, Botswana, the Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania, Zambia, and Zimbabwe.

purchasing power of a local currency versus SA. This translates into Botswana guests, with its strong currency, tending to have greater purchasing power than a Zimbabwean where debilitating onerous exchange rates restrict spending. Notwithstanding this, a further important variable relates to the relative number of visitors from given origins. Simplistically, two hundred Zimbabweans spending R100 each would see more significant value to SA than fifty guests from Botswana spending R200 each. Therefore, it is apparent that when comparing the relative contribution to the South African economy by individual SADC countries, the variables of intention, available spend, and the physical number of visitors must be considered.

Figure 4.18: Number of tourists from the ten leading SADC countries, November 2020 and November 2021



Source: Stats SA, 2021

4.6.3 Travel and tourism in KZN

In line with the Economic sectors, Investment, Employment and Infrastructure Development (ESEIED) cluster, the President announced that there was to be a "radical economic transformation that advances the economic position of women, youth and persons with disabilities, and that makes our cities, women, towns, villages and rural areas vibrant centres of economic activity" will be formed (EDTEA, 2020). This falls directly in line with the radical economic transformation (RET) as part of activating RET, KZN has launched Operation Vula (OV), which serves as practical vehicle to mobilise all sectors all sectors of the economy towards achieving meaningful economic transformation in the Province. The RET approach intends to remove apartheid inspired socio-economic disparities where black communities were deliberately excluded from active participation in the country's economy. Through OV, the provincial government applies its procurement system to encourage entrepreneurs from historically marginalised communities to seize business opportunities available in various sectors of the economy like agriculture" (EDTEA, 2020).

To achieve this, the process conducted "various works streams being established to lead the soliciting of inputs from stakeholders across the province" (EDTEA, 2020). As a result, the economic recovery plan consists of various work-streams, namely Agriculture, Industrial Development, Health Innovation and manufacturing, Clothing and Textiles, Creative Industries, Informal sector, Investment and Trade, Infrastructure Development, Tourism, Fourth Industrial Revolution (4IR), ICT and Innovation, Red tape, and Finance. With specific attention to the *tourism* work-stream, the key initiatives are hosting events on a large-scale post lockdown and virtual during the lockdown period. This work-stream further included the implementation of critical projects which have passed the feasibility stage. These projects are the Durban Waterfront project, the continuation of Cornubia, domestic marketing, tourism infrastructure, particularly in rural/township lodges visitor information centres. In addition, aviation, policy reforms, most notably skilling and re-skilling, the reduction in red tape, lobbying for the sector's opening up, and food tourism, with specific emphasis on the promotion of local fare, are also included. Emanating from this, the Tourism Sector Recovery Plan (2020) was developed.

In line with the KZN Department of Tourisms Annual Report 2020/21, the strategic focus was on the '*African Brand".* A detailed sectoral analysis was undertaken, considering the damage caused by COVID-19. To this end, the sector developed a different brand proposition for the corporate entity. The industry also aimed to boost domestic tourism in 2021, allowing affordable holidays to the South African market while increasing lost revenue due to COVID-19. On March 15 2021, the MEC for the KZN Department of Economic Development, Tourism and Environmental Affairs (EDTEA) launched a R20 million KZN Tourism Relief Fund to assist the affected tourist operations COVID-19 pandemic. Successful applicants would receive up to R50 000 for tourist businesses, whilst tour operators could receive up to R4 500 (Sefa finfind, 2021).

The criteria for successful applicants to receive funding includes the following: an enterprise must be a tourism-specific establishment that has been in existence for at least one year, the operation should be officially registered with relevant business authorities; the enterprise must be listed or in the process of enlisting with KZN EDTEA; the operation must be tax compliant; the operation should meet the requirements of the national minimum wage; the enterprise must be in possession of a B-BBEE certificate; and the operation must be able to demonstrate that it has been directly affected by COVID-19 (Sefa finfind, 2021). Unfortunately, due to many applications failing to meet the required criteria during the first tranche, the KZN Tourism Relief Fund only afforded assistance to 29 operations in an amount of R858 000. Accordingly, with the remaining available budget, KZN EDTEA decided on September 27 2021, to allow for a second uptake of applications (Media Release, 2021).

As mentioned previously, in 2020, KZN developed the Provincial COVID-19 Economic Recalibration and Recovery Plan, which includes measures to assist the tourism sector. According to the plan, in 2019, the hotel and restaurant sectors employed approximately 76 794 people, whilst the aviation and transport sectors employed around 18 188 persons. These two sectors alone contributed about 4.3 per cent to the province's economy. The plan further states that in respect of conference and event centres, around R1 billion was lost due to cancelled events. The plan highlights the results of a survey undertaken by the National Department of Tourism (NDT) and the Tourism Business Council of SA (TBCSA) regarding the impact of COVID-19 on the tourism sector. The results were as follows: over 63 per cent of businesses have closed temporarily, 54 per cent of businesses downscaled their operations significantly, 28 per cent of businesses were considering permanent closure, whilst 37 per cent of businesses reduced all of their staff's wages, 33 per cent have furloughed all staff and 7 per cent employees have been made redundant.

With specific reference to KZN, three essential needs were required, these being; support for cash flow (62.6 per cent), financial support for recovery (59.7 per cent), and the need for tax reductions/deferments (47 per cent). In addition, the plan covers several initiatives to mitigate the effects of the virus. These include repurposing – i.e. conference centres and stadiums converted to field hospitals, support to SMMEs and tourism relief support. It also enhanced industry communication, re-skilling, promotion/marketing – i.e. voucher system for re-bookings at reduced rates; sector stakeholder lobbying; and infrastructure development.

While the KZN tourism industry was still trying to recover from the 'third wave', another unpreceded blow was dealt in July 2021. This was the start of ten days of unpredicted riots in KZN and Gauteng. Furthermore, approximately 14 500 jobs were lost in Gauteng and about 150 000 jobs in KZN (International Federation of Red Cross and Red Crescent Societies, 2021).

The level of violence and unrest in KZN immediately halted people from other provinces/countries wanting to visit KZN. Although the exact amount of the total cost of the unrest had on the tourism industry in KZN has not been fully determined, the unrest cost the eThekwini metro a loss of 50,000 visitors, R110 million in direct spending, R280 million in tourism GDP and 600 jobs (Pappaya, 2021). In response to the damage caused to the tourism industry in KZN, the local tourism industry is striving to re-build, instituting campaigns and plans to lure domestic tourists back to its alluring beaches, mountains, and wildlife destinations. For example, the mayor of eThekwini stated that the municipality had introduced measures to ensure a safe and welcoming environment that will see increased visibility of law enforcement officers at key tourism zones. These include the beachfront, airports, harbour, local businesses, and shopping malls (Pappaya, 2021). Overall, since September 2021, tourists have started to return to the province.

4.6.3.1 Total tourism spend as a percentage of GDP in KZN

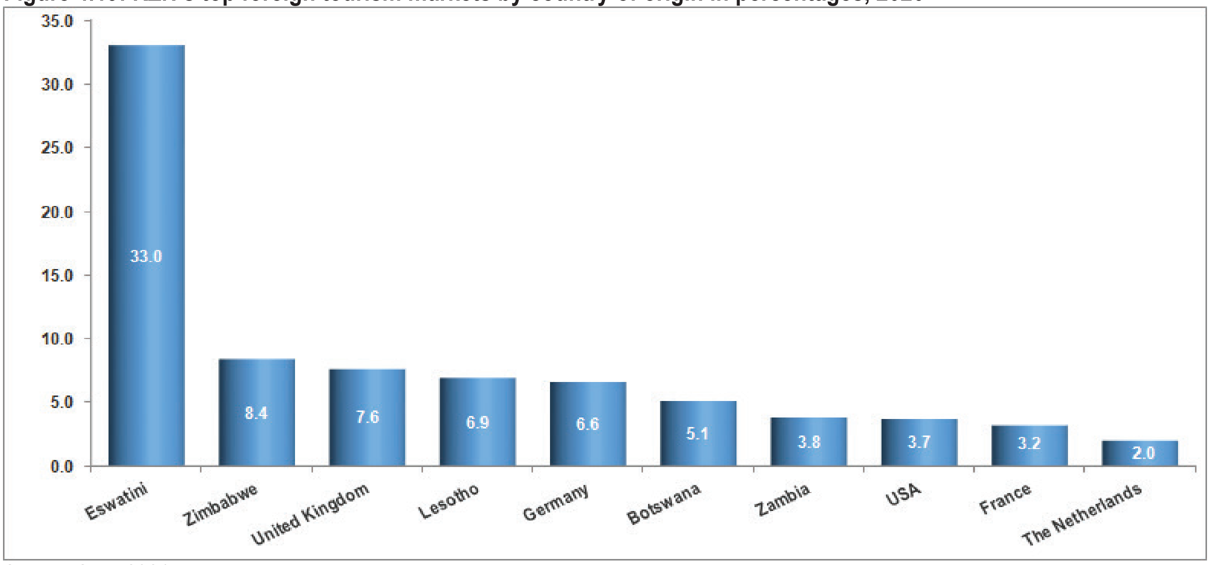
In 2020, the number of people directly employed in the Travel and tourism sector in KZN equated to approximately 79 393. Meanwhile, contribution to employment within the Province was estimated at 155 591 over the same period. During the same year, tourism's direct contribution to provincial GDP was R11.9 billion. Therefore, the total contribution (inclusive of direct, indirect, and induced spending) to GDP was approximated at R13.7 billion (South African Tourism (SAT), 2021).

4.6.3.2 Tourists visiting KZN by country of origin

Figure 4.19 shows the number of tourists from the top ten countries worldwide who visited KZN in 2020. Half of the ten are from outside Africa: Germany, the US, France, the Netherlands, and the UK. The remaining three-five countries come from within Africa and are, Eswatini, Zimbabwe, Lesotho, Botswana, and Zambia (SAT, 2021).

The highest proportion of visiting tourists from outside SA came from Eswatini at 33 per cent (71 340 people), Zimbabwe at 8.4 per cent (18 114 persons), the UK at 7.6 per cent (16 442 people), Lesotho at 6.9 per cent (14 952 visitors), Germany at 6.6 per cent (14 202 persons), Botswana at 5.1 per cent (11 087 visitors), Zambia at 3.8 per cent (8 135 people), the USA at 3.7 per cent (7 962 visitors), France at 3.2 per cent (6 819 persons), and the Netherlands at 2 per cent (4 368 people).

Figure 4.19: KZN's top foreign tourism markets by country of origin in percentages, 2020



Source: SAT, 2021

4.7 Conclusion and recommendations

This Chapter provided a comprehensive review of the economic landscape from a global perspective and zone down to the provincial level focusing mainly on KZN. The primary objective is to identify significant developments taking place both global and national that might pose as great opportunities and risks to the KZN's economy. The transmission mechanisms through which some developments could impact the KZN economy may vary, but the most common channel is trading partners. This implies that improved economic activity in any trading partner increases the opportunity for higher external for local goods and services. The opposite applies with deteriorating economic performance among trading partners.

Global economic activity continues to expand as the world emerges from the substantial global recession since World War II. The global growth bounced back significantly in 2021, following a substantial contraction induced by COVID-19. However, it remains tentative, with risks to growth skewed to the downside. The Omicron variant remains a significant health risk, and the pandemic resurgence could devastate health systems and trigger the simultaneous imposition of additional pandemic control measures across the globe. Another risk to the global outlook is the supply bottlenecks that contributed to downward revisions on projections for several countries.

The South African economy picked up significantly by 4.8 per cent in 2021, owing to a strong rebound in the mining, manufacturing, and services sectors. Real output will be further supported by the recovery in services sectors, including tourism, due to improved control over virus outbreaks as widespread vaccinations progress. In addition, the government is easing mobility restrictions as the Omicron wave subsides and the levels of vaccination increase. Consequently, private consumption and investment are projected to firm somewhat, recovering from last year's virus restrictions and social unrest. However, it should be noted that numerous constraints to long-term growth in SA existed prior to COVID-19, and some of the structural impediments are identified in the National Development Plan (NDP). These internal factors include, but are not limited to, the legacy of weak public finances and the slow implementation of reforms needed to boost productivity and employment growth. In addition, rising government debt and debt service costs will continue to constrain policy space and curtail public spending, leaving gaps in essential public services and infrastructure as a major obstacle to more substantial potential growth.

The provincial economic outlook for 2021 dropped moderately as the civil unrest, the third wave, cyberattack to Transnet, and global supply disruptions took a significant toll on economic activity, thereby inducing a contraction on GDP-R outturn for the third quarter. However, as the headwinds' negative impact dissipated and the lockdown restrictions remained at adjusted level one for the entire festive season despite the fourth wave of infections driven by the *Omicron variant*, real GDP-R is expected to revert from the contraction in the third quarter. Nevertheless, real output rebounded by 4.2 per cent in 2021 and is expected to moderate to 1.7 per cent and 1.8 per cent in 2022 and 2023, respectively.

The province should continue to implement structural reforms in relation to the economic recovery plan to ignite economic growth. Efforts need to be intensified to implement the plan to ensure inclusive economic growth supported by the radical economic transformation (RET). As outlined in the plan, the focus should be on agriculture, telecommunications and digital economy renewable energy, tourism, oceans economy and township economy. The full implementation of RET and Operation Vula (OV)[43] and its six commodities. The industry development, including agro-processing, automotive and pharmaceuticals. For more jobs to be created, infrastructure development and the promotion of international trade taking advantage of AfCFTA, which was implemented with effect from January 2021. The AfCETA is there to leverage regional trade opportunities for sustainable and inclusive growth in the African continent. The AfCETA was implemented during the period whereby countries globally scaled-down production due to disturbances in the global supply chain and to facilitate the response to COVID-19 pandemic.

[43] The six OV's commodities are bakery, clothing and textile, furniture, paper & pulp (detergents), fertilisers (seeds and animal feed) and construction.

Amid these international trade disturbances due to COVID-19, South Africa (SA) has benefitted from favourable commodity prices increase in 2021. Commodity prices remain important for SA, a major net exporter of minerals and a net importer of oil. However, strengthening foreign direct investment will be critical to propelling growth and creating jobs. In the first half of 2021, higher global commodity prices bolstered SA's terms of trade as the value of exports grew faster than that of imports. This led to an increase in the trade surplus, pushing the current account surplus higher. Encouragingly, the South African Revenue Service (SARS) recorded a trade surplus of R30.14 billion in December 2021. The increase in commodity prices has positively affected the country's revenue collection. Government will use part of the higher tax revenues associated with the recent commodity price surge to narrow the deficit. While increasing non-interest expenditure to support economic growth, job creation and social protection, and cover the higher costs of the public-service wage agreement. As commodity prices and global demand stabilise over the medium-term, the terms of trade gains are expected to dissipate, and import demand is expected to return.

Although various strategies have been put in place to try and mitigate the negative effects of the pandemic, more needs to be done in order to revive the tourism sector globally, nationally and locally, bearing in mind that the lockdown measures implemented at both a national and international level have had a devastating impact on the sector and the collateral effects going forward are likely to endure for some time. Measures to be put in place should include restoring traveller confidence supporting tourism businesses to adapt and survive. They must also be effective in promoting domestic tourism and supporting the safe return of international tourism. These interventions must further provide clear information to travellers and businesses, limiting uncertainty, evolving response measures to maintain capacity in the sector and address gaps in support, strengthening cooperation within and between countries, and building more resilient, sustainable tourism. The crisis is an opportunity to rethink tourism for the future. Tourism is at a crossroads, and the measures put in place today will shape the tourism of tomorrow. Governments need to consider the longer-term implications of the crisis while capitalising on digitalisation, supporting the low carbon transition, and promoting the structural transformation needed to build a stronger, more sustainable and resilient tourism economy.

Chapter Five: Labour Markets

5.1 Introduction

The global economy recovered significantly in 2021 from the severe contraction caused by the coronavirus (COVID-19) of 2020. Notwithstanding the ongoing surge in infections in other regions, economic activity continues to improve as vaccinations rollout progresses and mobility measures remain low. This allows labour market conditions also to pick up. However, the South African labour market remained constrained despite a robust upturn in 2021. As a result, the employment level continued to grow at a slower pace while unemployment accelerated significantly to all-time highs.

The number of employed people dropped by 4.4 per cent in the third quarter of 2021, reflecting massive job losses reported in the trade sector. Consequently, the official unemployment rate increased further to 34.9 per cent during the same period. The unemployment rate climbed to 46.6 per cent based on a broad definition that accounts for discouraged work-seekers. South Africa’s (SA’s) levels of unemployment continue to be counted among the highest in the world. The scourge of increasing unemployment is mainly structural, with a skills mismatch and discouraged job seekers.

The province of KwaZulu-Natal (KZN) resembles a national trend in slow employment growth and a persistent rise in the unemployment rate. The provincial employment level receded by 5.1 per cent, while the official unemployment rate also decreased moderately to 28.7 per cent in the third quarter of 2021. However, it should be noted that discouraged work-seekers are on the rise, contributing to a higher expanded unemployment rate of 48.6 per cent in the province. The largest proportion of people in the working-age has given up searching for employment while others are not economically active. Thus, a low rate of official unemployment could be not a true reflection of the seriousness of unemployment in the province.

Given the background outlined above, this chapter reviews the labour market dynamics in SA, KZN and District Municipalities. A comparative analysis for KZN and other provinces is also provided to comprehend the differences across the country. The analysis focuses on South African labour market dynamics. It includes employment, employment distribution by industries, unemployment, labour force participation and absorption rate. Similar topics are also covered under the KZN's labour market dynamics. The labour market dynamics discussed in this chapter include employment, employment distribution by industries, unemployment, labour absorption rate, labour force participation rate, and job scarcity at the District level. The chapter concludes by reviewing labour productivity and remuneration for KZN before providing the recommendations.

5.2 South African Labour Market

The emergence of COVID-19 exacerbated the prolonged economic challenges SA has grappled with over the past decade. As indicated in chapter four, the local economy recorded a substantial contraction in 2020 owing to a pandemic-related great national lockdown that put economic activities to a near standstill in the first half of the year. Given the positive correlation between economic growth and employment level, the country realised constantly slow employment growth during these protracted periods of stagnant economic performance. Table 5.1 depicts key labour force characteristics for SA from 2010, 2020 and the first to the third quarter of 2021.

Table 5.1: Key labour force characteristics, 2010 – 2021: Q3

	Labour force characteristics							
	2010	2020	Cumulative average annual growth rate 2010 - 2020		Jan-Mar 2021	Apr-Jun 2021	Jul - Sep 2021	
	Thousands				Thousands			
Population 15–64 yrs	33 299	39 017	1.8%	38.3%	39 455	39 599	39 745	46.6%
Labour force	18 029	22 249	2.4%		22 237	22 768	21 925	
Employed	13 534	15 589	1.6%	Expanded	14 995	14 942	14 282	Expanded
Unemployed	44 943	66 599	4.5%	unemployment rate	7 242	7 826	7 643	unemployment rate
Not economically active	15 271	16 767	1.0%	in South Africa	17 218	16 832	17 820	in South Africa
Discouraged work-seekers	2 152	2 838	3.1%		3 131	3 317	3 862	
Rates (%)			Change: 2010 - 2020	Youth: 15 - 34 (2020)				Youth: 15 - 34 (Q3 2021)
Unemployment rate	24.9%	29.9%	5.0%	48.5%	32.6%	34.4%	34.9%	55.2%
Labour absorption rate	40.6%	40.0%	-0.7%	26.2%	38.0%	37.7%	35.9%	22.6%
Labour force participation rate	54.1%	57.0%	2.9%	45.9%	56.4%	57.5%	55.2%	44.6%

Source: IHS Markit, 2022 and Stats SA, 2021

The past decade has been characterised by a rise in the number of employed people. The number of people employed grew by a cumulative average annual rate of 1.5 per cent from 13.515 million in 2010 to 15.419 million in 2020. Data from Stats SA (2021) shows that employment growth has increased consistently since 2010. However, employment contracted markedly by 5.0 per cent to 15.419 in 2020. The substantial decrease in employment in 2020 reflects the pandemic's negative impact, which induced unprecedented retrenchments as some businesses suffered significant losses. Business's retrenchments continued despite government efforts to mitigate the pandemic's enduring after-effects, particularly on employment. The interventions by the government include R40 billion that was allocated for wage support via the Temporary Employer/Employee Relief Scheme (TERS) and R100 billion set aside for job creation. These initiatives were part of the R500 billion emergency rescue package, amounting to around 10 per cent of GDP, announced by President Cyril Ramaphosa on 21 April 2020.

Despite these support programmes, several businesses struggled to continue operations amid the great national lockdown and ultimately liquidated while others were placed under business rescue. Consequently, about 2 035 liquidations were reported in 2020, with the most significant number of liquidations classified as voluntary at 1 773, while compulsory liquidations stood at 262 (Stats SA, 2022). Notwithstanding that company liquidations do not translate to the number of job losses; however, it indicates the extent of jobs at risk. Furthermore, as the number of liquidations rises, more people reportedly remain out of employment.

While economic activity showed a robust rebound at the beginning of 2021 as vaccination campaigns took off and supported the effort to manage the virus effectively, employment continued to grow, albeit slowly. The total number of people employed receded enormously by 4.4 per cent from 14.942 million in the second quarter to 14.282 million in the third quarter of 2021. The employment level dropped sharply by 2.8 per cent in the third quarter of 2021 compared to the corresponding period in 2020. The most considerable employment losses emanated from the formal sector, where about 571 000 job shedding was reported. Private households followed with 65 000 job losses (Stats SA, 2021).

The decline in employment during the third quarter reflects the impact of a combination of factors that depressed economic activity and contributed to a contraction in overall real GDP. Among the factors that significantly impacted the economy is the reintroduction of the pandemic-related measures amid the third wave of infections, civil unrests mostly in KZN and some parts of Gauteng in July 2021, continued global supply bottlenecks, and cyberattacks at Transnet. The negative impact on economic activity induced by these factors caused notable contraction of several economic sectors and thus employment losses. In addition, the civil unrest culminated in unprecedented public and private properties being destructed and vandalised. This mainly included shopping centres, warehouses, retail stores, and supermarkets, which might have caused some temporary or permanent employment losses depending on whether the business was insured and could recover from the damage.

As a result, SA recorded a substantial and consistent growth in unemployment level over the past decade. In addition, the country experienced prolonged languishing economic performance amid structural impediments. As a result, the number of people unemployed surged cumulatively by an average annual growth rate of 4.6 per cent to 6.708 million in 2020, from 4.488 million in 2010. This translate to a long-term unemployment growth rate of approximately 5.4 percentage points. Therefore, the unemployment rate rose from 24.9 per cent in 2010 to 30.3 per cent in 2020. The unemployment level also increased significantly by about 4.1 per cent in 2020 compared to 6.446 million people unemployed in 2019. The significant rise in unemployment in 2020 could be ascribed to the COVID-19 crisis, which caused unprecedented disruption to economic activities culminating in retrenchments as businesses struggle to operate under an abnormal period.

In addition, it should be noted that the global pandemic came at a difficult time for SA as the unemployment rate was already accelerating consistently over time. Structural factors contributing to a continuous rise in unemployment could be skills mismatch, rigid labour market regulations, lacklustre economic growth, low educational attainment, and skills shortage. Unemployment continues to be a national crisis that perpetuates the other two significant socio-economic challenges, namely, poverty and inequality. SA's levels of unemployment continue to be counted among the highest in the world, particularly when compared to other emerging market economies (EMEs) such as Brazil, Russia, and China.

Despite robust growth as the national economy recovers from the pandemic-induced contraction, the unemployment rate continues to upsurge significantly in the first three quarters of 2021. As a result, the number of people without employment took a significant rise of about 584 000 in the second quarter of 2021, pushing the unemployment rate higher to 34.4 per cent. However, the unemployment level moderated from 7.826 million in the second quarter to 7.643 million in the third quarter. Consequently, unemployment rate increased slightly by 0.5 percentage points to 34.9 per cent. Furthermore, unemployment level was higher at about 1.111 million persons in the third quarter of 2021 than in 2020. As a result, the unemployment rate increased by 4.1 percentage points from 30.8 per cent recorded a year ago.

In addition, the country has a greater number of people who are classified as not economically active[44] to the extent that it surpasses those officially employed. It almost matches those in the labour force, which is the combination of employed and unemployed people. Table 5.1 further shows that the not-economically active group constitutes approximately 43 per cent of the total working-age population. This implies that a more significant working-age population was neither employed nor unemployed. Over the past decade, the not-economically active population grew by a cumulative average annual rate of 1 per cent from 15.249 million in 2010 to 16.688 million in 2020. This trend persists in the first three quarters of 2021, as the total number of not-economically active people increased to 17.820 million in the third quarter.

As the country grapples with prolonged periods of lacklustre economic growth coupled with rising unemployment, the chances to get employed become difficult. It eventually pushes people to give up actively searching for job opportunities. This is evident in the rising number of discouraged work-seekers, which climbed by a cumulative average annual rate of 3.3 per cent over the past decade. It rose from 2.149 million in 2010 to 2.873 million in 2020. Discouraged work-seekers continued to increase in 2021, with the third quarter has shown an enormous increase of 16.4 per cent from 3.317 million in the second quarter to 3.862 million in the third quarter. It is against this background of a high number of discouraged work-seekers that SA's unemployment rate is pronounced when measured using the expanded definition[45]. On average, the country recorded an expanded unemployment rate of 38.3 per cent in 2020, 2 percentage points higher than 36.3 per cent reported in 2019. The expanded unemployment level increased further by 561 000, from 11.923 million in the second quarter to 12.484 million persons unemployed in the third quarter of 2021. Subsequent to this, the expanded unemployment rate took a significant jump in the third quarter and reached 46.6 per cent, up from 44.4 per cent in the second quarter.

According to Stats SA (2021), the expanded unemployment rate has almost doubled compared to the official unemployment rate. The high number of discouraged work seekers is primarily due to many people stopping searching for jobs resulting from difficulty finding employment, and job searching costs are beyond affordability. Based on this background, evidence suggests that joblessness is underestimated, excluding discouraged work-seekers from official unemployment. This assertion was further supported by Lloyd and Leibbrandt (2013), who

[44] Persons aged 15–64 years who are neither employed nor unemployed in the reference week

[45] The expanded unemployment rate does not distinguish between active and discouraged jobseekers but instead count all people without jobs as unemployed.

found that the people who are not looking for employment *"are involuntarily unemployed and should be seen and counted as being unemployed"*.

5.2.1 Employment by industries

Table 5.2 summarises the distribution of employment by industries from 2010, 2020 and the first to third quarters of 2021. The employment level in the country is dominated by industries within the tertiary sector, particularly community and social services, trade, finance, and other business services. This is followed by industries from the secondary and primary sectors. The agricultural sector reported a cumulative average annual growth rate of 2.4 per cent over a ten period, from 684 000 people employed in 2010 to 836 000 in 2020.

Table 5.2: South African employment by industry, 2010, 2020 and 2021: Q1 to Q3

	Number of people employed		Share for each industry		Cumulative average annual growth 2010 -	Jan-Mar 2021	Apr-Jun 2021	Jul - Sep 2021	Qtr-to-qtr change	Year-on-year change
Industry	**2010**	**2020**	**2010**	**2020**	**2020**	**Thousands**				
Agriculture	685 097	836 120	5.1%	5.4%	2.2%	792	862	829	-32	21
Mining	500 205	451 565	3.7%	2.9%	-1.1%	395	398	345	-54	-74
Manufacturing	1 593 849	1 528 378	11.8%	9.8%	-0.5%	1 497	1 415	1 402	-13	-58
Utilities	78 302	79 802	0.6%	0.5%	0.2%	115	118	96	-23	5
Construction	939 209	1 093 805	6.9%	7.0%	1.7%	1 079	1 222	1 157	-65	78
Trade	2 980 876	3 453 669	22.0%	22.2%	1.6%	2 979	3 087	2 778	-309	-231
Transport	714 127	854 559	5.3%	5.5%	2.0%	903	969	964	-5	86
Finance and other business services	2 162 435	2 709 351	16.0%	17.4%	2.5%	2 527	2 248	2 386	138	-48
Community and social services	2 682 599	3 373 024	19.8%	21.6%	2.6%	35 567	3 401	3 191	-210	-190
Private households	1 197 585	1 209 380	8.8%	7.8%	0.1%	1 127	1 194	1 130	-65	9
Total	**13 534 283**	**15 589 653**	**100.0%**	**100.0%**	**1.6%**	**14 995**	**14 942**	**14 282**	**-660**	**-409**

Source: Stats SA, 2021

At this cumulative average annual growth, *agriculture* reported the third-largest employment increase over the last decade. This industry contributed about 5.4 per cent to total employment in 2020, up from a contribution of 5.1 per cent in 2010. However, employment in the agricultural sector plummeted by about 32 000 during the third quarter of 2021, reflecting the impact of constrained activity as the industry contracted significantly. Employment in the mining sector dropped by a cumulative average annual rate of 1.2 per cent over the ten-year period, from 500 000 in 2010 to 450 000 in 2020. The *mining* industry contributed about 2.9 per cent to total employment in 2020, declining from 3.7 per cent in 2010. The number of people employed by this sector decreased by 54 000 in the third quarter of 2021 and 74 000 compared to the same period in 2020.

Despite being the largest employer within the secondary sector, *manufacturing* recorded a slight decrease in the number of people employed. The number of people employed dropped from 1.591 million in 2010 to 1.500 million in 2020, constituting a cumulative average annual rate of 0.7 per cent. On the other hand, employment level dropped sharply by 6.8 per cent in 2020, compared to 1.607 million recorded in 2019. Consequently, employment contribution by this industry moderated by 2.1 percentage points to 9.7 per cent in 2020, down from 11.8 per cent in 2010.

The marked decrease in employment level and contribution by *manufacturing* in 2020 reflects the enduring negative impact of COVID-19 on various businesses due to lockdown restrictions which caused economic activities to drop significantly. Hence, several businesses operating under such circumstances experienced difficulties and ultimately shut down while others retrenched staff to minimise labour costs. As a result, while economic activity continued to recover from the substantial contraction, employment in this sector remained depressed and plunged by a further 13 000 in the third quarter of 2021. Therefore, the significant job shedding by this sector during the third quarter could be attributed to a subdued activity amid continued electricity shortages, low domestic and global demands, resurgence of COVID-19, and prolonged global supply disruptions.

Employment level in the *construction* sector expanded by a cumulative average annual rate of 1.5 per cent from 937 000 in 2010 to 1.072 million in 2020. Despite a robust increase over ten years under review, the *construction sector* recorded enormous employment losses of 9.5 per cent in 2020 compared to 1.186 million people employed in 2019. The sector contribution to total employment improved slightly by 0.1 percentage points to 7 per cent in 2020, up from 6.9 per cent in 2010. Similar to other sectors, substantial job shedding in the *construction* sector, particularly in 2020, is attributable to lacklustre economic performance as most construction activities were severely affected by the global pandemic. The construction sector reported employment losses of about 65 000 in the third quarter of 2021, reflecting the continued impact of resurgent COVID-19 infections and related restrictions which impede construction activities.

Employment in the *trade* sector improved by a cumulative average annual rate of 1.5 per cent to 3.416 million in 2020, from 2.976 million people employed in 2010. However, the number of people employed in the sector plummeted by 5.4 per cent in 2020 compared to 3.612 million employed in 2019. The marked decrease in the number of people employed in *trade* reflects economic implications of the global pandemic on tourism, which resulted in the prohibition of international and domestic travel. Moreover, accommodation and catering services were also severely restricted. The pandemic further blocked global supply chains, thereby negatively impacting the *retail, motor and wholesale trade* activities. Despite a significant decline, *trade* was the largest employer, with an employment contribution of 22.2 per cent in 2020, slightly higher than 22 per cent reported in 2010. Disturbingly, the number of people employed in this industry dropped sharply by 309 000 in the third quarter of 2021, reflecting the impact of the pandemic-related restrictions, which entail disallowing sit-ins at restaurants and curfew. The sector was further impacted negatively by the civil unrest in KZN and Gauteng (GP), persistent global supply chain disruptions, and the cyberattack at the Transnet.

The number of people employed in the *transport* sector increased by a cumulative average annual rate of 1.9 per cent, from 713 000 people employed in 2010 to 846 000 in 2020. However, while the employment rate increased over the ten-year period, it dropped moderately by 2.8 per cent in 2020 compared to 870 000 people employed in 2019. In addition, the emergence of COVID-19 impacted on various transport services as people's mobility was restricted, which included a complete shutdown of air travel and rail freight.

Nevertheless, the sector contributed about 5.5 per cent to total employment in 2020, slightly higher than 5.3 per cent recorded in the previous year. At this rate, *the transport sector* is the least contributor to total employment compared to other sectors within the tertiary sector. Employment level in the *transport* sector declined by 5 000 in the third quarter of 2021, following an increase in the preceding quarter. The marginal decrease in employment within the *transport sector* reflects the negative effect of slow activity as the sector grapples with the global pandemic's persistent negative effect, which continues to weigh down subsectors such as rail freight.

The number of people employed in the *finance* sector expanded by a cumulative average annual rate of 2.4 per cent to 2.672 million in 2020, from 2.149 million people employed in 2010. This was the second most significant cumulative average annual growth compared to all other sectors. However, employment level plummeted moderately by 4.2 per cent in 2020 compared to 2.790 million people employed in 2019. Nevertheless, despite a decline in 2020, *finance* sector contributed significantly to total employment at 17.3 per cent, relatively higher than 16 per cent recorded in 2010.

Employment in the *finance* sector increased by 138 000 in the third quarter of 2021, following a decrease in the second quarter. The number of people employed in the *community and social services* sector increased by the most considerable cumulative average annual rate of 2.5 per cent compared to other sectors during the last decade. This sector is the second-largest employer in the country as it contributed 21.7 per cent of total employment in 2020, slightly higher than 19.8 per cent in 2010. However, employment level in the sector declined by a further 210 000 in the third quarter of 2021.

5.2.2 Unemployment by age and gender

The distribution of unemployment by gender shows that women experience a higher unemployment rate than men. This observation persists despite government initiatives to empower women and encourage them to participate in the mainstream economy. Though unemployment increased notably for both genders, it remained high among women at 37.3 per cent in the third quarter of 2021 (Stats SA, 2021). The concentration of unemployment among women is further indicated by the low labour absorption rate (LAR)[46] and labour force participation rate (LFPR)[47] at 35.9 per cent and 55.2 per cent, respectively. On the other hand, an estimated 32.6 per cent of men were out of employment during the third quarter of 2021. Moreover, the LAR for men was estimated at 41.3 per cent, whilst the LFPR was 61.5 per cent. Therefore, the government needs to continue implementing measures to empower women and encourage them to participate in various economic activities. This should include incentives to

[46]The LAR is defined as the percentage of the working-age population that is currently employed. It provides an alternative indication of the unemployment rate regarding the labour market's lack of job opportunities.

[47] The LFPR shows the extent to which the working-age population is economically active. It comprises people who actively participate in the economy, either employed or unemployed, excluding non-economically active people.

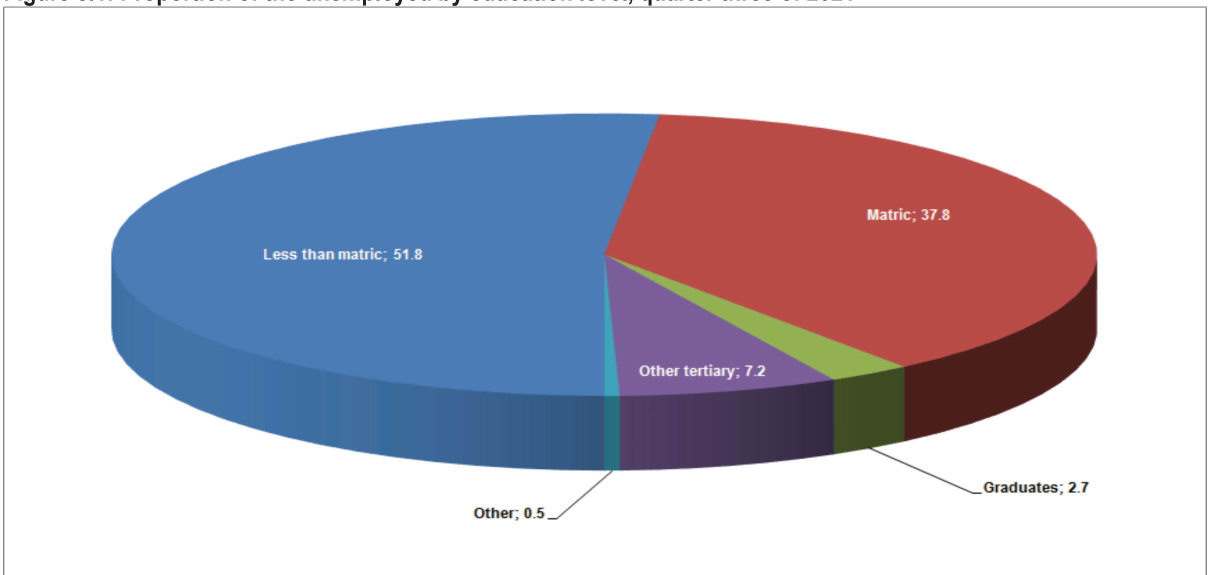
encourage young women to participate in businesses by creating an environment conducive for small, medium and macro enterprises (SMMEs) to flourish.

Evidence shows that young people face a high unemployment rate compared to the working-age cohorts of elderly people. For example, the QLFS shows that unemployment was high at 66.5 per cent among young people aged 15 to 24 years, followed by those aged 25 to 34 at 43.8 per cent in the third quarter of 2021. Furthermore, in respect of education, many young people leave school without completing the secondary level, thereby reducing the chances of being employed. This also contributes to the country's skills deficit, especially among young people, making them unemployable in almost all the sectors of the economy. This contrasts with the unemployment rate among those above 35 years, which is relatively low. For instance, the unemployment rate was low among people aged 45 to 54 years at 29.9 per cent and those aged 55 to 64 at 12.7 per cent in the third quarter of 2021 (Stats SA, 2021).

5.2.3. Unemployment by education level

Figure 5.1 depicts the proportion of the unemployed by level of education during the third quarter of 2021. As indicated earlier, low educational attainment contributes to rising unemployment in the country. This is evident from the figure, indicating that people with less than matric education levels (51.8 per cent) comprise the largest share of the unemployed, followed by those with matric only at 37.8 per cent. However, the unemployment rate was relatively low among graduates at 2.7 per cent during the third quarter of 2021. Given the correlation that seems to exist between educational attainment and unemployment, more attention needs to be directed at reducing the school drop-out rate and improving access to Technical and Vocational Education and Training (TVET) colleges. This would ensure that young people who left schooling without completing their secondary level get access to TVET colleges and pursue their careers on various vocational skills required in the labour market.

Figure 5.1: Proportion of the unemployed by education level, quarter three of 2021



Source: Stats SA, 2021

Although unemployment is still low among graduates, 2.7 per cent is enormous for unemployed graduates as they have post-matric qualifications. The unemployment rate among graduates might increase if not addressed because factors contributing to their employability will continue to affect new entrants and thus increase the number of unemployed graduates. Most graduates remain unemployed as education and prior work experience are critical in the labour market. Employers often prefer to employ those with previous work experience and a higher level of education. Unfortunately for the youth, lack of work experience is a stumbling block that makes it hard to secure employment. Further, there seems to be a mismatch between the qualifications and the needs of the economy. As part of the solution, students must be guided towards attaining the skills and qualifications that the economy needs.

Youth unemployment challenges persist despite various government programmes promoting economic inclusion through industrialisation and job creation. The adopted programmes include incentive schemes developed according to the Industrial Policy Action Plan (IPAP). This seeks to establish an industrial development path characterised by increased participation of previously marginalised citizens and regions. The most recent incentive scheme is the Black Industrialist Scheme (BIS), which centres on black-owned enterprises' growth and global competitiveness. Another essential incentive scheme is the Agro-Processing Support Scheme (APSS). It aims at encouraging South African agro-processing and beneficiation (agri-business) enterprises to invest in up and downstream support industries and, in the process, enhance transformation. The focus on agro-processing is primarily due to its tremendous potential of contributing to the economy in terms of stimulating investment, economic diversification, and job creation. Other interventions include the Aquaculture Development and Enhancement Programme.[48] (ADEP), Incubation Support Programme[49] (ISP), and Automotive Investment Scheme[50] (AIS).

In 2018, the first annual Presidential Job Summit was launched as a platform where various employment opportunities to assist young people were discussed. In this regard, progress is made regarding removing the regulatory inhibitors in the pharmaceutical industry, the review of the classification of critical skills, and expanding short-term training opportunities for young people in high growth sectors such as business processing services. Furthermore, from the business perspective, progress has been made concerning establishing an online company registration system that enables users to register a company. Businesses apply for and obtain a tax number, value-added tax (VAT) number, Broad-based Black Economic Empowerment (*BBBEE*) certificate, unemployment insurance and the skills development levy, among others, in one place. Through this online portal, the government aims to reduce the time to set up a company significantly.

[48] The ADEP aims to develop emerging aquaculture farmers, increase production, sustain and create jobs, and encourage geographical diversification.

[49] The ISP) aims to build self-sustaining SMMEs through skills transfer, enterprise development, supplier development, and marketing opportunities to generate revenue, create jobs, and contribute to economic growth.

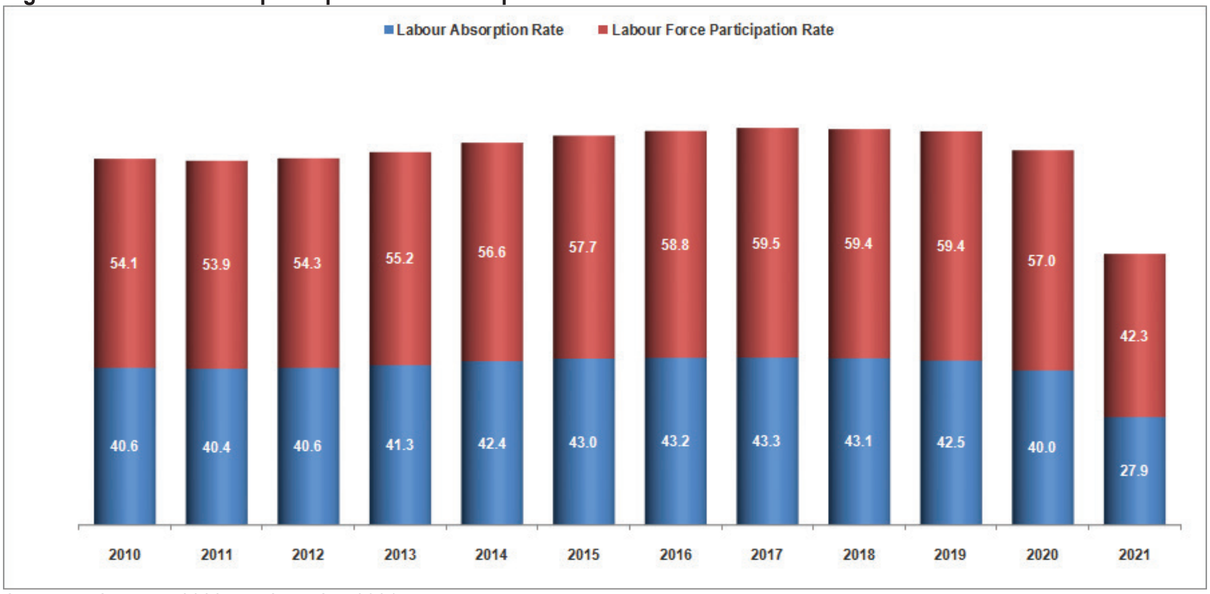
[50] The AIS) aims to build on and sustain these gains through investment in new and replacement models and components to increase plant production volumes, create employment, and strengthen the automotive value chain.

The Youth Employment Service (YES) was also launched to assist young people with their employment needs. It also aims at persuading corporates to commit to providing leadership to first-time jobseekers in line with the quest to upgrade skills and education, among others. This recognises that specific needs vary by workplace, with areas for improvement ranging from work re-organisation to enhance career mobility and create more semi-skilled and skilled workers opportunities. The intervention also focuses on greater transparency around pay in large organisations, continued support for joint ownership by workers and communities, and upgrading supervisory, communication, and mediation practices.

5.2.4 Labour force participation and absorption rate

Figure 5.2 illustrates SA labour force participation and absorption rate from 2010 to 2021. The scourge of the rising unemployment rate in the country, as highlighted above, is further indicated by other labour market indicators such as the LFPR and LAR. The country has constantly reported a LFPR above 54 per cent throughout the period under review. In 2019, an estimated 59.4 per cent of the labour force actively participated in economic activities. This equated the previous year's percentage and 5.3 percentage points higher than 54.1 per cent in 2010. Though the participation rate is relatively high in the country, it is insufficient compared to the rate at which the labour force is increasing. This shows a significant need for further initiatives to create job opportunities that absorb new entrants into the labour market. Given the severe economic contraction caused by the global pandemic, the LFPR plummeted sharply to 47.3 per cent in the second quarter of 2020. It improved moderately to 54.2 per cent in the third quarter, before rising further to 56.6 per cent in the fourth quarter following the cautious reopening of economic activities as the lockdown restrictions were gradually lifted. Therefore, the average LFPR for 2020 was estimated at 54.6 per cent.

Figure 5.2: Labour force participation and absorption rate in South Africa 2010 – 2021



Source: IHS Markit, 2022 and Stats SA, 2021

The LAR also shows an almost stable trend. It fluctuated above 40 per cent throughout the period under review. In 2020, about 40 per cent of the province's working-age population was absorbed in the labour market. This was relatively lower than 42.5 per cent reported in 2019 but somewhat higher than 40.6 per cent recorded in 2010. Despite the stable trend over time, LAR has trailed below the 50 per cent mark, signalling the national economy's inability to create sustainable employment opportunities for the growing labour force. Like the LFPR, the LAR dropped sharply to 35.9 per cent in the third quarter of 2021. This was due to the unprecedented disruption in economic activities as the country enforced nationwide lockdown to curb the spread of the COVID-19. However, it began increasing moderately to 37.5 per cent in the third quarter and a further 38.2 per cent in the fourth quarter due to easing the lockdown restrictions. In the third quarter of 2021, the LAR declined by 1.8 per cent to 35.9 per cent.

5.3 Labour Market of KwaZulu-Natal

The protracted period of sluggish provincial economic performance post-global financial crisis has significantly impacted the employment level in KZN. Table 5.3 summarises key labour force characteristics for KZN. The employment level expanded by a cumulative average annual rate of 1.1 per cent over the last decade, increasing from about 2.37 million in 2010 to 2.60 million persons employed in 2020. However, the slow employment growth reflects the negative impact of structural factors that hampered much desired economic growth.

Table 5.3: Key labour force characteristics, 2010 – 2021: Q3

	Labour force characteristics							
	2010	2020	Cumulative average annual growth rate 2010 - 2020		Jan-Mar 2021	Apr-Jun 2021	Jul - Sep 2021	
	Thousands				Thousands			
Population 15–64 yrs	6 547	7 392	1.4%	39.9%	7 291	7 317	7 343	48.6%
Labour force	3 003	3 544	1.9%		3 496	3 584	3 221	
Employed	2 359	2 593	1.1%	Expanded unemployment rate in KwaZulu-Natal	2 429	2 421	2 297	
Unemployed	629	940	4.6%		1 067	1 163	924	
Not economically active	3 544	3 848	0.9%		3 795	3 732	4 122	Expanded unemployment rate in KwaZulu-Natal
Discouraged work-seekers	533	789	4.5%		773	823	968	
Rates (%)			Change: 2010 - 2020	Youth: 15 - 34 (2020)				
Unemployment rate	21.0%	26.5%	5.6%	45.1%	30.5%	32.5%	28.7%	
Labour absorption rate	36.3%	35.2%	-1.0%	23.3%	33.3%	33.1%	31.3%	
Labour force participation ra	45.9%	47.9%	2.1%	37.9%	48.0%	49.0%	43.9%	

Source: IHS Markit, 2022 and Stats SA, 2021

The provincial employment level also suffered a big blow amid the emergency of COVID-19, which induced a substantial contraction in 2020 and caused job losses as many businesses experienced enormous losses owing to the hard national lockdown. Consequently, the number of people employed dropped markedly by about 4.85 per cent from 2.71 million in 2019 to 2.60 million in 2020. This was the most considerable rate of job losses recorded by the province over the ten years under consideration. Moreover, the employment level continued to slow down going into 2021 in spite of resilient economic recovery.

The total number of people employed in KZN receded significantly by 5.1 per cent in the third quarter of 2021. It dropped from 2.42 million in the second quarter to 2.30 million in the third quarter of 2021. The province also recorded a significant employment loss at 3.8 per cent compared to the corresponding period in 2020. During the third quarter, the marked decline in employment level could be attributed partly to the civil unrest that plagued most parts of KZN early in July 2021. As indicated in Chapter Four, among the properties destructed and vandalised during the unrest were shopping centres, warehouses, retail stores and supermarkets, implying that some people lost employment. In contrast, others remained temporary out of employment until renovations were completed.

KZN was among the provinces that reported the most extensive job shedding. For example, as GP shed an estimated 200 000. In the North West (NW) and Limpopo (LP), 128 000 and 112 000 were lost, respectively. However, Employment gains were only recorded in Northern Cape (NC) at 9 000 during the same period. KZN was also among provinces that recorded the most prominent employment losses when compared to the corresponding period in 2020, such as LP (121 000), NW (80 000), GP (58 000) and MP (57 000). On the other hand, the WC and EC were the only provinces that recorded gains in employment at 9 000 and 4 000, respectively.

While the employment level was growing, albeit at a slower pace, the unemployment level continued to increase significantly over the last decade. The number of people without employment in KZN climbed by a cumulative average annual rate of 4.6 per cent from 629 000 in 2010 to 940 000 in 2020. Consequently, unemployment rate accelerated by a cumulative average annual rate of 5.6 per cent from 21.0 per cent to 26.5 per cent over the same period. The persistent rise in unemployment is attributable to numerous structural factors such as subdued economic performance, skills mismatch, low educational attainment, and rigid labour market regulations. The deteriorating economic growth coupled with the accelerating unemployment rate in the province manifests the conventional wisdom advanced by Okun (1962), asserting that higher economic growth results in a lower unemployment rate and the opposite is true for low economic growth. The unemployment level increased by about 4.3 per cent between 2019 and 2020, reflecting the effects of ailing economic performance, particularly a broad-based contraction caused by COVID-19.

The negative impact of the pandemic continued to manifest itself in the labour market indicators. As a result, the unemployment level in KZN climbed beyond 1 million in the first two quarters of 2021, translating to about 32.5 per cent in the second quarter. However, the number of people unemployed moderated by 20.6 per cent from 1.16 million in the second quarter to 924 000 in the third quarter of 2021. Consequently, the unemployment rate dropped marginally by 3.8 percentage points to 28.7 per cent.

The unemployment level in the third quarter of 2021 was still 8 per cent higher than the corresponding period in 2020. Nevertheless, KZN and NC were the only provinces that recorded a decrease in the official unemployment rate. On the contrary, other provinces recorded an increase in the unemployment rate, with the most significant increases reported in MP with 2.3 percentage points, followed by LP with 2.1 percentage points. However, the official unemployment rate increased in all nine provinces compared to the same period in 2020, with the most significant increase of 9.7 percentage points recorded in MP. The NW followed this with 7.4 percentage points and LP with 6.2 percentage points.

Notably, the largest share of the working-age population in KZN is not economically active, and this trend has continued over the last ten-year period. Despite a low cumulative average annual growth rate of 0.9 per cent from 3.54 million in 2010 to 3.85 million in 2020, economically active remains higher than those in the labour force who are either employed or unemployed according to the narrow definition. This reflects the difficulty to search for employment which pushes people to give up looking for jobs and thus increases the expanded unemployment rate. This is evident from the table as it shows that the expanded unemployment rate was 39.9 per cent in 2020, almost doubled the official unemployment rate. Furthermore, Not-economically active group continued to increase and exceeded the 4 million mark in the third quarter of 2021, pushing the expanded unemployment rate further to 48.6 per cent. The table also reveals that several people of the working-age population are becoming discouraged as this group was estimated at 968 000 in the third quarter, marginally more remarkable than those unemployed.

Although the KZN unemployment rate is still below the national average and in other provinces, it remains one of the major socio-economic challenges contributing to high poverty and inequality levels. It also negatively affects the overall quality of life of the province's people. Therefore, drastic measures must be put in place to narrow the stubbornly high unemployment rate. This could be achieved by intensifying the implementation of programmes and policies to promote inclusive economic growth. This argument is also acknowledged in the Provincial Growth and Development Plan (PGDP) (2020), which stipulates that creating jobs through an inclusive economy is a key enabling factor for the province.

The PGDP further highlights the importance of focusing on creating employment through realising agricultural potential, enhancing industrial development through investment into the key productive sectors of manufacturing, tourism, transport and logistics, the maritime sector, the green economy and services sectors. Other government initiatives through which the scourge of unemployment can be narrowed include a Provincial Business Retention and Expansion (BR&E) programme and a full range of industrial policy support programmes and measures.

The challenge of slow employment level and hence rising unemployment rate is evident in other labour market indicators such as the labour absorption rate (LAR) and labour force participation rate (LFPR). LAR reflects how the workforce is absorbed in the labour market. In KZN, the absorption rate dropped slightly by 1.0 percentage points from 36.3 per cent in 2010 to 34.9 per cent in 2020. This follows a significant decline of 2.3 percentage points from 37.3 per cent in 2019, reflecting the negative impact of COVID-19 on labour market indicators, especially the economy's inability to absorb new entrants.

The LAR continues to deteriorate, with an estimated decrease of 1.8 percentage points from 33.1 per cent in the second quarter to 31.3 per cent in the third quarter of 2021. At this rate, KZN was among provinces that recorded the lowest LAR, such as Eastern Cape and Limpopo at 27.7 per cent and 29.4 per cent, respectively. Conversely, provinces that reported the highest LAR during the third quarter include Western Cape at 46.0 per cent and Gauteng at 41.2 per cent.

LFPR indicates the proportion of the working-age population employed or unemployed. In KZN, LFPR expanded moderately by 2.1 percentage points over ten years, from 45.9 per cent in 2010 to 47.8 per cent in 2020. The adverse effects of COVID-19 are evident in a significant decrease of 2 percentage points from 49.8 per cent in 2019. LFPR plunged sharply by 5.1 percentage points from 49.0 per cent in the second quarter to 43.9 per cent in the third quarter of 2021. KZN recorded the second-lowest LFPR after Limpopo at 43.6 per cent, but lower than Northern Cape at 44.7 per cent. Gauteng and Western Cape reported the highest LFPR at 65.3 per cent and 62.4 per cent, respectively, during the third quarter.

5.3.1 Employment by industries

The distribution of provincial employment level by industries in Table 5.4 reveals that the largest share of people is employed by industries within the tertiary sector such as *trade* and *community, and social services*. This is followed by industries from the secondary and primary sectors. Employment by the *agricultural* sector increased by a cumulative average annual growth rate of 1.8 per cent between 2010 and 2020. The table shows that *agriculture* contributed about 5.3 per cent to total provincial employment in 2020, marginally greater than a contribution of 5 per cent reported in 2010.

The number of people employed in this industry dropped significantly by 23 000 from 137 000 in the second quarter to 113 000 in the third quarter of 2021. The marked decrease in employment by *agriculture* in the third quarter reflects the negative impact of a substantial decline in economic activity, as outlined in the preceding chapter. Employment in the *mining* sector increased by a cumulative rate of 2.1 per cent over the ten years, contributing 0.4 percentage points to total provincial employment. Despite robust cumulative growth, the *mining* sector is the second least employer in the province. The number of people employed by this sector increased by a further 3 000 in the third quarter of 2021.

The perpetual decline in employment by *agriculture* demands that the province intensifies the implementation of policies and strategies that seek to promote industry’s development. This is due to the tremendous potential for agricultural expansion in the province. If agricultural resources are optimally managed, the production yield could increase dramatically and unlock the full agricultural production potential. Moreover, the province has vast hectares of land and generally good rainfalls. Therefore, agricultural economic activities and agro-processing must be pursued rigorously. Furthermore, the province can take advantage of the Agro-Processing Support Scheme (APSS) mentioned above to promote the province's agro-processing sector.

The *manufacturing* sector is among the largest employers in the province. However, the number of people employed by this sector plunged moderately by a cumulative average annual rate of 1.4 per cent in the past decade. Hence, the contribution to total employment by *manufacturing* sector plummeted from 14.1 per cent in 2010 to 11.4 per cent in 2020. The low contribution to total employment in 2020 could be attributed to job shedding caused by the global pandemic. In addition, several businesses enforced retrenchments to minimise costs while others completely shut down amid disruption to business operations during the hard lockdown. As a result, the number of people employed in *the manufacturing sector* reverted from a decline and recorded the most significant increase with 18 000 in the third quarter of 2021.

Table 5.4: KZN employment by industries, 2010, 2020 – 2021: Q1 to Q3

Industry	Number of people employed		Share for each industry		Cumulative average annual growth 2010 - 2020	Jan-Mar 2021	Apr-Jun 2021	Jul-Sep 2021	Qtr-to-qtr change	Year-on-year change
	2010	2020	2010	2020		Thousands				
Agriculture	117 658	138 587	5.0%	5.3%	1.8%	130	137	113	-23	-18
Mining	9 495	11 463	0.4%	0.4%	2.1%	2	3	6	3	4
Manufacturing	333 459	294 869	14.1%	11.4%	-1.4%	277	253	271	18	-1
Utilities	8 078	7 319	0.3%	0.3%	-1.1%	9	2	-	-	-
Construction	191 479	192 482	8.1%	7.4%	0.1%	184	228	227	-1	35
Trade	513 179	603 444	21.7%	23.3%	1.8%	543	532	480	-53	-45
Transport	153 999	164 810	6.5%	6.4%	0.8%	168	173	163	-10	-5
Finance and other business services	335 910	376 073	14.2%	14.5%	1.3%	355	309	303	-6	-6
Community and social services	473 916	591 345	20.1%	22.8%	2.5%	577	563	529	-33	-69
Private households	222 675	212 438	9.4%	8.2%	-0.5%	186	222	206	-16	22
Total	**2 359 847**	**2 592 830**	**100.0%**	**100.0%**	**1.1%**	**2 026**	**2 144**	**2 298**	**-121**	**-83**

Source: IHS Markit, 2022

The *electricity* sector is the least employer in the province. It reported a decline of 1.1 per cent in cumulative average annual rate, with a contribution of 0.3 percentage points to total employment. The *construction* sector recorded a relatively low cumulative average annual rate of 0.1 per cent over ten years under review. This sector is among the largest employers within the province. However, its contribution to total provincial employment dropped somewhat from 8.1 per cent in 2010 to 7.4 per cent in 2020. The marked decline in the contribution by the *construction* sector reflects a subdued economic activity as it contracted in four consecutive years, and the most significant reduction was reported in 2020 due to COVID-19. Employment level in the *construction* sector decreased modestly by 1 000 in the *third quarter of 2021 compared to the preceding quarter.*

The *trade* sector is the largest employer in the province with more than 600 000 people employed in 2020 and contributed 23.3 per cent to total provincial employment, up from 21.7 per cent in 2010. Consequently, this sector recorded a cumulative average annual rate increase of 1.8 per cent over the past decade. The significant contribution by *the trade sector* to provincial employment is supported by tourism, particularly the *catering* and *accommodation* subsectors, because the province is home to different tourist attractions in Durban. The *trade* sector also benefits from the two busiest harbour ports of Durban and Richard's Bay. However, the number of people employed by this sector declined markedly by 53 000 in the third quarter of 2021, reflecting the negative impact of lockdown restrictions during the third wave, which prohibited sit-ins at restaurants and alcohol sales; the civil unrest and the cyberattack at Transnet.

The number of people employed in the *transport* sector increased by a cumulative average annual rate of 0.8 per cent over the past decade. The sector contribution to total provincial employment moderated from 6.5 percentage points in 2010 to 6.4 percentage points in 2020. The modest drop in 2020 could be ascribed to the negative effects of COVID-19, which disrupted numerous activities within this sector, especially those related to rail freight and restrictions to international and domestic travels during most part of the year. Employment level in *transport sector* plunged by 10 000 in the third quarter of 2021, following a slight increase in the preceding quarter. The decrease in employment within the *transport* sector reflects the constrained economic activity as other subsectors such as rail freight remain highly depressed by the global pandemic and deteriorating infrastructure due to vandalism that took place during the hard lockdown.

The number of people employed in the *finance* sector expanded by a cumulative average annual rate of 1.3 per cent over the ten year period under review. The industry contributed 14.5 percentage points to total provincial employment in 2020, slightly higher than 14.2 percentage points in 2010. A resilient output growth supports the *finance* sector's significant contribution to total employment as the sector maintained annual growth of above 2 per cent in most years. However, employment in this sector dropped by a further 6 000 in the third quarter of 2021, reflecting the effects of lockdown restrictions amid the third wave of COVID-19 infections and the civil unrest in July 2021.

The number of people employed in the *community and social services* sector increased by the most considerable cumulative average annual rate of 2.5 per cent compared to other sectors during the last decade. This sector is the second largest employer in the province as it contributed 22.8 percentage points to total provincial employment in 2020, marginally higher than 20.1 percentage points in 2010. However, employment level in the *community and social services* sector declined by a further 33 000 in the third quarter of 2021.

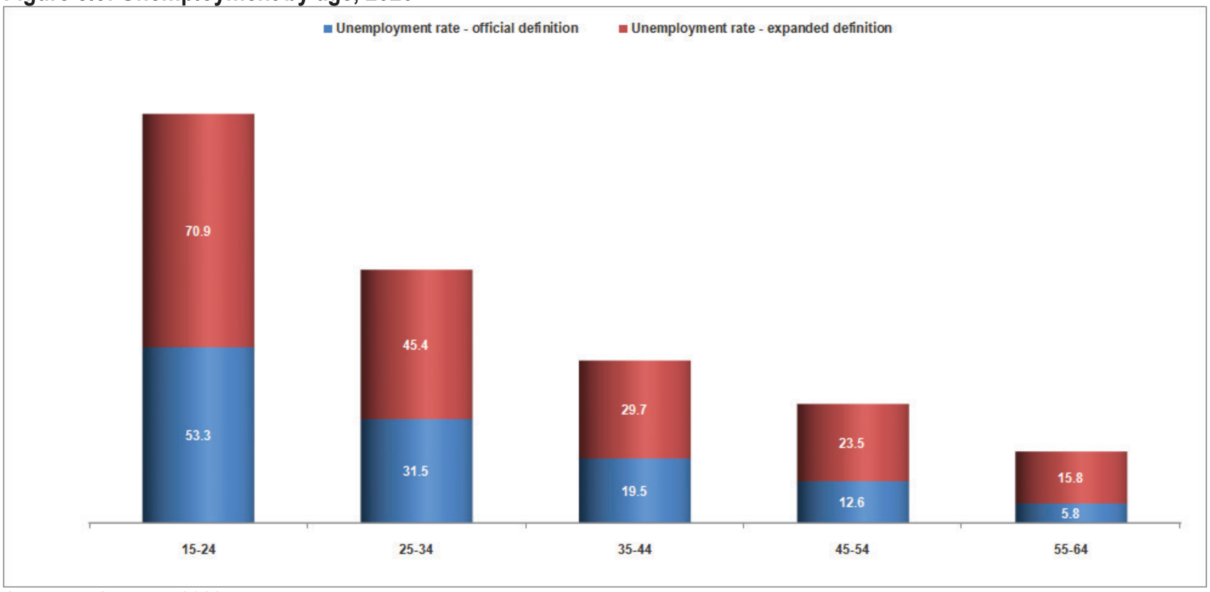
Given the significant decrease in the number of those employed in KZN, the Provincial Government should put more effort towards reviving the *manufacturing sector*. Moreover, there are several incentive schemes developed by the Department of Trade, Industry and Competition (DTIC), some of which are mentioned above. In doing so, this industry's employment contribution would increase because it would expand its plants, which requires more labour. This intervention could also be essential in increasing exportable products and widening the export base whilst creating more job opportunities. Furthermore, skills development focusing on different manufacturing industry components should be a priority for the government to ensure that many people get absorbed in the industry and deal with the province's skills shortage.

5.3.2 Unemployment by age and gender

The scourge of higher unemployment rate is acute among young people compared to older people of the working-age population. The high unemployment rate among young people emanates from numerous factors, including lower skills level and work experience required in the labour market. Other challenges include skills mismatch, rigid employment policies, and low education attainment. Regarding education attainment, a remarkable progress has been made to improve the number of people who complete secondary school. However, it should be noted that a more significant proportion of young people leave school before completing an upper secondary level and thus experiences difficulties getting absorbed in sustainable employment. Figure 5.3 displays the distribution of the unemployment rate by age group in 2020.

The most considerable unemployment rate emanates from young aged between 15 and 24 years at 57.5 per cent, while those aged between 25 and 34 reported an unemployment rate of 33 per cent. On average, the official unemployment rate among young people between 15 to 34 years was estimated at 45.3 per cent in 2020. The challenge of a higher unemployment rate among young people is common across provinces. Provinces that recorded the most extensive youth unemployment in 2020 include EC at 59.0 per cent, FS at 56.3 per cent, and the NW at 52.5 per cent. The lowest youth unemployment rate was recorded in the WC at 33.8 per cent and the NC at 41.3 per cent (Table A5.2). The figure further shows that young working-age people are currently faced with a high unemployment rate than those above 35. KZN's unemployment rate among those aged between 35 and 44 years was estimated at 20.7 per cent, followed by those aged 45 to 54 and 55 to 64 years at 13.7 per cent and 6.4 per cent, respectively. Other provinces have also reported an almost similar unemployment rate trend among these age groups.

Figure 5.3: Unemployment by age, 2020



Source: IHS Markit, 2022

Youth unemployment rate is significantly higher when measured using the expanded definition, which incorporates discouraged-work seekers. The figure shows that the youth unemployment rate using the expanded definition is almost half higher than the official unemployment rate. Approximately 72.4 per cent of young people aged between 15 and 24 years were unemployed in 2020. This is followed by those aged between 25 and 34 years at 46.2 per cent. The average rate of unemployment using expanded definition among people aged between 15 and 34 years stood at 59.3 per cent.

The expanded youth unemployment rate in KZN is also notably higher among other age groups, with approximately 31.3 per cent of people aged between 35 and 44 years reported to be unemployed in 2020. This was followed by those aged 45 to 54 years and 55 to 64 years at 25.4 per cent and 16.7 per cent, respectively. This is the case for other provinces whereby EC reported the largest joblessness for people aged between 15 and 34 years at 65.1 per cent, followed by NW and Limpopo at 64.2 per cent and 61.3 per cent, respectively. The lowest expanded youth unemployment rate was reported only in the WC at 38.6 per cent. In terms of gender, the province had a high unemployment rate among females at 27.2 per cent compared to their male counterparts at 26.7 per cent in 2020.

The provincial government is working tirelessly to ensure that young people are at the centre of all economic activities and utilise all the available opportunities. In doing so, skills development is at the forefront, whereby new entrants are allowed to gain entry-level experience through internships, mentorships and learnerships. Furthermore, the government also strives to promote Small, Medium and Micro Enterprises (SMMEs) owned by the youth. This follows the KZN Youth Fund (KZNYF) programme officially launched in 2019, aiming to assist youth-owned businesses with the necessary financial support and other capital or equipment required for their businesses' proper operational structures.

The KZNYF initiative emanated from a realisation that SMMEs can generate much-needed employment and contribute to GDP growth in the province. However, it has also been noted that most small businesses collapse at an early stage of operation due to a lack of financial support. Other factors contributing are entrepreneurial and business management skills, information regarding entering the export market, and high competition within industries in which they operate. Therefore, the KZNYF aims to address these challenges, assist young people with the necessary financial support, and create a conducive environment for SMMEs to thrive.

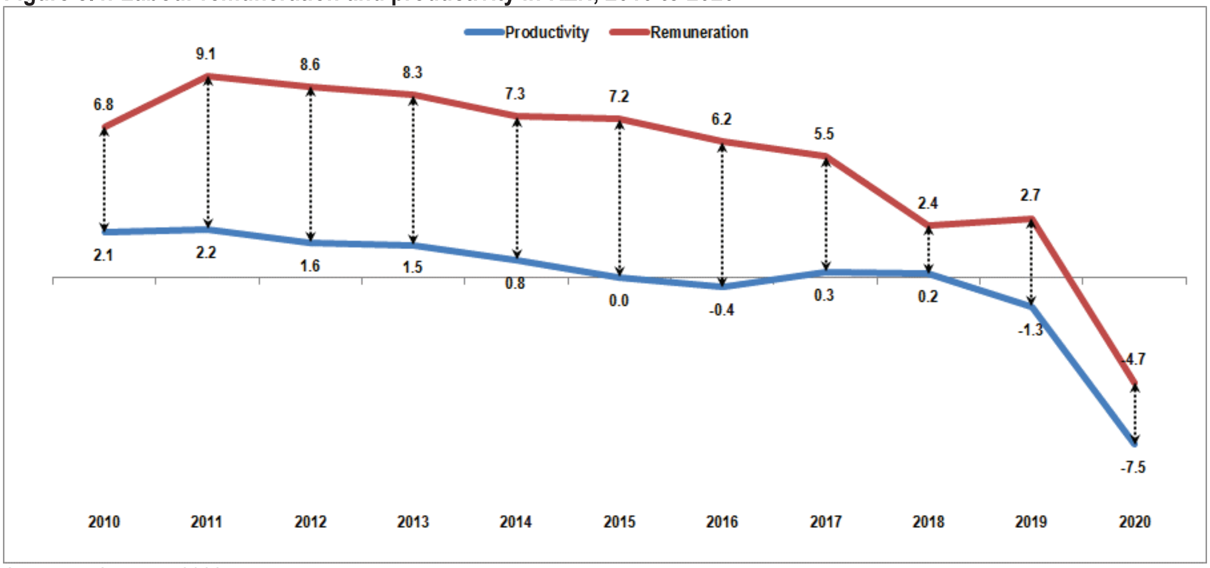
5.4 Labour remuneration and productivity

Labour productivity is the measure of output produced by workers in various sectors of the economy with available inputs. It highlights the extent to which inputs are efficiently utilised in an economy to produce goods and services (Barker, 1998). According to the mainstream macroeconomic theory, productivity is linked to labour remuneration. The labour market is in equilibrium when the marginal cost of employing an additional person equals the marginal revenue earned by employing that person. Hence, more employees should be hired if the marginal revenue is greater than the marginal cost associated with employing an extra person. Conversely, if the opposite is true, employees should be released if the marginal cost exceeds the marginal revenue. This suggests that labour remuneration should positively affect labour productivity (Tsoku, 2014).

Figure 5.4 provides a review of the labour productivity and remuneration trends in KZN between 2010 and 2020. The growth rate in labour remuneration has out-weighed productivity growth in KZN over the period under review. In 2020, the labour productivity contracted by 7.5 per cent while the labour remuneration dropped by 4.7 per cent. In an ideal situation, labour productivity should be higher than the remuneration level to increase the willingness to absorb more labour into the economy.

In line with the economic theory, higher productivity above the remuneration level ensures that the costs associated with employing additional labour into the firm would be less than the revenue. Hence, the economy can continue absorbing additional employees into the labour market. However, in KZN, there is a considerable gap between productivity and remuneration. Productivity in the province is exceptionally low compared to the remuneration level. This shows that more work needs to be done in the province to ensure that those working do not get retrenched while trying to absorb the new entrants into the labour market.

Figure 5.4: Labour remuneration and productivity in KZN, 2010 to 2020



Source: IHS Markit, 2022

5.5 Conclusion and recommendations

This Chapter discusses labour market dynamics from national, provincial and district perspectives. An analysis includes labour force characteristics and a review of government's programmes that sought to tackle issues affecting the labour market. It also highlights the areas that require significant attention from policymakers. The labour markets, both at the global and local levels, suffered adversely from the adverse effects of the COVID-19 crisis in 2020. The advent of COVID-19 exacerbated labour market challenges in the country because other indicators such as employment were already growing slower while unemployment was persistently rising prior to the global pandemic. Consequently, unemployment remained higher according to global standards.

In SA, employment levels increased by a cumulative average annual rate of 1.5 per cent between 2010 and 2020. The downward trajectory in employment growth began in 2015 and reached the lowest rate of 0.2 per cent in 2019, before contracting markedly by 5.0 per cent from 16.225 million in 2019 to 15.419 million in 2020. The substantial decrease in employment in 2020 reflects the pandemic's negative impact, which induced unprecedented retrenchments as some businesses suffered significant losses. Employment losses continued coming into 2021; the total number of people employed receded enormously by 4.4 per cent from 14.942 million in the second quarter to 14.282 million in the third quarter of 2021. Employment level dropped sharply by 2.8 per cent in the third quarter of 2021 compared to the corresponding period in 2020.

SA realised a substantial and consistent growth in unemployment level over the past decade as the country experiences prolonged languishing economic performance amid structural impediments. The number of people unemployed surged cumulatively by an average annual rate of 4.6 per cent between 2010 and 2020. This translate to a long-term unemployment growth rate of approximately 5.4 percentage points from 24.9 per cent in 2010 to 30.3 per cent in 2020. Unemployment level also increased significantly by about 4.1 per cent in 2020, reflecting the impact of COVID-19. Unemployment level moderated marginally by 183 000 from 7.826 million in the second quarter to 7.643 million in the third quarter. This translated to a slight increase in the unemployment rate by 0.5 percentage points to 34.9 per cent.

At this rate, SA's unemployment is among the highest globally as it surpasses that of most emerging economies, including the BRIC countries. The scourge of unemployment is worsened by the vulnerable economic performance and structural factors. Further, unemployment is prevalent among young people, women, and people with less than a matric education. It has also been indicated that young people are experiencing a higher unemployment rate than other age groups. Therefore, more attention should be directed at policies that promote education, skills development and women empowerment by encouraging women to participate in businesses. This should include measures to ensure that government programmes such as the Presidential Annual Job Summit and Youth Employment Service (YES) are provided with enough resources required in the implementation process.

The labour market challenges noted at the national level boils down to provincial and district levels. In KZN, employment level expanded by a cumulative average annual rate of 1.1 per cent over the last decade, increasing from about 2.37 million in 2010 to 2.60 million persons employed. The provincial employment level also suffered a big blow amid the emergency of COVID-19 which induced a substantial contraction in 2020 and caused job losses as many businesses experienced enormous losses owing to the tremendous national lockdown. Consequently, the number of people employed dropped markedly by about 4.85 per cent in 2020. The total number of people employed receded significantly by 5.1 per cent from 2.42 million in the second quarter to 2.30 million in the third quarter of 2021.

Regarding employment by industries, it is noted that the largest share of employment in KZN emanates from the tertiary sector, which is mainly driven by *trade and community services* sectors. The districts have a similar trend whereby employment is predominantly concentrated in the tertiary sector. However, the province should intensify its efforts to promote the agricultural sector as it can contribute significantly to employment.

The province experienced a similar trend to national in terms of a notable rise in the unemployment rate over the last decade. The number of people without employment climbed by a cumulative average annual rate of 4.6 per cent between 2010 and 2020. The persistent rise in unemployment is attributable to numerous structural factors such as subdued economic performance, skills mismatch, low educational attainment, and rigid labour market regulations. Unemployment level increased by about 4.3 per cent between 2019 and 2020, reflecting the effects of ailing economic performance, particularly a broad-based contraction caused by COVID-19. In addition, the negative impact of the pandemic continues to manifest itself in the labour market indicators, especially the unemployment level, as it climbed beyond 1 million in the first two quarters of 2021, translating to about 32.5 per cent in the second quarter. However, the unemployment rate dropped marginally by 3.8 percentage points to 28.7 per cent in the third quarter.

The most important observation was that most people of the province's working-age are not economically active, contributing to a higher expanded unemployment rate, which was reported at 48.6 per cent, almost doubled the official unemployment rate during the third quarter. It is within this background that KZN has one of the highest expanded unemployment rates in the country.

The distribution of unemployment by age indicates that unemployment is disproportionately spread across the age groups, whereby the youth population accounts for the most significant proportion of people unemployed. People aged between 15 to 34 years experiences a high rate of official unemployment at 57.5 per cent compared to other age cohorts. As the data reveal that young people are the main victims of unemployment, pre-employment initiatives targeting the youth should continue to be developed in relation to the economy's current needs and reviewed those in existence to realign it with the structural factors contributing to youth unemployment. This should include strategic approaches to address the lower educational attainment rate and skills deficit as the main contributory factors to the low probability of employment among young people.

Chapter 6: Global Warming

6.1 Introduction

Global warming is a cause for concern to the economies around the world. Macmillan (2016) defines Global Warming as a rise in global temperatures due to excessive emission of greenhouse gases such as carbon dioxide (CO_2) and Chlorofluorocarbons (CFC's), amongst others. The excessive emission is released into the atmosphere and traps or absorbs the sunlight that would usually escape to space, causing the planet to get hotter. Unfortunately, the global average surface temperature of the earth has increased rapidly since 1861 (International Panel on Climate Change, 2013). The Panel further concludes that over the 20th century, the temperature has risen by about 0.6 degrees Celsius (◦C) due to continuous development and growth in industrialisation. In addition, the 1990s were likely the warmest decade since 1861. The report also asserts that the rise in the average global surface temperature has been accompanied by an increase in heavy and extreme weather events, primarily in the Northern Hemisphere.

On the other hand, climate change is a broader term that refers to long-term changes in climate, including average temperature and precipitation. In general, climate change may occur as a result of both internal variabilities within the climate system and as a result of external factors where the latter can be natural or anthropogenic[51] (Greiner & Semmler, 2005). However, there is strong evidence that most climate change and global warming observed over the last 50 years emanate from human activities. This argument is supported by the ongoing emission of greenhouse gases (GHGs), carbon dioxide (CO_2) or methane (CH4), amongst others.[52] These emissions are considered the primary cause of global warming and continue to impact the atmosphere in ways expected to affect the climate. In addition, developed economies are the major contributors to these high emissions, which result in global warming.

As expected, climate changes pose a significant threat to long-term growth and prosperity as they directly impact the economic well-being of all countries. Climate changes mainly affect green growth and sustainable development, threatening ecosystems, biodiversity and water resources. In addition, it affects human settlements and frequencies the scale of extreme weather events, which most negatively impacts the food production process, human well-being, socio-economic activities, and economic output.

With this background in mind, this chapter focuses on the impact of global warming on the global economy, examining the effects of climate change in Africa and South Africa (SA). It also discusses emissions by industry,

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[51] Anthropogenic-chiefly of environmental pollution and pollutants originating in human activity

52 Methane is a chemical compound with the chemical formula CH4 It is a group-14 hydride, the simplest alkane, and the main constituent of natural gas. It is used primarily as fuel to make heat and light. It is also used to manufacture organic chemicals.

highlighting the effect of decarbonising. Finally, the chapter concludes by providing an array of international policy interventions to consider in dealing with this global crisis.

6.2 Impact of global warming on the global economy

Climate change poses a severe threat to the economy globally, nationally and provincially. According to the Swiss Reinstitute, the global gross domestic product (GDP) is expected to be reduced by 18 per cent by 2050 if global temperatures rise by 32ºC (Marchent, 2021: World Economic Forum, 2021). The author further argues that climate change negatively affects productivity by disrupting daily life through leading to less work and fewer school days, trade, transportation, agriculture, fisheries, energy production, and tourism disruptions.

The author further states that climate change is a systematic risk inherent to the entire market. Globally, Asian economies have experienced the hardest hit to the climate change adversities due to high emission levels. The IMF (2021) reveals that when there is low emission, GDP will be reduced by 5.5 per cent in the best-case scenario. Meanwhile, in the worst-case scenario, where there are high emissions levels, GDP will be reduced by 26.5 per cent. However, the significant regional variation of data shows that for Advanced Asian economies, the GDP losses amounting to 3.3 per cent are expected for emissions below 2°C and 15.4 per cent in a severe scenario.

On the other hand, China is at risk of losing nearly 24 per cent of its GDP in a severe emission scenario compared to forecast losses of 10 per cent for the US, Canada and the UK, and 11 per cent for Europe. This is mainly due to the industrial revolution, and in Canada, anthropogenic acts are the leading cause of high emissions where people burn fossil fuel and convert forest to agriculture. At the same time, the report added that the Middle East & Africa would experience a drop of 4.7 per cent if temperatures remain below 2°C and 27.6°C in the severe case scenario. These declines are likely to occur if technologies controlling the emission of dangerous gases into the atmosphere are not developed speedily (Jaeger & Jaeger, 2010).

The detrimental climate variations mainly result in rising sea levels, property damage, and damage to essential infrastructure vital to the economy and human survival. Testifying this is Kahn et al. (2019), who investigated the long term macroeconomic effect of climate change. The findings showed that output growth in mining, construction, transport, retail trade, wholesale trade, services and government sectors are all negatively affected by freezing days caused by climate variations in the US. This then results in a decline in consumer spending on luxury products due to spending on higher heating costs or home repair expenses. In addition, this results to supply chain interruptions and construction project delays in the US. This has a negative spill-over effect on the US economic growth and development.

Furthermore, in dealing with the climate change predicament, countries such as the United Kingdom (UK), China and US have opted to phase out all coal-fired power plants and replace fossil fuels with smarter and cleaner forms of energy (decarbonisation). These interventions are aligned with those of the Paris agreement (COP26) that encourage countries to limit global temperature rise to 1.5°C by 2030 (Fiona Harvey et al., 2021). In addition, significant coal users such as Poland, Vietnam and Chile agreed to shift away from coal. Although it is of the biggest generators of CO^2 emissions, as per the conference of parties 26 (COP 26), the shift may be detrimental to their revenue bases as coal are part of their revenue generation.

In line with promoting green transport, 100 national governments, cities, states and major car companies signed the Glasgow Declaration on Zero-Emission Cars and Vans to end the sale of internal combustion engines by 2035 in leading markets. According to the United Nations Environment Programme (UNEP, 2021), by 2040, there would be an introduction of worldwide Zero-Emission Vehicles (ZEV). The UNEP (2021) further states that at least 13 nations are also committed to ending the sale of fossil fuel-powered heavy-duty vehicles by 2040. Though developed countries produce most greenhouse gas emissions, developing countries are likely to experience extreme climate variations due to vulnerable geography and lesser ability to cope with damage from severe weather and rising sea levels.

6.3 The impact of climate change in Africa

As spelt out by the UNEP (2021), the effects of climate change on developing countries such as Sub-Saharan Africa also include reversal of development gains and exacerbation of hostile health problems such as increased deaths due to malnutrition, malaria, diarrhoea and heat stress, amongst others. In addition, the economic well-being of the population in developing countries is also at risk. With fewer resources to adapt to climate change, the impact on people in developing economies is expected to be higher as it will also increase the inability of reducing poverty.

Furthermore, Africa faces exponential collateral damage despite contributing the least to global warming and having the lowest emissions. This challenge poses systemic risks to its economies, infrastructure investments, water, food systems, public health, agriculture, and livelihoods, threatening to undo its modest development gains and slip into higher levels of extreme poverty (African Development Bank, 2019).

The International Monetary Fund (IMF, 2017) further argues that the adverse consequences of climate change are mainly focused on regions with relatively hot temperatures. This is common in countries such as s Algeria, Ghana and Burkina Faso, amongst others, where many low-income countries are located. The United Nations Climate Change (UNCC, 2020) indicates that the African Climate Policy Centre projects that GDP in the five African[53] sub regions would suffer a significant decrease due to a global temperature increase. The continent's overall GDP is expected to decrease by 2.3 per cent in 2020 to 12.1 per cent in 2024. For scenarios ranging from a 1°C to a 4°C increase in global temperatures relative to pre-industrial levels.

[53] Five Sub-regions in Africa are North, West, Central, East and Southern.

Various factors exacerbate the climate variation effect in Africa, but the primary factor is the advancement of industrialisation. Industrialisation is an essential factor in Africa perceived as a driver for sustainable and inclusive economic growth. It can enhance productivity, increase workforce capabilities, and generate employment by introducing new equipment and production techniques (United Nations, 2021). However, as industrialisation brings about positive change to the economy, it also plays a massive role in bringing about the consequences of global warming. The adverse effects of industrialisation advancement are excessive emission from several industrialisation sites and deforestation (Schaub,2012).

In order to address the negative impact that emanates from industrialisation on the environment and climate variations, the African continent can design and implement industrial policies that aim to enhance green initiatives while pursuing industrialisation paths to reduce poverty and create jobs (Triki & Said, 2020). Implementing green industrialisation could also allow African countries to integrate into an increasingly global green economy. Ighobor (2016) believes that infusing green initiatives into value-chain activities during the sourcing and processing of raw materials and the marketing and selling of finished products to customers could improve innovation and productivity while lowering emissions levels contributing to climate variations.

On the other hand, in addressing the climate crisis associated with systematic risk and socio-economic challenges, Africa has committed itself to utilise the Nationally Determined Contribution (NDC) emanating from the Paris Agreement to formulate policies to align its emission requirements below the 1.5°C by 2030. Furthermore, the UNCC (2020) reveals that Africa has also committed to reducing climate-related risks to the agricultural sector. This sector is a significant contributor to employment and growth, employing almost 60 per cent of the African population. The use of clean energy sources, solar power and micro-irrigation are regarded as safe for the environment, at the same time contributing to the productivity of the sector through improving yields by up to 300 per cent and reducing water usage by up to 90 per cent, also offsetting carbon emissions by generating up to 250 Kilowatt (kW) of clean energy (UNCC, 2020).

In addition, the African Development Bank (AfDB) Group has proposed establishing an African Financial Stability Mechanism. This mechanism aims to prevent future financial shocks in Africa as Africa is the only continent without a Regional Financing Agreement. Africa is expected to align financial markets with the Paris agreement (COP 26) goals to channel private finance into a growing climate-friendly sector. However, the continent remains excluded from many financing opportunities available for climate change. Mainstreaming the impact of climate change in investment decisions and the careful allocation of capital to the green economy is crucial to the transformation of African and developing countries. There is a greater need for the development of financial mechanisms such as blended finance[54], green and blue bonds, and debt swaps, which can leverage limited public resources to mobilise huge investments needed for climate action (United Nations, 2021).

The AfDB has further devoted 63 per cent of its climate finance as a first step in initiating the channelling of investment towards dealing with the climate problem in the continent. This initiative is the highest share of any multilateral financial institution and has committed to double this funding to $25 billion by 2025 (United Nations, 2021). The report further reveals that the AfDB and the Global Centre on Adaptation have also created the Africa Adaptation Acceleration Program (AAAP) to help scale up bankable adaptation investments in the region. The mobilisation of $25 billion via the AAAP will be a first step toward investing in a green recovery for Africa. Technology transfer and capacity building are essential priorities in implementing mechanisms focusing on the green economy as per the COP 26 Paris agreement.

6.4 The Impact of Global warming in SA

The negative impact posed by climate change is already a measurable reality posing social, environmental and economic challenges to the world, and SA is no exception. National Treasury (2021) reveals that SA is the most significant greenhouse gas (GHG) emitter in Africa and the 12th largest globally due to its reliance on coal resources to generate power and liquid fuels. In addition, SA, a developing country, is rolling out the economic growth and transformation programme. However, these processes come with significant risks to the environment. They result in increasing climate variability and climatic extremes. These lead to water quality and availability reduction due to changes in rainfall patterns, with more intense storms, floods and droughts, soil moisture and runoff changes, and the effects of increasing evaporation and changing temperatures on aquatic systems (Sithole,2016).

Turpie et al. (2002) further affirm that weather extremes will hugely impact terrestrial and marine ecosystems, which will have a profound spill-over impact on agriculture, forestry, rangelands and fisheries, and biodiversity. Furthermore, changes in river flow may have immense consequences in terms of human health by increasing suitable habitat for water-borne diseases while affecting water supply and the maintenance of ecosystem functioning. In 2015, SA experienced severe droughts, particularly in the Western Cape (WC) and the KwaZulu-Natal province (KZN). In KZN, the drought mainly impacted the agricultural sector. Sithole (2016) concluded that it caused an estimated 15 per cent reduction in the national livestock herd as more than 4000 cattle died. In addressing distress caused by drought, the Department of water and sanitation committed R96.620 million for financing water tanks and additional drought projects in KZN.

Furthermore, in addressing the climate variation dilemma, the country has committed to the climate change targets per the COP 26 Paris agreement requirements. These include having GHG emissions peak in 2025 at 510 million

[54] Blended finance involves using different financial instruments that can be used alone or together to address unfavourable risk-return investment profiles in developing countries.

tonnes and decline thereafter to a maximum of 420 million tonnes by 2030. These targets align with the National Development Plan (NDP) and net zero emissions commitments by 2050. Reducing GHG emissions and adapting to climate change will involve a concerted national effort, achieving a just transition, and promoting resilience to droughts, floods, and extreme temperature change requires all economic sectors' participation (National Treasury, 2021).

In preparation for climate transitioning, developed countries are committed to investing R131 billion in concessional and grant funding over the next three to five years to support SA's transition away from coal and develop new sectors such as electric vehicles and green hydrogen (National Treasury, 2021). In addition, the United Nations (UN, 2021) indicated that SA has issued R3 billion ($196 million) green bond to refinance its energy sector. These investment mechanisms will facilitate the acceleration of decarbonising the energy system by harnessing new technologies to reduce the dependence on high emission fossil fuels, including unabated coal power. These priorities were also part of the mandate by Cabinet as per the mandate of COP26. The intention is to secure progressive finance and adaptation package and complete the Paris agreement work programme.

As part of the monitoring strategy, a comprehensive annual mitigation work program has been established, coupled with ministerial roundtables to assess progress on implementation. Parties are encouraged to review their NDCs at any time, in line with Article 4.11 of the Paris Agreement[55]. Parties are also asked to update regularly their long-term low emissions development strategy, and the UNFCCC Secretariat will provide a synthesis report on these strategies and NDCs on an annual basis.

Furthermore, critical industries such as mining, energy, manufacturing and transport are negatively affected by climate variation. Therefore, the transition must be implemented strategically to avoid negative implications experienced by vulnerable workers and communities, especially coal miners, women, and youth who are affected due to moving away from coal.

In addition, the transition to less carbon emission will be beneficial in protecting human comfort and health compared to when mitigating efforts are low. Currently, several extreme weather changes in the country contribute to high precipitation. These changes result in flooding, storms, drought and heatwaves that result in loss of life, damage to infrastructure and weaken the capacity to adapt to climate change. Therefore, climate change education must be incorporated in various forms (academic institutions and the community at large) to better understand the impact of climate change.

It is precisely for these changes in climate that the Sustainable Development Goal (SDG) 13 that aims at taking urgent action to combat climate change and its impact is critical. This goal acknowledges that the United Nations

[55] Article 4.11 of the Agreement states that: A party may at any time adjust its existing nationally determined contribution to enhance its level of ambition, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.

Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change. The associated targets of SDG 13 focus on integrating climate change measures into national policies, the improvement of education and awareness-raising. It also focuses on the institutional capacity of climate change mitigation, adaptation, impact reduction and early warnings. These factors are critical in ensuring the consistency and effectiveness of the policies implemented.

Following the SDG goal number 13, the country is expected to be in line with the COP 26 targets of keeping temperatures below the 2 degrees Celsius (°C) above the pre-industrial levels, pursuing the efforts of limiting temperature increase to 1.5°C. According to the National Determined Contribution (NDC, 2021), SA's updated mitigation targets represents a significant progression when comparing the targets contained in the 2015 NDC. As a result, the country targets to cut its emission by 17 per cent in 2025. This is equivalent to 398-510 tonnes of CO2 emission and by 28 per cent in 2030, equivalent to 398-440 tonnes of CO2 emission.

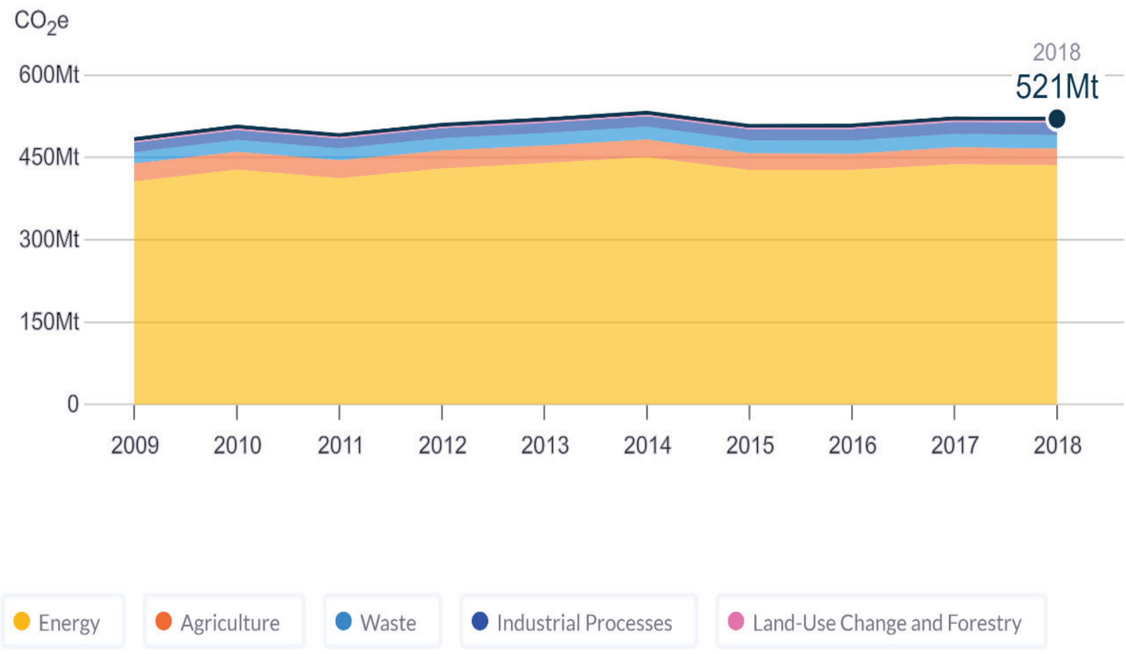
In achieving these targets, the country relies on an aggressive investment plan, the green transport strategy, and the carbon tax implementation (NDC, 2021). The report further reveals that the country requires financial backing of 8 billion dollars per year (2025-2030) from the international community to finance its decarbonisation and adaptation efforts. However, with no exit date on coal usage, especially with continuous uncertainties that come with the country's high reliance on coal due to its use by the largest state-owned utility (ESKOM), carbon emission targets seem to be far from being achieved. In addition, the Integrated Resource Plan (2019) indicated that beyond Medupi and Kusile, coal would continue to play a significant role in electricity generation and hence government allowed for 1 500 Megawatt (MW) of coal power capacity to be installed. However, this could restrict the fast-tracking of reducing GHG emissions and delay the implementation of renewable energy such as solar installation.

6.4.1 Gas emission by industry

Over the years, SA has experienced a rapid change from being an agricultural society where most people relied on the land for a living to being an industrial society. South African History Online (2019) reveals that industrialisation occurred primarily due to discovering large diamond deposits in Kimberley in 1867, followed in 1886 by the discovery of gold on the Witwatersrand. Schaub (2012) alludes to the fact that causes of global warming are found in the multiple consequences of industrialisation. The report further states that emissions pollution, overpopulation and deforestation are double-duty issues, especially as they are harmful effects of industrialisation. They are also the leading causes of global warming. Most scientists agree that the "blame for air and land pollution, global warming and ozone depletion have all been laid at the door of industrialisation".

The country is considered a major emerging economy and a major emitter in Africa. Its most prominent economic sectors include mining, transport, energy, manufacturing, tourism, and agriculture. Since the South African economy is highly dependent on its abundant natural resources, the country is particularly vulnerable to climate change. The world's carbon market (2015) reveals that in 2010, GHG emissions from the energy, transport and manufacturing industries and construction sectors were 67.8 per cent, 9.3 per cent and 8.5 per cent, respectively. These sectors were responsible for the largest share of emissions, accounting for more than 80 per cent of total emissions. As expected, coal predominates fossil fuel demand by about 75 per cent and accounts for over 92 per cent of fuel input in electricity generation. Around 90 per cent of total electricity generation in SA is produced by the public electricity utility Eskom[56]

Figure 6.1 GHG emissions by sector in SA, 2009 to 2018



Data source: CAIT; Countries/Regions: South Africa; Sectors/Subsectors: Total including LUCF; Gases: All GHG; Calculation: Total; Show data by Sectors.

Figure 6.1 also confirms that the energy sector contributes to greenhouse gas emissions, followed by industrial processes. On the other hand, land use has a minimal emission role, while waste also contributes to GHG emissions.

6.4.2 The effect of decarbonising

In alignment with the COP26 initiative of reducing emissions and curbing rising temperatures by 1.5 °C by 2030, SA has focused on decarbonising electricity and liquid fuels. Burger (2021) indicated that SA obtained a R130 billion concessional climate finance green deal at COP 26 in 2021 that will be mobilised in three to five years to accelerate investment in renewable energy and the development of new sectors such as electric vehicles and green hydrogen. It will also assist ESKOM to finance the repurposing of coal-fired power stations due for

[56] Eskom is a South African electricity public utility.

decommissioning over the next 15 years. Furthermore, Burton et al. (2018) affirm that by 2050, wind and solar energy will provide 71 per cent of electricity. However, the difficulty of the transition is exacerbated by SA's very high dependence on coal for energy and coal's role in the economy in general and Mpumalanga in particular.

The report further shows that the coal sector already faces challenges and crises due to cost increases, energy security risks, export demand risks, and low local demand growth. These are already having profound implications for South African electricity consumers. For example, Eskom's primary energy costs have increased by 300 per cent in real terms over the past 20 years. The significant increases in Eskom's primary energy costs have, along with cost overruns at new coal-fired plants under construction, contributed to rapidly increasing electricity prices that have placed Eskom, and the economy, under increasing pressure (Burton et al., 2018).

Strambo et al. (2019) warn about the overwhelming view of rapid declines in employment due to transitioning from coal energy to other alternative energy sources such as solar and wind energies. This has negatively affected the already constraint labour force in SA. This assertion is supported by Stats SA (2021), indicating that the official unemployment rate reached 34.9 per cent in the third quarter of 2021, which is the highest since the 2008-2009 global financial crisis. The drop in the use of coal has also negatively impacted the socio-economic status of coal mine workers and communities that are highly reliant on coal. Therefore, transition to other means of energy sources will mainly affect the unskilled coal mine workers, and their level of education is below grade 12. Some of these workers are illiterate, making it hard for them to be employed by other sectors.

Burton et al. (2018) observation are that transitioning away from coal is also accompanied by many benefits, including cheaper electricity, improvements in air quality, and fewer impacts from extraction. Therefore, cost-effective electricity can have positive macroeconomic effects, boosting economic activity and increasing employment. In addition, it can also reduce the amount of energy needed to deliver services, such as mobility, lighting, heating and cooling, while freeing up resources for households, businesses and governments, at the same time positively influencing their economic status.

6.5. Conclusion and recommendations

Climate change is a global challenge affecting many countries as it destroys places and wreaks havoc on people's livelihoods and communities. The main threats of climate change stemming from the rising temperature on earth include rising sea levels, ecosystem collapse and more frequent and severe weather, and SA is no exception. If not addressed, it may result in unprecedented fires, storms, droughts, floods and heat, detrimental to the economies and human health. Therefore, a COP conference was formed with a motivation to address the climate change problems. Every country in the world participated and is required to have a National Determined Contribution (NDC), which will assist in assessing the progress that each country makes in terms of the climate goals of the conference.

Therefore, there is a clear need to diffuse climate-friendly technologies as swiftly as possible from a climate action perspective. In addition, many developing countries seek access to such technologies to enable them to leapfrog carbon-intensive development pathways. It is then imperative for governments to develop trade policies that will promote the diffusion of climate-friendly goods and services, such as renewable energy technologies and energy-efficient technologies. Furthermore, Promoting and coordinating national trade policies and practices that support the implementation of the Paris Agreement and SDG commitments are imperative. Lastly, SA needs to align policies with climate and environmental goals at national, provincial and local spheres of government.

Furthermore, in ensuring smooth transitioning to renewable, SA should develop mechanisms to better equip labour force participants who worked in coal-intensive industries for the coal-free environment. Adding to this, workers who worked in coal industries are mostly illiterate. They could be provided with training for skills that do not require any qualifications, such as recycling jobs and refuse collectors, to enable them to be employable and continue being financially independent while participating in the economy. It is also imperative to equip the literate labour force with skills such as environmental technician, solar installer, and wind turbine technicians, amongst others, which will align and prepare them for the coal-free environment and increase their employability chances.

Chapter Seven: Conclusion and recommendations

In 2011, South Africa (SA) adopted the National Development Plan (NDP) Vision 2030. The primary aim of the NDP is to eliminate poverty and reduce inequality by 2030. SA can realise the goals as outlined in the plan by drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society. The NDP is the mirror image of the 17 Sustainable Development Goals (SDGs) and other member states in the United Nations (UN).

In line with the objectives of the NDP, this publication provided an outline of the demographic trends, development indicators, economic review and outlook and the changes in the labour markets. Therefore, this chapter provides overall concluding remarks and recommendations emanating from the various sections of this report. The report commenced with an overarching introduction setting the scene for the publication.

Chapter Two shed light on the social and economic implications of the ageing population on economic development and growth. In most nations, especially developed countries, policymakers are confronted with several interrelated issues of socio-economic conditions. These conditions include the rapid ageing population, decline in the working-age population, increased health care costs, unsustainable pension commitments, and changing demand drivers within the economy.

The chapter revealed that the reduction in the working-age population could lead to a supply shortage of qualified workers, making it a challenge for businesses to fill in-demand roles. As illustrated in the mainstream economic theories, an economy that cannot fill in-demand occupations faces adverse consequences. These include declining productivity, higher labour costs, delayed business expansions and reduced international competitiveness. Moreover, in some instances, a supply shortage may push up wages, causing wage inflation and creating a vicious cycle of wage spiral.

As a result, many countries review their international relations policies considering immigration to keep their labour forces well adequately supplied and improve their economies. However, it also becomes a challenge to test and recognise the credentials of those immigrants to ensure their authenticity. The alternative option for countries involves adopting new technology and artificial intelligence.

Considering these population dynamics, it becomes critical to link interventions to the economic and human development issues. These issues relate to reducing poverty, reducing inequalities, and the roll-out of education services from preschool to tertiary levels while ensuring equity in allocating resources. Therefore, efforts to slow down population growth, reduce poverty, achieve economic progress, improve environmental protection, and reduce unsustainable consumption and production patterns are mutually reinforcing.

Collectively, children and young people account for approximately two-thirds of the KZN population. Hence the dependency ratio of 59.3 per cent is highly skewed towards children. However, the dominance of children and the youth population can yield an economic dividend in the long-run, provided efforts are made to ensure quality education is provided early. The long-term result of quality education is an increase in productive citizens, which are anticipated to improve the average income per capita in the country.

Factors influencing changes in population structure require that the world prepare a variety of tools to monitor economic development and growth. As different dynamics impact population changes, countries should prepare their economies to implement strategic policy interventions. For instance, if the old-age population increases due to available proper health systems and healthy lifestyle choices, the government needs to cater to those without putting more pressure on the state's revenue. This is because an increase in the ageing population will likely lead to a declining labour force, lower fertility and a rise in the age dependency ratio.

Notwithstanding policy interventions, COVID-19 disturbances exerted pressure on most economies across the globe. Consequently, a response to the economic impact of COVID-19 demanded interventions that also address the structural problems that beset the South African economy prior to the effects of the pandemic. This meant crafting interventions that bring about an outcome that decisively deals with the impact of the pandemic on the South African economy. In addition, the last standing structural challenges inhibited the type of inroads that needed to be made as an economy must be reconsidered.

Population growth in a country is often associated with poor economies, lack of education, and in many cases, poor living conditions. Africa is a prime example of a continent where high fertility exists. Therefore, it is recommended that policies be put in place to reduce fertility in order to curb poverty and perhaps increase economic benefits.

Fertility is a global problem, with many countries having to put extreme controls in place to curb the growing population. For example, the government of China implemented a plan of one child per couple in 1980. This was relaxed in 2016, and couples are now allowed two children. However, the policy helped reduce the ever-growing population, placing a heavy burden on society and the economy.

In SA, the total population was estimated at 60.14 million in 2021. However, it is a concern that social grant allocations increase rapidly as the population grows. Therefore, the government needs to continue to advocate and provide quality education. In addition, the government needs to intensify its campaigns to promote the adverse effects of having children at a young age to reduce underage, especially teenage pregnancies.

Chapter Three has demonstrated the effects of COVID-19 on economic development across the globe. However, the drop in human development is expected to be much higher in developing compared to advanced countries. Following the United Nations (UN) framework for the immediate socio-economic response to the COVID-19 crisis, governments need to redevelop interventions to protect health systems and services. The UN also promotes social protection, protecting jobs and small, medium-sized businesses. As indicated in this chapter, poverty affects everybody, including children. It has explicitly life-long repercussions on children's cognitive and physical development and well-being with a perpetuating nature that could pass on to future generations. Addressing child poverty needs to be a national policy priority to ensure better life and opportunities for all in the future. Measuring child poverty and understanding its dynamic nature is crucial to guarantee that relevant, effective, and sustainable policies and strategies geared towards breaking the revolving cycle of poverty are put in place.

On the education front, the National Senior Certificate (NSC) class of 2021 was the most affected by the adverse effects of COVID-19. Learners had to endure two years of harsh exposure to the unrelenting pandemic. Despite the ongoing challenge of COVID-19, the NSC results improved slightly from 76.2 per cent in 2020 to 76.4 per cent in 2021. The province of KZN, which continues to have the highest number of matriculants, came fifth, with a record of 76.8 per cent, a moderate decrease of 0.8 percentage points from 77.6 per cent in 2020.

Although there is an improvement in the NSC results, it should be celebrated with caution given the NSC pass requirements, which is significantly low. The pass rate is 40 per cent home language, 40 per cent in two other subjects, 30 per cent for four other subjects and must pass at least 6 out of 7 subjects. In addition, learners who obtained a bachelor pass at a minimal level do not have the required points for university entrance. This shows poor coordination between what is required in the higher education level and the school level, consequently harming universities' throughput rate.

Nevertheless, the decision taken by the DoE to make a full return to schools by all learners is highly commendable given the constraints they have been facing since the emergence of COVID-19. However, maintaining health and safety and a conducive environment for learners and educators will be more critical. In addition, the capacity of the school infrastructure to accommodate all learners should be considered, given that most of the schools, especially in the rural areas, are overcrowded.

Therefore, there is a need for mobile classes and adequate educators in line with the required educator-learner ratio. In addition, maintaining the health and safety of people will be more critical than ever before. To make the school environment safe, additional health and hygiene measures should be implemented, and school-based psychosocial and nutritional support should be extended to learners to strengthen their overall health and well-being in the wake of the pandemic.

Chapter four reviewed the global, national and provincial economic landscape, focusing mainly on KZN. The primary objective of this chapter is to identify significant global and national latest economic developments that might pose as great opportunities and risks to the KZN's economy. The transmission mechanisms through which some developments could impact the KZN economy may vary, but most of the common channel is trading partners.

This implies that improved economic activity in the trading partner increases the opportunity for higher external for local goods and services.

The chapter demonstrated that the global economic activity continues to expand as the world emerges from the substantial global recession since World War II. In addition, the global growth bounced back significantly in 2021, following a considerable contraction induced by COVID-19. However, it remains tentative, with risks to growth skewed to the downside. The Omicron variant remains a major health risk, and the pandemic resurgence could devastate health systems and trigger the simultaneous imposition of additional pandemic control measures across the globe. Another risk to the global outlook is the supply bottlenecks that contributed to downward revisions on projections for several countries.

The South African economy picked up significantly by 4.8 per cent in 2021, owing to a strong rebound in the mining, manufacturing, and services sectors. Real output will be further supported by the recovery in services sectors, including tourism, due to improved control over virus outbreaks as widespread vaccinations progress. In addition, the government is easing mobility restrictions as the Omicron wave subsides and the levels of vaccination increase.

Consequently, private consumption and investment are projected to firm somewhat, recovering from 2021 virus restrictions and social unrest. However, it has also been observed that numerous constraints to long-term growth in SA existed prior to COVID-19, and some of the structural impediments are identified in the NDP. These internal factors include, but are not limited to, the legacy of weak public finances and the slow implementation of reforms needed to boost productivity and employment growth. In addition, rising government debt and debt service costs will continue to constrain policy space and curtail public spending, leaving gaps in essential public services and infrastructure as a major obstacle to more substantial potential growth.

Notably, the KZN economic estimate for 2021 dropped moderately as the civil unrest, the third wave, cyberattack to Transnet, and global supply disruptions took a tremendous toll on economic activity, thereby inducing a contraction on GDP-R outturn the third quarter. Subsequently, real output rebounded by 4.2 per cent in 2021. However, it is expected to moderate to 1.7 per cent and 1.8 per cent in 2022 and 2023, respectively.

To rebuild KZN's economy, the province should continue to implement structural reforms in relation to the economic recovery plan to ignite economic growth. Efforts need to be intensified to implement the plan to ensure inclusive economic growth supported by the radical economic transformation (RET). As outlined in the plan, the focus should be on agriculture, telecommunications and digital economy renewable energy, tourism, oceans economy and township economy. The full implementation of RET and Operation Vula (OV) and its six commodities. The industry development, including agro-processing, automotive and pharmaceuticals.

For more jobs to be created, infrastructure development and the promotion of international trade taking advantage of AfCFTA, which was implemented with effect from January 2021. The AfCFTA is there to leverage opportunities of regional trade for sustainable and inclusive growth in the African continent. The AfCFTA was implemented during the period whereby countries globally scaled-down production due to disturbances in the global supply chain and to facilitate response to the COVID-19 pandemic.

Chapter five focused primarily on the labour market dynamics from national, provincial and district perspectives. The chapter shows that the labour markets, both at the global and local levels, suffered severely from the adverse effects brought by the COVID-19 crisis. As a result, unemployment in SA remained high at 34.9 per cent in the third quarter of 2021. However, considering that most people have given up searching for jobs, the expanded underpayment rate in the country is estimated at 46.6 per cent. Notably, unemployment was high at 66.5 per cent among young people aged 15 to 24 years, followed by those aged 25 to 34 at 43.8 per cent in the third quarter of 2021.

Over the same period, unemployment in KZN was 28.7 per cent. Most people of the province's working-age are not economically active, contributing to a higher expanded unemployment rate, which was reported at 48.6 per cent. The distribution of unemployment by age indicates that people aged between 15 to 34 years experiences a high rate of official unemployment at 57.5 per cent compared to other age cohorts.

Undoubtfully, young people are the main victims of unemployment. Therefore, pre-employment initiatives targeting the youth should continue to be developed in relation to the economy's current needs. There is a need also to review the existing policy interventions to realign it with the structural factors contributing to youth unemployment. This should include strategic approaches to address the lower educational attainment rate and skills deficit as the main contributory factors to the low probability of employment among young people.

At this alarming high unemployment rate, particularly among young people, more attention should be directed at policies that promote education, skills development and women empowerment by encouraging women to participate in businesses. This should include measures to ensure that government programmes such as the Presidential Annual Job Summit and Youth Employment Service (YES) are provided with enough resources required in the implementation process.

In addition, skills development is also critical, whereby new entrants are allowed to gain entry-level experience through internships, mentorships and learnerships. In KZN, the government also needs to intensify efforts to promote Small, Medium and Micro Enterprises (SMMEs) owned by the youth. Therefore, the KZN Youth Fund (KZNYF) programme, officially launched in 2019, must be vigorously implemented.

As demonstrated in ***Chapter six***, climate change has been a growing concern to many countries across the globe. SA is no exception because climate changes directly deteriorate economic performance and negatively affects human health. As a result of global warming and climate change, the COP conference was formed. This forum has shown a need to diffuse climate-friendly technologies as swiftly as possible from a climate action perspective. In addition, many developing countries seek access to such technologies to enable them to leapfrog carbon-intensive development pathways.

It is, therefore, imperative for governments to develop trade policies that will promote the diffusion of climate-friendly goods and services, such as renewable energy technologies and energy-efficient technologies. Furthermore, promoting and coordinating national trade policies and practices that support the implementation of the Paris Agreement and SDG commitments are imperative. It is also of great importance that a committee focusing mainly on climate change be formulated to ensure climate patriotism, ensuring that all formulated policies are adequately implemented to achieve the desired target as per the COP 26 agreement. Lastly, the trade policies should align with climate and environmental goals at a national, provincial and local level.

Appendix A: List of additional Figures and Tables

Table A3.1: Income distribution by proportion of households in SA, 2020

Income category	Income level (R'000)	African	White	Coloured	Asian	Grand total
Lower income	0 - 54	38.0%	2.3%	15.0%	3.5%	31.5%
Low emerging middle income	54 - 96	24.3%	2.6%	20.8%	9.0%	21.3%
Emerging middle class	96 - 360	28.3%	27.7%	42.1%	46.5%	29.8%
Realised middle class	360 - 600	5.2%	22.0%	10.9%	18.3%	7.7%
Upper middle class	600 - 1 200	3.1%	26.9%	7.9%	14.9%	6.3%
Affluent	1 200 +	1.2%	18.5%	3.4%	7.9%	3.3%
Grand total		100.0%	100.0%	100.0%	100.0%	100.0%

Source: IHS Markit, 2022

Table A3.2: Crime in Dundee, 2017 to 2020

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21	
				Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	21	14	21	464	10.6
Sexual Offences	51	57	61	501	5.4
Attempted murder	22	22	22	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	108	124	105	540	2.0
Common assault	139	136	150	1 379	5.9
Common robbery	32	26	24	93	1.3
Robbery with aggravating circumstances	95	79	50	714	3.2
Total Contact Crimes (Crimes Against the Person)	**468**	**458**	**433**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	41	48	47	(331)	(10.9)
Sexual Assault	9	8	13	(81)	(1.9)
Attempted Sexual Offences	-	-	-	96	3.3
Contact Sexual Offences	1	1	1	5	20.0
Total Sexual Offences	**51**	**57**	**61**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	5	2	4	277	(2.9)
Robbery at residential premises	10	12	14	393	(7.5)
Robbery at non-residential premises	10	17	11	17	
Robbery of cash in transit	2	-	-	4	
Bank robbery	-	-	-	-	
Truck hijacking	-	-	-	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	21	14	4	8	1.1
Malicious damage to property	51	57	68	(346)	(2.5)
Total Contact-Related Crimes	**72**	**71**	**72**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	62	70	51	(19)	(0.2)
Burglary at residential premises	279	242	192	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	33	29	39	(20)	(0.2)
Theft out of or from motor vehicle	49	48	33	(524)	(3.5)
Stock-theft	100	88	85	(128)	(2.0)
Total Property-Related Crimes	**523**	**477**	**400**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	240	268	238	-546	(1.4)
Commercial crime	231	112	74	-556	(3.7)
Shoplifting	100	107	101	-740	(6.8)
Total Other Serious Crimes	**571**	**487**	**413**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**1 634**	**1 493**	**1 318**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	17	30	20	(14)	(0.4)
Drug-related crime	146	156	179	(9 368)	(26.5)
Driving under the influence of alcohol or drugs	34	16	16	3 439	(19.6)
Sexual Offences detected as a result of police action	-	-	-	(141)	(3.9)
Total Crime Detected As A Result Of Police Action	**197**	**202**	**215**	**(6 084)**	**(10)**

Source: SAPS, 2022

Table A.3.3: Crime in Durban, 2018 to 2021

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21	
				Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	61	49	40	464	10.6
Sexual Offences	84	90	70	501	5.4
Attempted murder	56	39	40	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	242	223	164	540	2.0
Common assault	595	638	460	1 379	5.9
Common robbery	671	741	571	93	1.3
Robbery with aggravating circumstances	1 141	966	709	714	3.2
Total Contact Crimes (Crimes Against the Person)	**2 850**	**2 746**	**2 054**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	65	79	64	(331)	(10.9)
Sexual Assault	14	9	4	(81)	(1.9)
Attempted Sexual Offences	3	2	1	96	3.3
Contact Sexual Offences	2	-	1	5	20.0
Total Sexual Offences	**84**	**90**	**70**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	64	66	28	277	(2.9)
Robbery at residential premises	6	14	5	393	(7.5)
Robbery at non-residential premises	198	120	103	17	
Robbery of cash in transit	-	-	1	4	
Bank robbery	-	-	-	-	
Truck hijacking	-	-	1	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	61	49	-	8	1.1
Malicious damage to property	84	90	147	(346)	(2.5)
Total Contact-Related Crimes	**145**	**139**	**147**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	510	464	419	(19)	(0.2)
Burglary at residential premises	165	130	83	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	765	752	452	(20)	(0.2)
Theft out of or from motor vehicle	1 344	1 510	842	(524)	(3.5)
Stock-theft	-	-	-	(128)	(2.0)
Total Property-Related Crimes	**2 784**	**2 856**	**1 796**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	64	64	41	-546	(1.4)
Commercial crime	2 050	2 101	2 444	-556	(3.7)
Shoplifting	2 524	2 562	236	-740	(6.8)
Total Other Serious Crimes	**340**	**355**	**629**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**4 978**	**5 082**	**3 350**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	64	64	41	(23)	(0.4)
Drug-related crime	2 050	2 101	2 444	343	(26.5)
Driving under the influence of alcohol or drugs	2 524	2 562	236	(2 326)	(19.6)
Sexual Offences detected as a result of police action	340	355	629	274	(3.9)
Total Crime Detected As A Result Of Police Action	**4 978**	**5 082**	**3 350**	**(6 084)**	**(10)**

Source: SAPS, 2022

Table A3.4: Crime in Jozini, 2018 to 2021

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21	
				Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	12	14	14	464	10.6
Sexual Offences	57	82	57	501	5.4
Attempted murder	17	16	15	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	184	200	163	540	2.0
Common assault	53	60	44	1 379	5.9
Common robbery	24	28	16	93	1.3
Robbery with aggravating circumstances	43	49	59	714	3.2
Total Contact Crimes (Crimes Against the Person)	**390**	**449**	**368**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	48	69	53	(331)	(10.9)
Sexual Assault	7	13	3	(81)	(1.9)
Attempted Sexual Offences	2	-	1	96	3.3
Contact Sexual Offences	-	-	-	5	20.0
Total Sexual Offences	**57**	**82**	**57**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	3	6	1	277	(2.9)
Robbery at residential premises	15	17	25	393	(7.5)
Robbery at non-residential premises	11	12	18	17	
Robbery of cash in transit	-	-	-	4	
Bank robbery	-	-	-	-	
Truck hijacking	-	-	-	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	12	14	8	8	1.1
Malicious damage to property	57	82	33	(346)	(2.5)
Total Contact-Related Crimes	**69**	**96**	**41**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	36	54	52	(19)	(0.2)
Burglary at residential premises	121	122	75	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	3	1	6	(20)	(0.2)
Theft out of or from motor vehicle	14	22	23	(524)	(3.5)
Stock-theft	37	17	20	(128)	(2.0)
Total Property-Related Crimes	**211**	**216**	**176**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	104	113	99	-546	(1.4)
Commercial crime	84	84	72	-556	(3.7)
Shoplifting	23	27	12	-740	(6.8)
Total Other Serious Crimes	**211**	**224**	**183**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**881**	**985**	**768**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	18	19	15	(14)	(0.4)
Drug-related crime	30	19	29	(9 368)	(26.5)
Driving under the influence of alcohol or drugs	65	60	41	3 439	(19.6)
Sexual Offences detected as a result of police action	-	-	-	(141)	(3.9)
Total Crime Detected As A Result Of Police Action	**113**	**98**	**85**	**(6 084)**	**(10)**

Source: SAPS, 2022

Table A3.5: Crime in Kokstad, 2018 to 2021

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21	
				Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	18	22	21	464	10.6
Sexual Offences	74	88	57	501	5.4
Attempted murder	10	21	21	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	249	271	258	540	2.0
Common assault	90	152	149	1 379	5.9
Common robbery	33	50	40	93	1.3
Robbery with aggravating circumstances	92	124	124	714	3.2
Total Contact Crimes (Crimes Against the Person)	**566**	**728**	**670**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	63	76	46	(331)	(10.9)
Sexual Assault	8	9	4	(81)	(1.9)
Attempted Sexual Offences	3	2	7	96	3.3
Contact Sexual Offences	-	1	-	5	20.0
Total Sexual Offences	**74**	**88**	**57**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	8	8	2	277	(2.9)
Robbery at residential premises	15	23	20	393	(7.5)
Robbery at non-residential premises	9	17	31	17	
Robbery of cash in transit	-	-	-	4	
Bank robbery	-	-	-	-	
Truck hijacking	1	1	-	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	18	22	6	8	1.1
Malicious damage to property	74	88	85	(346)	(2.5)
Total Contact-Related Crimes	**92**	**110**	**91**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	95	60	72	(19)	(0.2)
Burglary at residential premises	373	405	344	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	24	16	5	(20)	(0.2)
Theft out of or from motor vehicle	382	238	257	(524)	(3.5)
Stock-theft	37	67	66	(128)	(2.0)
Total Property-Related Crimes	**911**	**786**	**744**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	217	259	250	-546	(1.4)
Commercial crime	126	132	134	-556	(3.7)
Shoplifting	151	86	56	-740	(6.8)
Total Other Serious Crimes	**494**	**477**	**440**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**2 063**	**2 101**	**1 945**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	13	19	7	(14)	(0.4)
Drug-related crime	235	264	195	(9 368)	(26.5)
Driving under the influence of alcohol or drugs	197	284	115	3 439	(19.6)
Sexual Offences detected as a result of police action	-	-	-	(141)	(3.9)
Total Crime Detected As A Result Of Police Action	**445**	**567**	**317**	**(6 084)**	**(10)**

Source: SAPS, 2022

Table A3.6: Crime in KwaDukuza, 2018 to 2021

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21	
				Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	65	67	77	464	10.6
Sexual Offences	166	188	142	501	5.4
Attempted murder	100	85	99	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	613	659	577	540	2.0
Common assault	637	631	492	1 379	5.9
Common robbery	105	110	76	93	1.3
Robbery with aggravating circumstances	654	706	767	714	3.2
Total Contact Crimes (Crimes Against the Person)	**2 340**	**2 446**	**2 230**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	140	142	116	(331)	(10.9)
Sexual Assault	18	39	26	(81)	(1.9)
Attempted Sexual Offences	5	3	-	96	3.3
Contact Sexual Offences	3	4	-	5	20.0
Total Sexual Offences	**166**	**188**	**142**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	35	32	31	277	(2.9)
Robbery at residential premises	137	133	197	393	(7.5)
Robbery at non-residential premises	72	61	68	17	
Robbery of cash in transit	-	-	1	4	
Bank robbery	-	-	-	-	
Truck hijacking	-	1	-	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	65	67	2	8	1.1
Malicious damage to property	166	188	345	(346)	(2.5)
Total Contact-Related Crimes	**231**	**255**	**347**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	246	187	208	(19)	(0.2)
Burglary at residential premises	906	805	726	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	95	73	65	(20)	(0.2)
Theft out of or from motor vehicle	246	260	211	(524)	(3.5)
Stock-theft	26	12	32	(128)	(2.0)
Total Property-Related Crimes	**1 519**	**1 337**	**1 242**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	891	915	845	-546	(1.4)
Commercial crime	344	274	190	-556	(3.7)
Shoplifting	287	201	133	-740	(6.8)
Total Other Serious Crimes	**1 522**	**1 390**	**1 168**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**5 612**	**5 428**	**4 987**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	53	56	54	(14)	(0.4)
Drug-related crime	854	751	230	(9 368)	(26.5)
Driving under the influence of alcohol or drugs	98	89	47	3 439	(19.6)
Sexual Offences detected as a result of police action	25	25	-	(141)	(3.9)
Total Crime Detected As A Result Of Police Action	**1 030**	**921**	**331**	**(6 084)**	**(10)**

Source: SAPS, 2022

Table A3.7: Crime in Pietermaritzburg, 2018 to 2021

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21 Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	44	44	28	464	10.6
Sexual Offences	60	69	46	501	5.4
Attempted murder	41	24	29	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	203	217	165	540	2.0
Common assault	360	390	234	1 379	5.9
Common robbery	312	255	175	93	1.3
Robbery with aggravating circumstances	427	315	250	714	3.2
Total Contact Crimes (Crimes Against the Person)	**1 447**	**1 314**	**927**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	49	54	37	(331)	(10.9)
Sexual Assault	9	14	6	(81)	(1.9)
Attempted Sexual Offences	-	-	-	96	3.3
Contact Sexual Offences	2	1	3	5	20.0
Total Sexual Offences	**60**	**69**	**46**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	23	19	25	277	(2.9)
Robbery at residential premises	10	5	15	393	(7.5)
Robbery at non-residential premises	35	33	50	17	
Robbery of cash in transit	-	-	-	4	
Bank robbery	-	-	-	-	
Truck hijacking	1	-	-	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	44	44	-	8	1.1
Malicious damage to property	60	69	121	(346)	(2.5)
Total Contact-Related Crimes	**104**	**113**	**121**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	309	312	302	(19)	(0.2)
Burglary at residential premises	162	119	125	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	132	98	68	(20)	(0.2)
Theft out of or from motor vehicle	561	398	288	(524)	(3.5)
Stock-theft	-	-	-	(128)	(2.0)
Total Property-Related Crimes	**1 164**	**927**	**783**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	1 148	952	762	-546	(1.4)
Commercial crime	477	423	329	-556	(3.7)
Shoplifting	579	572	358	-740	(6.8)
Total Other Serious Crimes	**2 204**	**1 947**	**1 449**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**4 919**	**4 301**	**3 280**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	46	44	20	(14)	(0.4)
Drug-related crime	1 100	1 318	670	(9 368)	(26.5)
Driving under the influence of alcohol or drugs	152	536	102	3 439	(19.6)
Sexual Offences detected as a result of police action	303	217	127	(141)	(3.9)
Total Crime Detected As A Result Of Police Action	**1 601**	**2 115**	**919**	**(6 084)**	**(10)**

Source: SAPS, 2022

Table A3.8: Crime in Port Shepstone, 2018 to 2021

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21	
				Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	48	38	42	464	10.6
Sexual Offences	97	104	85	501	5.4
Attempted murder	30	24	38	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	354	365	286	540	2.0
Common assault	318	334	306	1 379	5.9
Common robbery	120	93	96	93	1.3
Robbery with aggravating circumstances	159	187	191	714	3.2
Total Contact Crimes (Crimes Against the Person)	**1 126**	**1 145**	**1 044**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	78	82	65	(331)	(10.9)
Sexual Assault	13	18	12	(81)	(1.9)
Attempted Sexual Offences	5	1	4	96	3.3
Contact Sexual Offences	1	3	4	5	20.0
Total Sexual Offences	**97**	**104**	**85**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	5	1	2	277	(2.9)
Robbery at residential premises	24	41	36	393	(7.5)
Robbery at non-residential premises	39	41	38	17	
Robbery of cash in transit	-	-	-	4	
Bank robbery	-	-	-	-	
Truck hijacking	1	1	2	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	48	38	10	8	1.1
Malicious damage to property	97	104	97	(346)	(2.5)
Total Contact-Related Crimes	**145**	**142**	**107**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	195	202	230	(19)	(0.2)
Burglary at residential premises	588	606	450	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	39	33	32	(20)	(0.2)
Theft out of or from motor vehicle	197	184	191	(524)	(3.5)
Stock-theft	11	3	7	(128)	(2.0)
Total Property-Related Crimes	**1 030**	**1 028**	**910**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	621	571	453	-546	(1.4)
Commercial crime	380	341	274	-556	(3.7)
Shoplifting	196	181	160	-740	(6.8)
Total Other Serious Crimes	**1 197**	**1 093**	**887**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**3 498**	**3 408**	**2 948**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	18	18	14	(14)	(0.4)
Drug-related crime	406	156	126	(9 368)	(26.5)
Driving under the influence of alcohol or drugs	301	241	55	3 439	(19.6)
Sexual Offences detected as a result of police action	935	1 084	108	(141)	(3.9)
Total Crime Detected As A Result Of Police Action	**1 660**	**1 499**	**303**	**(6 084)**	**(10)**

Source: SAPS, 2022

Table A3.9: Crime in Vryheid, 2018 to 2021

Crime Category	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021	Comparison 2019/20 with 2020/21	
				Case Difference	% change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	34	14	17	464	10.6
Sexual Offences	65	61	36	501	5.4
Attempted murder	26	15	12	(42)	(1.0)
Assault with the intent to inflict grievous bodily harm	318	297	286	540	2.0
Common assault	257	187	255	1 379	5.9
Common robbery	82	45	44	93	1.3
Robbery with aggravating circumstances	130	104	91	714	3.2
Total Contact Crimes (Crimes Against the Person)	**912**	**723**	**741**	**3 649**	**3.7**
TOTAL SEXUAL OFFENCES					
Rape	58	50	31	(331)	(10.9)
Sexual Assault	4	6	2	(81)	(1.9)
Attempted Sexual Offences	1	3	-	96	3.3
Contact Sexual Offences	2	2	3	5	20.0
Total Sexual Offences	**65**	**61**	**36**	**501**	**5.4**
SOME SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	8	5	4	277	(2.9)
Robbery at residential premises	19	18	11	393	(7.5)
Robbery at non-residential premises	24	17	19	17	
Robbery of cash in transit	2	-	-	4	
Bank robbery	-	-	-	-	
Truck hijacking	-	-	-	(10)	(7.3)
Total Aggravated Robbery	**10 004**	**10 093**	**10 774**	**681**	**(0.9)**
CONTACT-RELATED CRIMES					
Arson	34	14	1	8	1.1
Malicious damage to property	65	61	140	(346)	(2.5)
Total Contact-Related Crimes	**99**	**75**	**141**	**(338)**	**(2.3)**
PROPERTY RELATED CRIMES					
Burglary at non-residential premises	159	125	101	(19)	(0.2)
Burglary at residential premises	350	305	312	(3 500)	(9.0)
Theft of motor vehicle and motorcycle	31	33	28	(20)	(0.2)
Theft out of or from motor vehicle	124	140	107	(524)	(3.5)
Stock-theft	124	110	87	(128)	(2.0)
Total Property-Related Crimes	**788**	**713**	**635**	**(4 191)**	**(5.3)**
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	422	366	378	-546	(1.4)
Commercial crime	259	218	198	-556	(3.7)
Shoplifting	173	180	98	-740	(6.8)
Total Other Serious Crimes	**854**	**764**	**674**	**-1 842**	**(2.8)**
Total 17 Community Reported Serious Crimes	**2 653**	**2 275**	**2 191**	**-2 722**	**(1.1)**
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	24	29	15	(14)	(0.4)
Drug-related crime	258	273	210	(9 368)	(26.5)
Driving under the influence of alcohol or drugs	210	252	32	3 439	(19.6)
Sexual Offences detected as a result of police action	-	-	-	(141)	(3.9)
Total Crime Detected As A Result Of Police Action	**492**	**554**	**257**	**(6 084)**	**(10)**

Source: SAPS, 2021

Table A5.1: Provincial unemployment distribution by age, 2020

	Unemployment Rate - official definition					Unemployment Rate - expanded definition				
	15-24	25-34	35-44	45-54	55-64	15-24	25-34	35-44	45-54	55-64
Western Cape	44.4	28.4	16.4	14.1	7.7	46.8	30.4	17.8	15.7	9.9
Eastern Cape	67.5	50.5	34.8	24.4	14.1	73.8	56.3	40.6	31.2	20.6
Northern Cape	50.8	31.8	22.6	16.4	8.1	64.5	44.8	31.5	24.8	14.2
Free State	69.3	43.2	27.6	17.3	9.8	74.1	48.2	31.7	21.1	13.2
KwaZulu-Natal	**57.5**	**33.0**	**20.7**	**13.7**	**6.4**	**72.4**	**46.2**	**31.3**	**25.4**	**16.7**
North West	64.2	40.8	26.4	17.1	10.5	76.3	52.1	35.9	26.4	19.1
Gauteng	64.4	39.8	27.9	21.7	15.4	68.9	44.1	32.0	25.9	21.6
Mpumalanga	63.9	25.6	25.6	16.0	10.7	73.0	47.9	32.3	22.6	16.5
Limpopo	53.0	31.4	18.3	10.7	6.2	73.5	49.1	31.8	23.6	17.3

Source: IHS Markit, 2022

Table A5.2: Provincial labour force participation rate, 2010 - 2020

	Labour Force Participation Rate										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Western Cape	67.0	67.1	67.2	67.4	67.9	68.0	68.4	68.8	68.6	68.0	64.6
Eastern Cape	42.6	42.2	42.6	43.9	45.7	47.0	48.6	50.3	50.9	51.4	51.5
Northern Cape	52.2	52.5	53.8	55.6	57.1	57.2	56.6	56.1	55.6	55.1	51.5
Free State	56.7	56.9	57.4	58.6	60.7	62.1	63.1	63.8	63.9	63.9	60.3
KwaZulu-Natal	**45.9**	**45.2**	**45.5**	**46.4**	**47.6**	**48.2**	**48.6**	**49.1**	**49.2**	**49.4**	**47.8**
North West	48.0	46.6	46.5	47.8	49.7	50.9	51.7	52.1	51.8	51.8	50.8
Gauteng	69.3	69.0	68.8	68.9	69.8	71.2	72.1	72.2	71.3	70.6	67.5
Mpumalanga	53.2	53.8	55.1	56.8	58.2	58.9	60.0	61.5	62.2	62.5	58.7
Limpopo	36.7	36.6	37.3	38.7	41.1	43.9	46.5	47.9	47.9	47.7	46.1

Source: IHS Markit, 2022

Table A5.3: Provincial labour absorption rate, 2010 - 2020

	Labour Absorption Rate										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Western Cape	52.7	52.2	51.9	52.1	52.8	53.5	53.9	54.5	54.8	54.1	50.6
Eastern Cape	30.7	30.3	30.2	30.9	32.2	33.3	33.7	33.7	33.1	32.4	30.0
Northern Cape	37.8	37.7	38.5	39.5	40.2	40.0	39.6	39.6	40.0	39.8	37.5
Free State	41.0	40.4	39.6	39.7	40.8	42.0	42.3	42.3	42.3	41.8	39.2
KwaZulu-Natal	**36.3**	**35.8**	**35.9**	**36.4**	**37.3**	**37.6**	**37.4**	**37.4**	**37.4**	**37.1**	**34.9**
North West	34.9	34.2	34.3	35.0	36.4	37.2	37.6	37.8	37.4	36.7	34.8
Gauteng	51.4	50.9	51.2	51.5	51.8	51.9	51.5	51.0	50.4	49.2	45.8
Mpumalanga	38.2	38.1	38.9	40.3	41.7	42.2	42.3	42.3	42.3	41.9	39.7
Limpopo	27.7	28.4	29.5	31.2	33.6	35.7	37.3	38.3	38.5	37.9	34.8

Source: IHS Markit, 2022

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