

**Towards an inclusive, green growth path:
A review of South Africa's National
Development Plan's approach to economic
growth**

by

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Declaration

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Abstract

To counter current challenges, South Africa's growth path must support the greening of the economy, ensure the sustainable use of natural resources and address poverty, inequality and unemployment concurrently. The country's growth path therefore needs to be both green and inclusive. This study aims to develop a conceptual framework that identifies the determinants of such a path and it reviews South Africa's National Development Plan against this framework to understand whether it has the characteristics necessary to move the country onto an inclusive, green growth path. It is argued that the country needs to transition to this path to address the socioeconomic and environmental challenges it faces.

A traditional narrative literature review was conducted to create the conceptual framework, with the focus on the alternative pro-poor, inclusive and green growth paths to identify the necessary determinants. A coding process was used to identify five categories and their related themes: the social category with themes of social protection, education and training, and poverty alleviation; economic category covering growth and structural transformation, small business development, financial inclusion, job creation and inequality reduction; environmental category comprising themes of green industries, natural resource management, green finance, green jobs and green skills; spatial development category encompassing themes of economic infrastructure and rural development; and the governance category focused on themes of strong institutions and public participation. The five categories and 16 themes provide a framework for an inclusive, green growth path.

South Africa's National Development Plan, specifically chapter 3 focused on economic growth and chapter 5 focused on the environment, is analysed against this framework. Various other chapters related to education, training and innovation (chapter 9), social protection (chapter 11), economic infrastructure (chapter 4), the rural economy (chapter 6) and building a capable and developmental state (chapter 13) are also reviewed to provide context.

The thematic content analysis indicates that the National Development Plan displays many of the characteristics necessary to transition to an inclusive, green growth path, but it does not adequately integrate economic growth and environmental sustainability considerations, nor does it place enough emphasis on the need for supporting green finance models, green industries and the necessary green policy design. This study provides a set of recommendations related to fiscal, economic and industrial policymaking and policy planning that would support the transition and contribute to sustainable development in South Africa.

Keywords: inclusive economic growth, green economic growth, inclusive green growth, national development plan, South Africa, sustainable development, green growth and poverty, green growth and inequality, green growth policies, pro-poor growth, green economy

Opsomming

Om vandag se uitdagings te kan hanteer moet die weg van ontwikkeling in Suid-Afrika die vergroening van die ekonomie bevorder, die volhoubare benutting van natuurlike hulpbronne verseker en armoede, ongelykheid en werkloosheid ter gelyktyd aanspreek. Die ontwikkelingsrigting van die land moet dus beide groen en inklusief wees.

Hierdie studie beoog die ontwikkeling van 'n konseptuele raamwerk wat die bepalende faktore vir so 'n ontwikkelingsrigting identifiseer, en dit gee 'n oorsig van die Suid-Afrikaanse Nasionale Ontwikkelingsplan teen die agtergrond van daardie raamwerk, ten einde te bepaal of dit wel die eienskappe bevat wat die land op 'n pad van groen ontwikkeling en inklusiwiteit sal plaas. Dit stel ook voor dat die land behoort oor te skakel na daardie pad om sosio-ekonomiese-en-omgewingsuitdagings die hoof te kan bied.

'n Oorsig van tradisionele literatuur is gedoen vir die skepping van die konseptuele raamwerk, met die fokus op die alternatiewe pro-arme-, inklusiewe- en groen ontwikkelings- rigtings in die identifisering van die noodwendige determinante. 'n Proses van kodering is gebruik in die bepaling van vyf kategorieë met verwante temas: die maatskaplike kategorie met temas van gemeenskapsbeskerming, opvoeding en opleiding en armoedeverligting; die ekonomiese kategorie wat insluit groei en strukturele verandering, kleinsake-ontwikkeling, finansiële insluiting, werkskepping en ongelykheidsvermindering; die omgewingskategorie, omvattende temas van groen industrieë, bestuur van natuurlike hulpbronne, groen finansiering, groen arbeid en groen vaardighede; ruimteontwikkeling, insluitende temas van ekonomiese infrastruktuur en plattelandse ontwikkeling; en die regeringskategorie, gefokus op temas van sterk instellings en openbare deelname. Hierdie vyf kategorieë en sestien temas stel 'n raamwerk daar vir inklusiewe en groen ontwikkeling.

Suid-Afrika se Nasionale Ontwikkelingsplan, spesifiek Hoofstuk 3, wat gefokus is op ekonomiese groei, word ontleed teen die agtergrond van die daargestelde raamwerk. Verskeie ander hoofstukke, wat verband hou met opvoeding, opleiding en vernuwing/innovasie (Hoofstuk 9), gemeenskapsbeskerming (Hoofstuk 11), ekonomiese infrastruktuur (Hoofstuk 4), die plattelandse ekonomie (Hoofstuk 6) en die bou van 'n vaardige ontwikkelingsstaat (Hoofstuk 13) word ook in oorsig geneem om konteks te verleen.

Die tematiese inhoudsanalise toon aan dat die Nasionale Ontwikkelingsplan verskeie van die vereiste eienskappe vir oorskakeling na 'n inklusiewe pad van groen ontwikkeling bevat, maar dat dit nie die oorwegings van ekonomiese groei en volhoubaarheid voldoende integreer nie, en verder ook nie genoeg klem plaas op die noodsaak vir onderskraging van groen finansieringsmodelle, groen industrie en die noodsaaklike groen beleidsontwerp nie.

Hierdie ondersoek bied 'n versameling voorstelle aan vir fiskale, ekonomiese en industriële beleidskepping- en –beplanning wat die oorgang sou onderskraag en bydra tot volhoubare ontwikkeling in Suid-Afrika.

Sleutelwoorde: inklusiewe ekonomiese groei, groen ekonomiese groei, inklusiewe groen ontwikkeling, nasionale ontwikkelingsplan, Suid-Afrika, volhoubare ontwikkeling, groen groei en armoede, groen ontwikkeling en ongelykheid, groenontwikkelings-beleid, pro-armoede groei, groen ekonomie.

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List of acronyms

AfDB	African Development Bank
ANC	African National Congress
AsgiSA	Accelerated and Shared Growth Initiative for South Africa
B-BBEE	Broad-based black economic empowerment
COIDA	Compensation of Occupation Injuries and Disease Act
COSATU	Congress of South African Trade Unions
CSIR	Council for Scientific and Industrial Research
DEA	Department of Environmental Affairs
ECD	Early childhood development
EDD	Economic Development Department
EMG	Environmental Monitoring Group
EIA	Environmental impact assessments
FET	Further education and training
FPL	Food poverty line
GDP	Gross domestic product
GEAR	Growth, Employment and Redistribution Strategy
GGKP	Green Growth Knowledge Platform
ICT	Information and communication technology
IGG	Inclusive, green growth
IIED	International Institute for Environment and Development
ILO	International Labour Organization
LBPL	Lower-bound poverty line
MDG	Millennium Development Goals
NDP	National Development Plan
NGO	Non-governmental organisation
NGP	New Growth Path
NPC	National Planning Commission
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
PEP	Poverty–Environment Partnership
RDP	Reconstruction and Development Programme
SACP	South African Communist Party
SETA	Sector education training authorities
SMME	Small, micro and medium sized enterprises
STATS SA	Statistics South Africa
TVET	Technical and vocational education and training
UIF	Unemployment Insurance Fund
UN	United Nations
UNDoESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UBPL	Upper-bound poverty line
WCED	World Commission on Environment and Development

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Chapter 1: Introduction

1.1 Introduction

The current dominant economic growth path followed by most countries is inherently unsustainable. It contributes significantly to environmental degradation, water scarcity and air pollution, as well as driving climate change (World Commission on Environment and Development [WCED], 1987; Drexhage & Murphy, 2010; Swilling & Annecke, 2012; Swilling, 2012). This model has also not eliminated poverty, hunger or ill-health (Organisation for Economic Co-operation and Development [OECD], World Bank & United Nations [UN], 2012) and it has resulted in high levels of inequality. South Africa is no exception to these impacts.

The country's economic growth path is highly dependent on coal-generated energy and on energy-intensive sectors (Camaren & Wakeford, 2016; Seelinger & Turok, 2016). According to the Carbon Brief's profile on South Africa (2018) it was the 14th largest emitter of greenhouse gases in the world in 2015, and is facing significant environmental challenges. South Africa is also struggling to address the multiple legacies of apartheid in the form of high levels of inequality and poverty, and to counter sluggish economic growth and unemployment (Gulati, Scholtz & Fakir, 2016; Mohamed, 2018). There is a critical need for South Africa to transition to a more environmentally friendly, socially inclusive and sustainable growth path (Mohamed & Montmasson-Clair, 2018).

The overarching objective of sustainable economic growth is to promote a low-carbon economy that eradicates poverty, and to do so in a way that protects natural resources (Gulati, Scholtz & Fakir, 2016). Poverty, which prevents people from meeting their basic needs as well as those of their future generations (Blewitt, 2008), cannot be separated from inequalities in access to and consumption of natural resources, as well as the sharing of benefits derived from their use (Rodríguez, 2010). Poverty and inequality therefore need to be dealt with concurrently (Swilling & Annecke, 2012). As a result, there have been increasing discussions around economic growth theories, types of economic growth and policies implemented to stimulate growth, reduce inequality and end poverty (Triegaardt, 2006; Saad-Filho, 2010; OECD, 2015; Padoan, 2015; Suryanarayana, 2015; Hasmath, 2015).

This study explores the potential of an alternative inclusive, green growth (IGG) path to promote sustainable economic growth and realise the social and economic benefits of such growth for the majority of South Africa's population. It then analyses the country's National Development Plan (NDP), published in 2012, against the developed framework to determine whether it has the necessary characteristics to support a transition to an IGG path.

1.2 Background

I was made aware of the unsustainability of current growth paths through my studies at the Sustainability Institute, School of Public Leadership, Stellenbosch University in 2014. I learned that the global development path links improvements in wellbeing with economic growth dependent on material flows extracted from the Earth system, including non-renewable resources such as fossil fuels, to create goods and services for human consumption (Swilling & Annecke, 2012).

The accelerated use of fossil fuels globally has resulted in the emission of greenhouse gases, which have reached concentrated levels in the atmosphere resulting in global climate change (UN Environment Programme [UNEP], 2011; World Wildlife Fund, 2016). Climate change and other environmental crises caused by man are threatening human wellbeing. Countries, particularly developing countries, will need to deal with these crises while also dealing with the challenges of poverty, inequality and unemployment (Altenburg & Assmann, 2017).

There is an urgent need to build resource-efficient, low-carbon and zero-waste economies that simultaneously improve societal welfare and are more equitable, although there is a cost to transitioning (Swilling & Annecke, 2012). South Africa will need to find a balance between economic growth, societal wellbeing and environmental protection to address its many challenges. It will need a growth path that is both green and inclusive (Mohammed, Mensah & Gyeke-Dako, 2017).

1.3 Problem statement

The key problem to be addressed by this study is the inability of South Africa's economic policy to translate into inclusive and green economic growth. Economic growth is considered a vehicle for development in South Africa on the assumption that a higher rate of economic growth will create jobs, reduce poverty levels and support a general improvement of living standards. This is evident when exploring the approach taken in the country's post-1994 grand economic development policies, which aimed to create a just society, namely a "society based on democratic values, social justice and fundamental human rights;...a society in which government is based on the will of the people and every citizen is equally protected by law; improve the quality of life of all citizens and free the potential of each person", as set out in the Preamble to the Constitution of the Republic of South Africa, 1996.

These policies and strategies were implemented by the African National Congress (ANC), the first democratically elected governing party in South Africa in the 1994 national elections. The 1996 *Growth, Employment and Redistribution Strategy* (GEAR) noted that "As South Africa

moves toward the next century, we seek: a competitive fast-growing economy which creates sufficient jobs for all workseekers” (National Treasury, 1996:1).

The *New Growth Path* (NGP) framework released in 2010 stated that:

... there is growing consensus that creating decent work, reducing inequality and defeating poverty can only happen through a new growth path founded on a restructuring of the South African economy to improve its performance in terms of labour absorption as well as the composition and rate of growth. (Department of Economic Development, 2011:1)

The NDP states that “to eliminate poverty, South Africa has to raise employment. This can happen only if the economy grows faster and in ways that draw in the historically disadvantaged” (National Planning Commission [NPC], 2012:110).

These approaches have yielded social benefits with millions more people accessing housing, electricity, sanitation, education and healthcare services (South African Communist Party [SACP], 2014; Statistics South Africa [Stats SA], 2016b). About 80 percent of the population has access to improved sanitation and electricity (Stats SA, 2018) and about 1.4 million learners now receive subsidies for education with a further 9 million accessing school feeding schemes (SACP, 2014). But there has not been a concurrent gain in economic benefits for most of the population, and these plans have not yielded the desired result of an inclusive and environmentally just society.

Economic benefits are still concentrated within a few people and spaces (OECD, 2016b), resulting in high levels of inequality. The country’s Gini-coefficient is currently 0.68 (Stats SA, 2017) with the top 10 percent of income earners getting 51 percent of the country’s national income and the bottom 20 percent only about 1 percent (Orthofer, 2016). This is the highest level of inequality among South Africa’s peer countries, such as Brazil, China and India (OECD, 2015b; Stats SA, 2016b; Orthofer, 2017). The country is characterised by high poverty and unemployment rates (Haroon, van der Berg & van Aardt, 2003; Triegaardt, 2006; NPC, 2012; World Bank, Department of Planning, Monitoring and Evaluation & Stats SA, 2018).

Its economic growth rate has been relatively stagnant for a number of years – 0.3 percent, 3.4 percent and 1.4 percent in 2016, 2017 and 2018 respectively (Stats SA, 2019a) and economic growth has not been able to create employment opportunities. The unemployment rate has been higher than 20 percent since 2000 (Trading Economics, 2019) reaching 26.5 percent, 26.7 percent and 27.1 percent in 2016, 2017 and 2018 respectively (Stats SA, 2019a).

More than 9 million out of 38 million people of working age are unemployed, and 12.8 million people are not economically active (Stats SA, 2019b). About 13.8 million people live in extreme poverty (Stats SA, 2017) and the percentage of people living in poverty is growing – from 21 percent in 2011 to 25 percent in 2015 (Stats SA, 2017:14).

The face of vulnerability and poverty in South Africa is still black, female, unskilled and young (OECD, 2015b; Orthofer, 2016; Stats SA, 2017).

South Africa's economic growth has been built and is mainly dependent on primary sectors, specifically the mineral and energy sectors (Hirsch, 2005). The nature of the country's economic growth is also highly energy intensive and dependent on coal-based energy generation (Seeliger & Turok, 2016). South Africa's per capita carbon emissions rank among the top 20 in the world (Gulati, Schultz & Saliem, 2016; Carbon Brief, 2018), higher than countries such as Australia, Spain, France and the United Kingdom (Visual Capitalist, 2019). Climate change in South Africa has resulted in environmental challenges, including a rise in average temperatures and more frequent and severe droughts, as well as ecosystem degradation (Swilling & Annecke, 2012; Mohamed, 2018). The country is also highly reliant on natural resource use resulting in the country's wetlands, water systems, soils and air showing signs of degradation (Amis, Montmasson-Clair, Lugogo & Benson, 2018).

This study argues that South Africa will not be able to achieve its development goals unless it follows an IGG path. South African needs to reduce its carbon emissions, while addressing unemployment, a low rate of economic growth and inequality (Gulati, Scholtz & Fakir, 2016).

1.4 Rationale for the study

There are an increasing number of studies on inclusive growth, green growth and IGG. What is lacking is agreement on definitions for many of the terms used within these frameworks (Overseas Development Institute [ODI], 2013) and common sets of indicators to evaluate growth paths against these frameworks (Green Growth Knowledge Platform [GGKP], 2016).

In addition, there is a lack of country-specific studies to determine whether the characteristics of these paths are embedded in national-level strategies and policy to support the transition to an IGG path. This is particularly true for developing country contexts, with most literature, particularly that on green growth, focused on industrialised countries (ODI, 2013).

This study aims to provide an IGG framework that will enable the evaluation of South Africa's NDP and identify gaps in understanding and policy that will inhibit the country's ability to achieve its developmental and environmental goals. Most literature focuses on the potential for alternative growth paths, but does not adequately make the case for adoption of these paths (ODI, 2013). This study attempts to make an evidentiary case for South Africa's adoption

of an IGG path by highlighting the interconnected nature of economic, social and environmental challenges, and the need to deal with challenges concurrently through integrated policymaking and service delivery.

South Africa's growth path will need to be green and inclusive to address its significant socioeconomic and environmental challenges (United Nations Economic Commission for Africa [UNECA], 2015; Musango & Tshangela, 2016).

1.4.1 Assumptions

The study's primary assumption is that the NDP would not align with an IGG framework, because of its emphasis on economic progress over environmental sustainability. This assumption is based on the understanding that previous policies focused more on growth, as opposed to development initiatives that would address issues of the environment, poverty and inequality.

1.5 Research aim, objectives, questions and strategy

1.5.1 Research aim and objectives

The research aim of this study is to identify the building blocks of an IGG path and to use this knowledge to build a conceptual framework with which to review the approach articulated in the NDP. The research objectives are therefore to:

1. Define and explore the concepts of inclusive growth and green growth in the literature and to develop a conceptual IGG framework.
2. Use the developed framework to explore the approach of post-apartheid policies related to economic growth.
3. Explore the NDP's capacity to achieve IGG through a review of chapter 3, which focuses on economic growth and employment, and chapter 5 that focuses on environmental sustainability, using the developed framework.
4. Make recommendations that would promote the uptake of an IGG path.

1.5.2 Research questions

The study aims to answer the following research questions:

1. What are the characteristics of an IGG path?
2. What were the approaches of the former grand economic growth policies (the Reconstruction and Development Programme (RDP), 1994; GEAR; the Accelerated and Shared Growth Initiative for South Africa (AsgiSA), 2005; and the NGP, to inclusive growth and environmental sustainability?
3. Does the current NDP include policy prescriptions that would result in IGG?
4. What recommendations can be made to promote IGG?

Question 1 will be answered in chapter 3 through a literature review, which discusses different economic growth paths with a focus on the inclusive and green growth paths to create a framework that will be used to review the NDP. Question 2 will be answered in chapter 4 through an analysis of South Africa's former grand economic growth policies.

Question 3 will be dealt with in chapter 5 through a content analysis of chapters 3 and 5 of the NDP using the framework created in chapter 2. Question 4 will be answered in chapter 6 through a reflection on the lessons learned from the literature review and analysis of the NDP.

Figure 1.1 below shows the link between the research objectives and research questions.

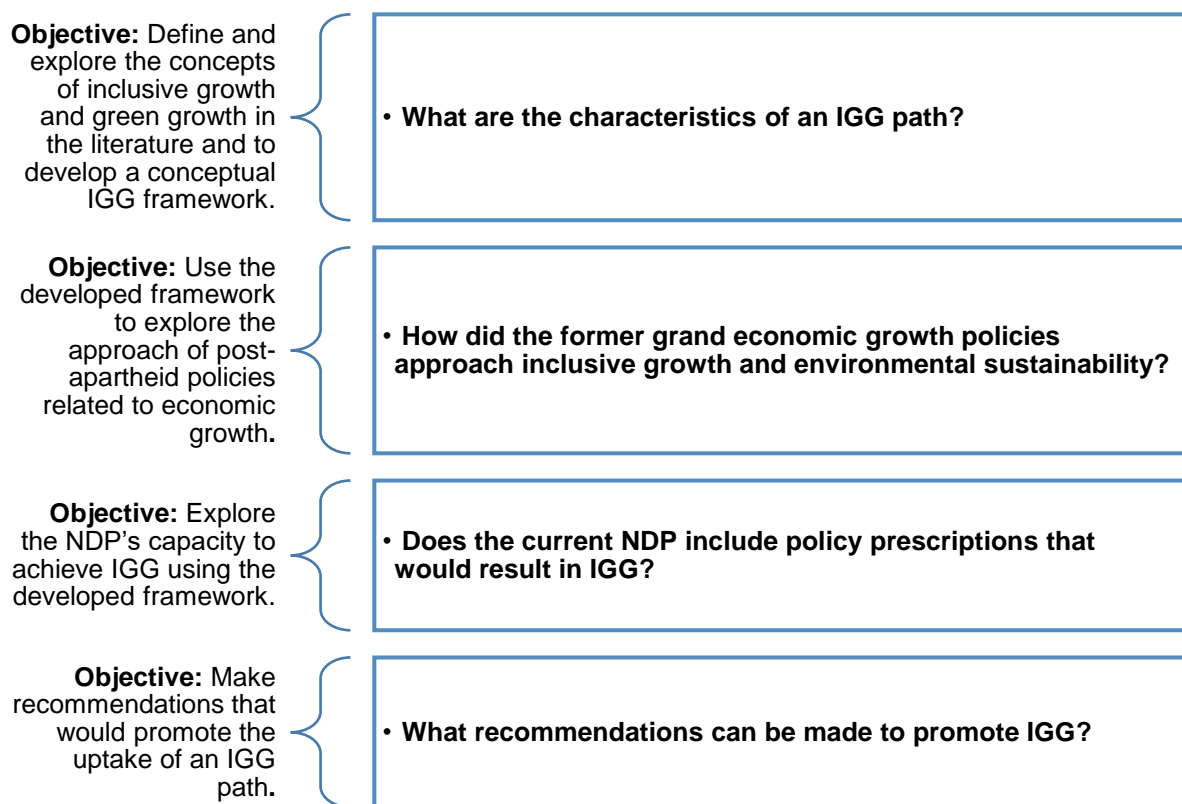


Figure 1.1: Linkages between the research objectives and questions

1.6 Research design, methodology and methods

This study is motivated by the urgent need to address economic and environmental injustices and promote transformation. It therefore falls within an interpretive paradigm that interprets a socially constructed world, with multiple actors influencing reality (Loseke, 2012). The study is also influenced by critical theory and this approach aligns with the study's aim of realising change.

1.6.1 Research design

The initial step was a review of the literature to understand the context of four interlinked themes: sustainable development and sustainable economies; the challenges of poverty, inequality and environmental degradation; alternative economic growth paths; and IGG.

The review enabled the development of a conceptual IGG framework to review the NDP and former national economic policies.

The literature review chapter responded to research question 1 and provided the foundation to respond to questions 2 and 3.

The developed conceptual framework was used to analyse post-1994 grand economic policies to determine their alignment with an IGG path, and their response to poverty, inequality and environmental degradation. The subsequent review of the NDP aimed to determine if the plan had the determinants of an IGG path as stipulated in the conceptual framework.

Based on the literature review, development of the framework and analysis of the NDP, recommendations could be drawn related to the promotion of IGG.

Figure 1.2 illustrates the design of the study.

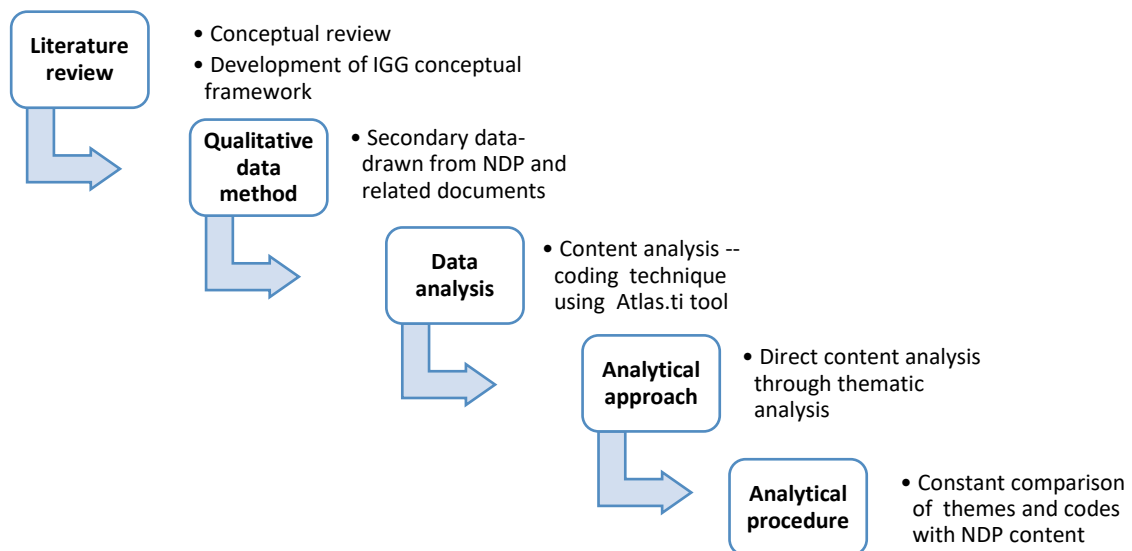


Figure 1.2: Research design

1.6.2 Methodology and methods

The study uses a qualitative methodology and a literature review and document analysis, specifically content analysis, as the primary methods. Chapter 2 provides a detailed overview of the research methodology and methods.

1.7 Definition of terms

Economic development is the process by which a nation improves the economic, political, and social wellbeing of its people.

Sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987:41).

Pro-poor growth is growth that is able to absorb labour from the labour market through policies and programmes that create employment and generate income for the poor, particularly women and other traditionally excluded groups (Kakwani & Pernia, 2000).

Inclusive growth is growth that rapidly and sustainably reduces poverty by allowing people to contribute to and benefit from economic growth in response to increasing inequality in the world (Lanchovichina & Lundström, 2009).

Green growth is growth that aims to foster economic growth and development while ensuring that natural resources continue to provide their services for the wellbeing of humans (OECD, 2012b).

1.8 Chapter outline

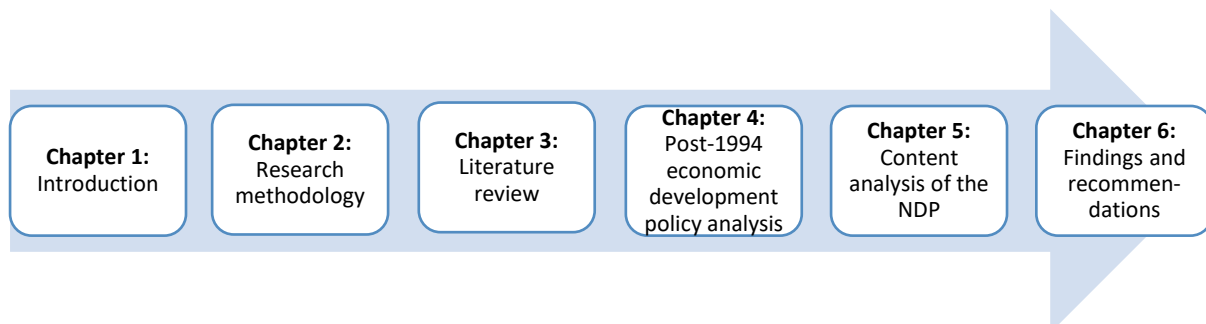


Figure 1.3: Chapter outline

Chapter 1 introduces the background to, rationale for and research aims of the study. Chapter 2 discusses the research methodology, methods of data collection and data analysis. Chapter 3 explores pro-poor growth, inclusive growth, green growth and the proposed alternative IGG path and their ability to respond to the challenges of poverty, inequality and environmental degradation. Chapter 4 analyses South Africa’s former grand economic development policies to understand their approach to economic growth and environmental sustainability. This analysis assists in obtaining lessons learned from past mistakes and ensuring that future economic development policies do not repeat these, but instead can effectively promote an IGG path. Chapter 5 provides an analysis of the NDP to determine whether its proposed economic growth approach fosters an IGG path for South Africa. Chapter 6 provides the conclusion and recommendations, including for future and further studies.

Chapter 2: Research design and methodology

This chapter discusses the research process followed in the study to illustrate how the topic was approached, the methods chosen and used, and the research questions answered. It first expands on the research paradigm that influenced the study and then discusses the methodology and methods – a literature review and content analysis – as well as expanding on the approach to data collection and analysis. It provides an overview of the limitations of the study and ethical considerations.

2.1 Research paradigm

The research paradigm of the study is based on the interpretive paradigm, which is associated with a philosophy that the world is socially constructed and consists of multiple realities, or ontologies (Loseke, 2012). It is also influenced by the critical theory paradigm that challenges the status quo and highlights injustices. A review of relevant literature helped in understanding the multiple socially constructed realities in South Africa and their injustices. These include environmental, social and economic injustices that are expressed through the problem statement, poverty, inequality and environmental degradation. These are discussed with the aim of motivating for the adoption of an IGG path.

Chapter 3 discusses the issues of poverty, inequality and environmental degradation in depth, as well the relationship between economic growth and differing economic growth paths and these three factors. This process enabled the development of a conceptual framework for a growth path that would simultaneously address these challenges – the IGG path.

2.2 Research methodology

This study uses a qualitative research methodology to analyse the NDP against a developed framework that evaluates elements of inclusivity and green growth. A qualitative methodology was chosen because of its ability to enable an in-depth understanding of a phenomenon and to give context to the unit of study (Bryman, Bell, Hirschsohn, dos Santos, du Toit & Masenge, 2011). This supports a broader understanding and analysis of the topic.

There are valid critiques of a qualitative research methodology – that it can be subjective, difficult to replicate, not transparent enough, and insufficient for generating generalised findings (Kumar, 2011; Silverman, 2016). It is subjective to a degree because the researcher is ultimately responsible for ascertaining what is important from gathered data and may not follow a systematic approach in this process (Flick, 2013). In addition, the researcher determines the focus of the research making it difficult for others to replicate (Bryman *et al.*, 2011). These shortcomings, however, can be addressed through the use of a systematic

cataloguing of process and methods (Gibbs, 2014). This study uses themes, categories and codes as a basis for ensuring academic rigour.

2.2.1 Research design

The research design is in the form of a content analysis. Content analysis is used when the research questions aim to investigate the extent to which the issue gets reported, where it is reported and what gets reported on (Bryman *et al.*, 2011).

Words, phrases and themes are counted or uncovered for analysis and coding is used to categorise subjects and themes. This study, through content analysis, will focus on the number of appearances of identified words and phrases in the NDP and look at the “latent” or underlying content to be able to fully answer the research questions, specifically questions 2 and 3. Exploring the latent content is important because it reveals what is deemed valuable or a priority (Bryman *et al.*, 2011); in this case, the link between NDP content and the IGG themes. Content analysis does pose certain pitfalls involving document quality and reliability. The quality of content analysed can impact the investigation and thus the results of study. It is important, therefore, to consider the documents’ credibility, authenticity and representability (Bryman *et al.*, 2011). The information in the document should be genuine, free of error and distortion, and facts within the documents should be typical of its kind (Bryman *et al.*, 2011). This study used documents published by the Office of the Presidency, thereby guaranteeing their reliability and ongoing availability.

2.2.2 The literature review

A literature review aims to broaden knowledge and bring clarity and focus to the research question (Kumar, 2011) by informing and narrowing the topic and providing different lenses. It can be defined as an appraisal of already available information to enable understanding of the subject being investigated and to highlight contradictions and gaps in knowledge (Jesson, Matheson & Lacey, 2012). It also helps to identify interconnection within the subject of study (Onwuegbuzie & Frels, 2016).

2.2.1.1 Searching the literature

To find relevant literature, I used library resources, including the faculty librarians, to source printed and electronic books and journals related to the topic. I also used the internet to search for literature from Google Scholar and Microsoft Academic using key words to find relevant literature from these resources. Keywords were drawn from my research questions, problem statement and background section (Kumar, 2011; Jesson *et al.*, 2012; Mouton, 2012). Key words included “green growth”, “inclusive growth”, “pro-poor growth” and “inclusive green growth” as well as combinations such “green growth and poverty”, “green growth and inequality” and these terms linked to “policies” and “growth policies”.

2.2.1.2 Analysing the literature

A literature review can be undertaken in a traditional or systematic way. A traditional literature review synthesises available literature on a particular topic through a critical narrative (Onwuegbuzie & Frels, 2016). A systematic review uses a particular method, such as a methodological systematic review, to make sense of the available literature (Jesson *et al.*, 2012).

The traditional narrative approach can take the form of an review written by subject experts expressing their opinions based on their knowledge and experience; a conceptual review that synthesises conceptual knowledge that will support a better understanding of the issue; or a transitional review that critiques and assesses theories related to the study background (Jesson *et al.*, 2012).

Narrative reviews can be further categorised into four types: general review, theoretical review, methodological review and historical review (Onwuegbuzie & Frels, 2016). The general review summarises and critiques knowledge on the topic; a theoretical review explores how theory shapes research by looking at how theory was used to make meaning in the research; a methodological review describes the research design and methods used in the study; and a historical review links the literature to historical events and context (Onwuegbuzie & Frels, 2016).

This study uses a narrative literature review and a conceptual review approach. This approach was chosen because of the study's objective of developing a conceptual framework for an IGG path. This made it necessary to identify and understand knowledge around concepts of inclusivity, green growth and other growth paths (Jesson *et al.*, 2012).

The literature review broadened my knowledge on the related concepts and their linkages to the challenges expressed in the problem statement. It enabled the creation of the conceptual framework used in the analysis of the NDP.

2.3 Data collection and analysis

2.3.1 Method of data collection

This study uses secondary data as a primary source. Use of secondary data enables more time for data analysis and interpretation of results (Olsen, 2011; Richards, 2013). There are some limitations. Some data might be complex and require careful consideration regarding which level of analysis to use because it might be difficult to answer the research question if incorrect data is used (Olsen, 2011; Richards, 2013). In addition, there is no control over data quality because the data formulation process is out of the researcher's control (Olsen, 2011; Richards, 2013).

Using data drawn from official public documents (such as those issued by the Office of the Presidency), however, enables a level of objectivity because the information will always be available and the collection process was done for a specific purpose (de Vos, Strydom & Fouche, 2005).

The primary unit of analysis is South Africa's NDP, specifically chapters 3 and 5. Chapter 3 focuses on matters of economic growth and Chapter 5 on matters of environmental sustainability. The unit of analysis is, however, linked to other elements that cannot be ignored – the propositions (Yin, 2003). In this study, these include other chapters in the NDP that impact and affect the promotion of IGG, including chapter 4 focused on economic infrastructure, chapter 6 focused on the rural economy; chapter 9 focused on education, training and innovation; chapter 11 focused on social protection; and chapter 13 focused on building a capable and developmental state governance.

The NDP was chosen as the unit of analysis because it is South Africa's development plan until 2030, which aligns with the research title that queries whether the country is capable of transitioning towards an IGG path.

2.3.2 Method of data analysis

The study uses a combination of content analysis and coding, aligned with the research design, to analyse the data. Content analysis encompassed the analysis of documents, visual or printed text, to build themes and meaning by identifying the frequency of terms. Content analysis is mostly used to analyse items published in mass media, unstructured information and reports (Saldana, 2009; Flick, 2013). The aim when analysing data is to produce counts of raw material in terms of specified categories and to interpret the meaning underlying themes and categories of content (Saldana, 2009). Coding is also used to identify themes, ideas and patterns in qualitative data (Saldana, 2009; Bryman *et al.*, 2011).

The data analysis approach in this study is a thematic data analysis combined with direct content analysis. The direct content analysis enabled the application of the conceptual framework generated in Chapter 3. The conceptual review enabled me to identify key concepts as initial themes or categories. The thematic analysis used these themes to analyse the NDP. This is top-down or deductive thematic analysis because the analysis is informed by the literature framework (Boeije, 2010; Bryman *et al.*, 2011; Richards, 2013).

The data analysis procedure was the constant comparison of the IGG framework with the content of the NDP, after creating themes and codes using Atlas.ti software. Atlas.ti is one of several non-formatted textual database systems developed in recent years – others are NVIVO and WINMAX (Smit, 2002).

Atlas.ti offers computer-assisted qualitative analysis of data (text, audio and video) (Lewis, 2016) and is able to assist in the management and organisation of data, as well as preliminary analyses using searches, auto-coding and network views (Friese, 2019).

This study used a thematic content analysis and deployed Atlas.ti to categorise terms drawn from the literature review in a word list and word cloud to create the IGG framework. The comparison between the literature and the coding enabled a deeper analysis and the presentation of solid findings (Gibbs, 2014). The study was therefore able to search for patterns, make comparisons and build explanations to answer the research questions.

Figure 2.1 below illustrates the coding process and figures 2.2 and 2.3 provide examples of the Atlas.ti-generated word lists and clouds during the research process.

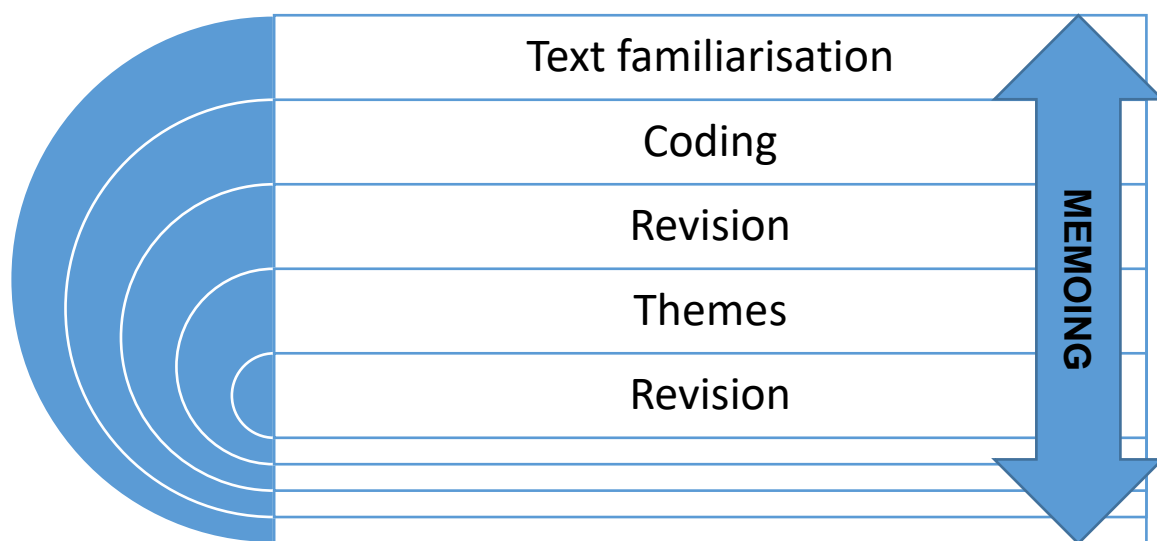


Figure 2.1: Atlas.ti coding process

Source: Remade from Archer, Herman, van Vuuren & Hugo, 2017:iii

Word	Length	Count	%	Preliminary them	%
growth	6	13	4,35	13	3,74
economic	8	11	3,68	11	3,16
green	5	6	2,01	6	1,72
climate	7	5	1,67	5	1,44
development	11	5	1,67	5	1,44
inequality	10	5	1,67	5	1,44
social	6	5	1,67	5	1,44
change	6	4	1,34	4	1,15
income	6	4	1,34	4	1,15
labour	6	4	1,34	4	1,15
poverty	7	4	1,34	4	1,15
productive	10	4	1,34	4	1,15
access	6	3	1,00	3	0,86
deprivation	11	3	1,00	3	0,86
ecosystem	9	3	1,00	3	0,86
environmental	13	3	1,00	3	0,86
exclusion	9	3	1,00	3	0,86
human	5	3	1,00	3	0,86
industries	10	3	1,00	3	0,86
infrastructure	14	3	1,00	3	0,86
local	5	3	1,00	3	0,86

Figure 2.2: Atlas.ti-generated word list

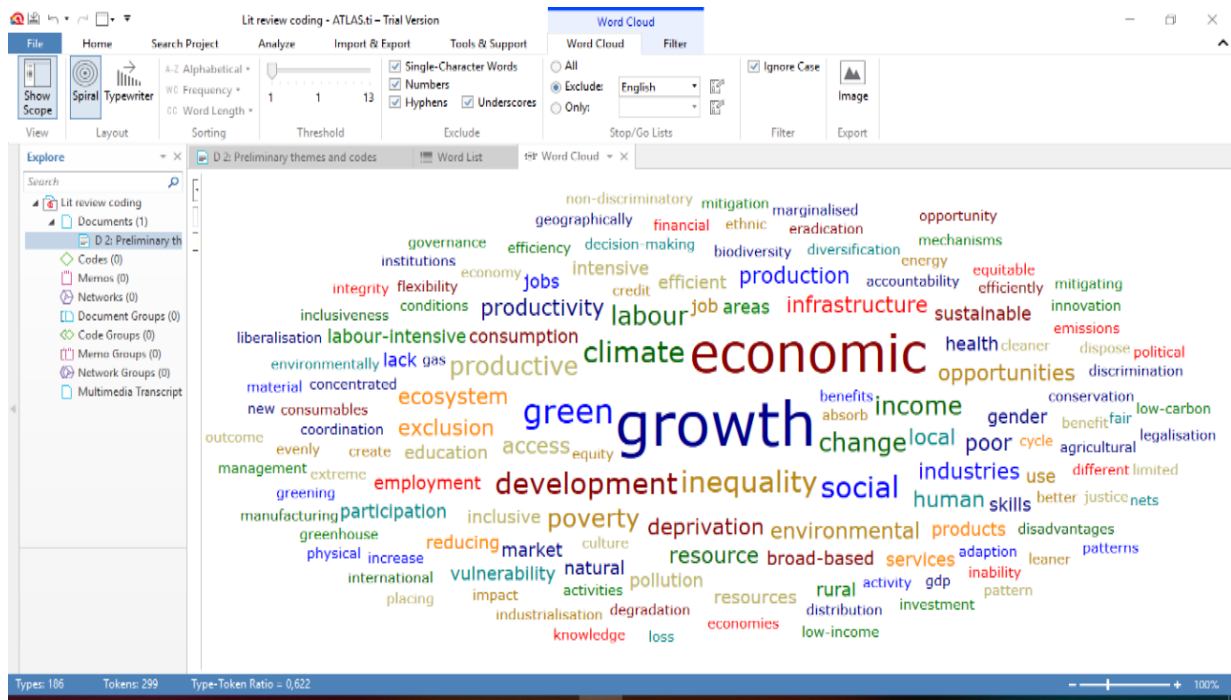


Figure 2.3: Atlas.ti-generated word cloud

Table 2.1 represents the connection between the research objectives and questions, as well as the data sources, methods used and analysis instruments.

Table: 2.1: Research objectives aligned to questions, sources, methods and instruments

Research objectives	Research question	Data source	Data collection method	Data analysis method	Analysis instrument
Develop an IGG framework that can be used for promoting an IGG path	What are the characteristics of an IGG Path?	Secondary data	Literature review	Thematic literature analysis	Atlas.ti software
Understand the approach of former grand policies to economic growth and environmental sustainability and compare them to the NDP	What were the approaches of the former grand policies to economic growth and environmental sustainability?	Secondary data	Document analysis	Thematic content analysis	IGG conceptual framework
Review the NDP's capacity to achieve IGG using the conceptual framework	Does the current NDP include the policy prescriptions that will result in IGG?	Secondary data	Document analysis	Thematic content analysis	Conceptual framework and coding sheet
Make recommendations that would promote the uptake of an IGG path	What recommendations can be made to promote IGG?	Secondary data	Literature review and content analysis	Constant comparison	Literature review and NDP analysis

2.4 Ethics

The necessary measures to ensure the quality of this research were undertaken. Ethics clearance was applied for. The departmental ethics screening committee deemed the study to be of minimal risk and gave approval to conduct the study. The study used a literature review of secondary sources and so did not interview or engage with individuals, which would require additional ethics clearance to ensure their voluntary, informed and protected participation in the project. Information used is in the public domain and so no extraordinary measures were needed to protect the confidentiality of information. I do not benefit financially or in any other way from the publishing of this study, and have put the necessary measures in place through my choice of methodology and methods to ensure the rigour of this work.

2.5 Chapter summary

This chapter provided information on how the study was undertaken, the methodology and methods used, as well as limitations to the study. The study employed a qualitative methodology encompassing a conceptual literature review of reliable secondary data sources to gain an in-depth understanding of the issues of poverty, inequality and environmental degradation, and the relationship between these and various economic growth paths. This thematic analysis was combined with direct content analysis using Atlas.ti to categorise and code key terms against the NDP – the primary unit of analysis. This enabled the determination of the extent to which the NDP could support a transition to an IGG path.

Chapter 3: Literature review

3.1 Introduction

The current GDP-based economic growth path is highly unlikely to result in a low-carbon economy that will support equitable development (Fioramonti, 2015). The neoclassical paradigm in respect of economic growth is flawed in many ways including in its approach to natural resource management (Musango & Tshangela, 2016). It has effectively “suffocated” social and ecological resources. The depth of the challenges has led to growing interest in alternative growth paths.

The discussion on alternatives focuses on types of economic growth and the policies that could simultaneously stimulate growth, lower inequality and end poverty (Triegaardt, 2006; Saad-Filho, 2010; Hasmath, 2015; OECD, 2015a; Padoan, 2015; Suryanarayana, 2015). There are also growing numbers of studies on the different types of growth, such as pro-poor growth, inclusive growth and green growth, that aim to overcome the shortcomings of the conventional economic growth path, specifically its inability to deliver on the promise to “trickle down” wealth (Lanchovichina & Lundström, 2009; Toman, 2012; Dercon, 2014; Suryanarayana, 2015).

The concept of pro-poor growth is a decided departure from the notion of trickle-down economics in its focus on channelling the distribution and benefits of growth towards the poor (Ranieri & Ramos, 2013b). The emergence of inclusive growth responds to the challenge of economic inequality and focuses on the rapid reduction of poverty (Lanchovichina & Lundström, 2009). The green growth concept promotes economic growth and development based on sustainable natural resource management and preservation (OECD, 2011). The culmination of these approaches can be found in the IGG path that recognises that a growth path must simultaneously focus on generating economic, social and environmental benefits, particularly in developing and least developed countries that face significant challenges around poverty and unemployment (Schalatek & Alexander, 2012; UNECA, 2015).

This chapter aims to address the research question: what are the characteristics of an IGG path? This means understanding the relationship between inclusive and green growth and how both paths respond to challenges of poverty, inequality and environmental degradation. The literature review attempts to develop an IGG framework with which to analyse South Africa’s NDP, and to add knowledge to the existing literature on this growth path.

This chapter is divided into four sections, which focus on:

- Sustainable development, particularly the relationship between the economic and environmental dimensions.

- The challenges of and linkages between poverty, inequality and environmental degradation.
- Economic growth paths from market-led to pro-poor, inclusive, green growth and IGG paths to understand how they respond to the challenges mentioned above.
- The development of an IGG framework.

3.2 Sustainable development: a discussion on dimensions

The concept of sustainable development can be understood as an appreciation of the interconnectedness of everything in the universe across all spheres, including economic, social and environmental dimensions (Macy & Young-Brown, 1998). Different groups of people approach this notion of connectedness in different ways. Some are more concerned with people's wellbeing, some with environmental wellbeing (Hattingh, 2001) and some with economic wellbeing, which has created a degree of conflict and disagreement about the meaning of the term (Blewitt, 2008).

3.2.1 A conceptual history

Rachel Carson is credited with being one of the first people to bring the interconnection between environmental health, human wellbeing and the economy to mainstream attention in the United States. Her book *Silent Spring*, published in 1962, synthesised research on ecology, epidemiology and toxicology to show that the chemicals used in farming were impacting ecological systems and human health in a negative way (Rogers, Jalal & Boyd, 2008). This sparked a broader awareness of these issues in the Western World.

The concept of sustainable development first surfaced at the global level at the 1972 UN Conference on the Human Environment in Stockholm amid discussions that the developmental agenda should also consider social and environmental aspects. In 1987, WCED released *Our Common Future*, also known as the Brundtland Report, containing the most well-known and widely used definition of sustainable development: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987:41). *Our Common Future* looked in depth at the relationship between development and the economy, environment and society (Rogers *et al.*, 2008).

A series of conferences took place in the following years focused on integrating social and environmental aspects into development thinking, including the 1992 UN Conference on Environment and Development in Rio, also known as the Earth Summit.

South Africa hosted the 2002 World Summit on Sustainable Development, which brought together thousands of government and civil society representatives, as well as business leaders, to discuss how to address global challenges in a sustainable way.

The use of the term has grown exponentially (Rogers *et al.*, 2008), although there are still disagreements as to how it should be implemented. Figure 3.1 illustrates the evolution of global meetings and agreements about sustainable development.



Figure 3.1: Evolution of sustainable development

In 2012, the Rio+ 20 Conference adopted *The Future we Want* report, which emphasised the need for a green economy, one in which sustainable development included a focus on poverty reduction and the roles that institutions need to play. It focused on decent jobs, energy, food security, sustainable agriculture, water and sustainable cities (UN, 2012). An outcome of this conference was the adoption of the Sustainable Development Goals and the initiation of finance mobilisation for sustainable development. The notion of sustainable production and consumption based on green economies, green growth and green jobs emerged during discussions (International Labour Organisation [ILO], 2019).

A high-level panel was appointed to finalise the Sustainable Development Goals, which were released in a 2013 report titled *The new global partnership: eradicating poverty and transforming economies through sustainable development* (Stoevska & Hunter, 2013). The report called for a transformative shift that would (Stoevska & Hunter, 2013):

- Leave no-one behind

- Put sustainable development at the core
- Transform economies for inclusive growth and jobs
- Build peace and effective and accountable institutions and create a new partnership.

In 2015, 193 UN member states adopted the 17 Sustainable Development Goals, illustrated in figure 3.2 below.



Figure 3.2: UN Sustainable Development Goals

Source: UN, 2015

3.2.2 A contested definition

Though the concept of sustainable development has evolved significantly since 1987, defining exactly what it means has not been straightforward. Even the most commonly accepted WCED definition is disputed. This definition does imply the need for both intragenerational and intergenerational equity, with an equitable distribution of resources and opportunities in the now, and in the future.

What is contested is the definition of needs (whose needs are to be met) and the barriers to meeting those needs. These barriers include the extent to which current social organisation and technology can support the meeting of current and future needs (Wackernagle & Rees, 1996; Mebratu, 1998). Despite contestation over the meaning of the term, sustainable development is generally understood as a balance between economic, social and ecological goals (Huge, 2010). Some authors include spatial development and governance in these pillars (Pezzoli, 1997; Allen & You, 2002; Allen, Hofman & Griffiths, 2007; Allen, 2009).

The three primary pillars are discussed below, as well as an additional two: spatial development and governance dimensions.

3.2.3 Traditional dimensions of sustainable development

3.2.3.1 Social sustainability

The social dimension of sustainable development encompasses issues of social justice and equity. It focuses on levels of inclusiveness, fairness, cultural recognition and equal rights to economic, physical and natural capital to support livelihoods, particularly for marginalised groups (Allen, 2009). Cultural recognition implies respect for cultural diversity and the heritage of different communities (Allen *et al.*, 2007; Scammon, 2012). Activities aiming to enhance social sustainability include reducing poverty, promoting human rights and satisfying basic needs (Allen, 2001).

3.2.3.2 Economic sustainability

This dimension focuses on the ability of economic practices to use available resources productively for the long-term benefit of people, without depleting their ability to benefit future generations (Basiago, 1998). Economies are therefore required to consider the full impact of an economic growth path on the country, and on its developmental objectives (Allen *et al.*, 2007; Allen, 2009), including the efficient use of natural resources and the impact of production cycles (Allen, 2001). Allen (2001) further notes that economic sustainability also promotes growth in productivity of local economies into the urban and regional spaces, but this expansion should not compromise the long-term use and existence of the local natural economic resource base. Economic sustainability encompasses growth, development, productivity and trickle down criteria involving plans to enhance these factors while also enhancing natural capital (Basiago, 1998).

3.2.3.3 Environmental sustainability

The pillar of environmental sustainability focuses on conserving and enhancing natural and physical ecosystems. It is concerned with the impact of economic consumption and production on the natural resource base, as well as the productivity of those resources and their use and disposal (Allen, 2001). It considers the long-term ability of the resource base to render services to people over time (Allen, 2001; Allen *et al.*, 2007; Allen, 2009; Hoge, 2010). It also encompasses the notions of ecosystem integrity, natural resource carrying capacity and biodiversity levels (Basiago, 1998).

The model of sustainable development considers the three pillars as equal and interrelated. Any developmental processes that aim to support sustainable development should therefore consider all three elements. This does not, however, happen in reality. The economic and social dimensions tend to dominate and the environmental dimension is often marginalised (Masundire, 2008).

Figure 3.3 illustrates the relationships between the three dimensions of sustainability discussed in the preceding section.

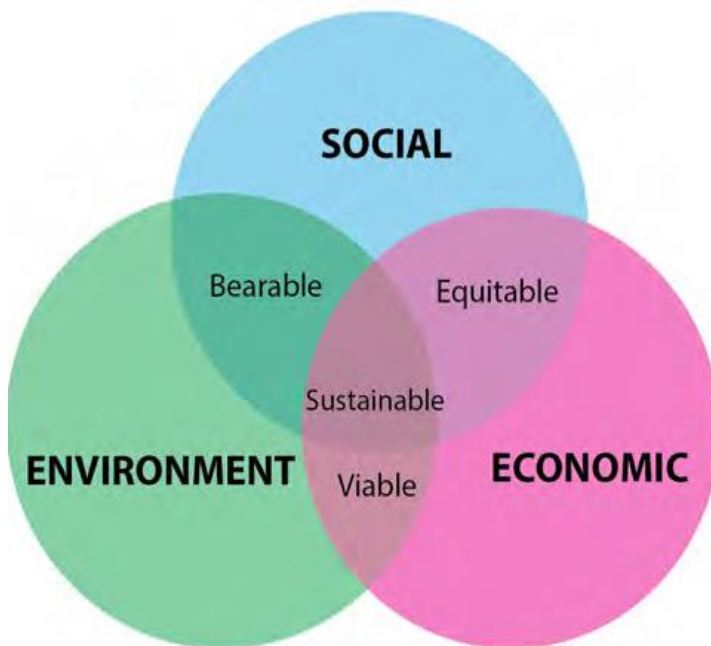


Figure 3.3: Three dimensions of sustainable development

Source: Department of Environmental Affairs (DEA), 2012

3.2.4 A shifting model for sustainable development

The *2005 Millennium Ecosystem Assessment* report suggested that the three dimensions and their relationship should be re-evaluated (Steiner, 2008). The three-pillar model has some significant shortcomings; for example, it does not relate to the urban environment and its infrastructure nor does it account for political agency and institutional processes, both of which are critical drivers of sustainable development (Allen, 2001). It also does not acknowledge the effect that cultural and spatial dimensions have on intergenerational justice (Seghezso, 2009).

Another two dimensions therefore need to be considered: the sustainability of spatial development and governance.

3.2.4.1 Spatial development sustainability

This dimension encompasses the enhancement of infrastructure for current development, without limiting infrastructure development in the future, and it covers the need for infrastructure in local economic development (Allen, 2009). It therefore integrates existing and new information about the built environment as a fundamental building block for achieving sustainability (Glaser & Bates, 2011). And it refers to the need to develop urban spaces without damaging the regional environment (Allen, 2011).

3.2.4.2 Governance sustainability

The governance dimension covers the areas of transparency, participation, accountability and multi-actor and multi-level decision-making in the development process (Huge, 2010). It focuses on the quality of the governance system and the coordination of the four other dimensions (Allen, 2001; Allen, 2009). Institutional capacity and capability fall into this dimension because strong institutions are key to improving human wellbeing (Huge, 2010). It encompasses democratisation and participation of stakeholders in all areas of decision making, and touches on inclusive decision-making processes for resource allocation, specifically in defence of the poor and socially excluded (Allen, 2001).

Figure 3.4 below illustrates how the five dimensions work together.

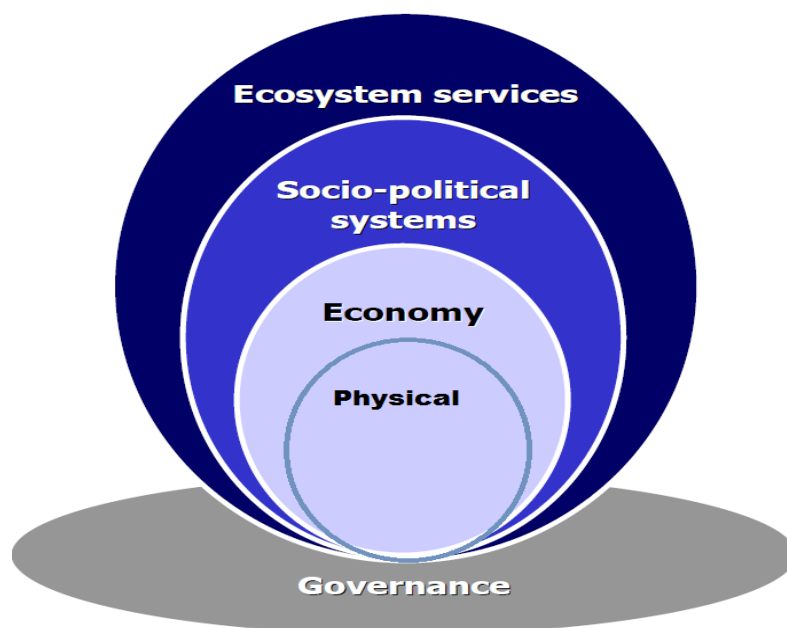


Figure 3.4: A five dimensional sustainable development model

Source: Department of Environmental Affairs and Tourism, 2008

3.2.5 Integrating the economic and environmental dimensions

The most ignored relationship to date has been that between the model of economic growth and the environment. This section explores literature related to these aspects and their interaction.

3.2.5.1 Natural resources and growth

Adam Smith and David Ricardo provided a theoretical foundation that established the elements of production as land, labour and capital as inputs to economic growth and subsequently development (Todaro & Smith, 2003; Common & Stagl, 2005). Any environmental contribution to growth, measured as gross domestic product (GDP), is counted as a benefit and any environmental detraction is counted as a cost.

Individual natural resources, such as water and fossil fuels (converted to energy), used to stimulate growth are viewed as inputs (Environment Monitoring Group [EMG], 1992).

In the 1800s, Marx noted that labour and capital were key factors of production and were competing factors for growth stimulation in an era of industrialisation (Rogers *et al.*, 2008). In the 1900s Keynes emphasised the key element as labour, not only as a production factor but also one to be considered before and after the production process (Rogers *et al.*, 2008). He considered consumer spending and welfare of labour as essential to boost consumer demand for produced goods (Todaro & Smith, 2003; Common & Stagl, 2005). Natural resources were not considered as key factors because of their relative abundance and seemingly unlimited nature. They were therefore not put on the developmental agenda (Rogers *et al.*, 2008). This shifted in the 1950s following World War II with the birth of environmental activism, which promoted land as an important factor of production (Cavagnaro & Curiel, 2012). From that point on, the environment was increasingly included in economic models (Common & Stagl, 2005; Rogers *et al.*, 2008), although it was not given the same weight as other factors.

3.2.5.2 Limits to growth

Economic theorists, politicians and business have operated as if there are no limits to growth and with little understanding of the Earth as a living body comprising complex systems that work with each other to support sustainable functioning.

The *2005 Millennium Ecosystem Assessment Report* revealed that humans had significantly impacted on ecosystems over the previous half century resulting in the degradation of about 60 percent of ecosystem functioning. These ecosystems provide people with food, water, fibre and medicines, as well as supporting climate regulation (Millennium Ecosystem Report, 2005). Concerns about ecosystem health grew following the publication of this report and economists began to explore the possibility of providing an economic value to ecosystem services, as well as incentives for their conservation (United Nations Department of Economic and Social Affairs [UNDoESA], 2008).

There is an urgent need to integrate environmental and economic sustainability. The contribution of natural resources to economic growth is significant; it is effectively a primary tool to stimulate economic growth. But it is only considered as a factor of production, an input to the production of goods and processes (Cavagnaro & Curiel 2012) with no regard for the finite nature of some resources or the time needed for other renewable resources to regenerate (Djoghla, 2008). The economy is affected by any reduction in the quality and quantity of renewable and non-renewable resources (WCED, 1987).

Human wellbeing is directly reliant on healthy ecosystem services (Millennium Ecosystem Assessment, 2005). With this in mind and noting the WCED definition of sustainable development, it seems clear that current and future development should not compromise or limit ecosystems' ability to provide services that support people in meeting their needs and/or aspirations now, or in the future (Masundire, 2008).

These two dimensions are also affected by social and political factors, such as population growth, gender inequality and cultural values (WCED, 1987; Masundire, 2008). Unequal access to and control of land and other natural resources shapes the distribution of power and influences politics (Masundire, 2008), hence, the need for governance. Governance of the environmental dimension, however, is mostly undertaken by institutions, such as government departments, not directly involved in the degradation or decisions that might lead to degradation (Ayre & Callway, 2005). Management therefore tends to be reactive rather than proactive and does not consider ecological, economic and social dimensions simultaneously in decision making (WCED, 1987). Ayre and Callway (2005) note that governance for sustainable development needs both vertical and horizontal mechanisms to prevent institutions working in sectoral silos.

3.2.6 A dilemma for developing countries

Developing countries have been slow to integrate the environmental dimension of sustainable development into policy and planning. There is an assumption that focusing on the environmental dimension will hinder economic growth and thus economic development (EMG, 1992), which is seen as a priority for developing countries.

Developing countries' economies are often directly linked to and mostly dependent on the exploitation of non-renewable resources (Cavagnaro & Curiel, 2012). Consequently, they find it challenging to find development paths that drive economic growth while using fewer natural resources or using these resources less intensely (Cavagnaro & Curiel, 2012).

The environmental and economic dimensions are sometimes viewed as being in opposition, where a benefit in the one system is viewed as a cost in the other (WCED, 1987). This is not always true, however, because a failing of ecosystem health (due to natural disasters, degradation and climate change, for example) has direct social and economic impacts through food shortages, rapid urbanisation patterns and migration, among others (UNDoESA, 2008). Countries that are highly reliant on natural resource bases, such as South Africa, need to shift their focus to using other resources and services to substitute for non-renewable resources (EMG, 1992). Swilling and Annecke (2012) propose the need to restructure the economy to achieve non-material economic growth because of the unsustainability of current development that couples wellbeing with material economic growth.

There is a need to build resource-efficient, low-carbon and zero-waste economics that are also equitable and that improve the welfare of people (Swilling & Annecke, 2012).

Table 3.1 illustrates the themes drawn from the conceptual review of literature related to sustainable development, and the associated codes.

Table 3.1: Sustainable development: themes and codes identified

Themes	Codes
Social	social justice, equity, inclusiveness, culture recognition, fair access and distribution of resources, reducing poverty, promoting human rights
Economic	promote economic growth, efficient use of natural resource, impact of the production cycle, local economies' ability to sustain themselves, increase in the productivity of local economic growth, development, productivity
Environmental	conservation, ecosystem integrity, natural sustainability
Physical	infrastructure development, infrastructure in supporting local economic development
Governance	transparency, participation, accountability, coordination, strong institutions, inclusive decision-making processes

3.3 The reality: poverty, inequality and environmental degradation

3.3.1 Poverty

Poverty can be defined as the lack of basic needs, such as food, shelter, health and education; the lack of sufficient resources to accommodate daily needs; or the lack of opportunities for survival and employment (Alcock, 2006). It can also be understood as a sense of powerlessness, a lack of knowledge, and social exclusion, which can be caused by poor health or education, gender discrimination, an unfair tax system or labour practices, and limited or no access to productive resources such as land (UNDoESA, 2009; Amone, 2015).

Poverty is about far more than income; it extends to a lack of human capital, physical assets, autonomy and dignity (Walker & Park, 1999). Poverty is clearly a multidimensional concept expressed in varied ways that speaks to social exclusion, deprivation and vulnerability.

Income poverty, as part of economic poverty, refers to the lack of income and resultant inability to spend on consumables. Income poverty can result from unemployment that is interconnected with deprivation and social exclusion (Walker & Park, 1999). Additionally, people deprived of access to education often earn low incomes, which can result in their inability to participate in economic and social activities (Haron, 2014), and thus their exclusion.

Deprivation encompasses the number and type of a person's possessions and commodities as well as their ability to participate in different social activities with what they have (Haron, 2014). It is the lack of material, services and amenities, including items such as clothing and recreational and social opportunities (Oppenheim, 1999). Deprivation can result from vulnerability, which is a poverty factor. People can also move in and out of poverty due to changes in their circumstances. Deprivation can be addressed by ensuring an adequate minimum standard of living as regards income and amenities (Oppenheim, 1999; Haron, 2014).

Poverty also emerges as exclusion from participation in key activities, such as consumption, production, political engagement and social interaction (Alcock, 2006). This can be in the form of economic and/or social exclusion. Economic exclusion refers to the inability to access income from employment and an inability to satisfy basic needs such as shelter, education, food and social exclusion refers to the inability to participate in social, political and economic activities (Bhalla & Lapeyre, 2004). Any analysis of poverty must therefore consider more than just income (UNDoESA, 2009).

3.3.1.1 Poverty measurements

The most common form of poverty measurement is the "poverty line", which is a monetary measurement of individual economic welfare. It accounts for expenditure on all goods and services that meet basic needs. People are said to be poor if their expenditure falls below this line (Pradhan & Ravallion, 2000). South Africa uses three different poverty lines. The food poverty line of R547 refers to the minimum amount a person would need to spend on food a month to gain the energy needed to function on a daily level – this is also called the extreme poverty line (Stats SA, 2018). The second measure is the lower-bound poverty line of R785 a month, which would provide for the minimum food and non-food purchases and the third is the upper-bound poverty line of R1 183 a month, which provides for basic necessities (Stats SA, 2018).

There are several issues with this monetary measure of poverty. It focuses only on the monetary dimension of poverty and does not look at social exclusion or deprivation, including levels of malnutrition (UNDoESA, 2009). It also does not consider differences according to geographical location. For example, those living below the line in one country can be counted as above the line in another, and it doesn't account for differences in time periods; for example, a person's status as per the poverty line might shift during a recession (Ravallion, 2012). It does not account for differences in household size and composition because it measures per capita income (Ravallion, 2012). As a result, there could be an over-estimate in regions with bigger household sizes and an under-estimate in regions with smaller ones (Ravallion, 2012).

Essentially, the poverty line measure does not illustrate poverty from the perspective of exclusion and marginalisation; it ignores the socio-political elements that form the foundation for reproducing poverty (Pradhan & Ravallion, 2000; UNDoESA, 2009; Ravallion, 2012).

Because of these shortcomings, alternative poverty measurements have been developed. These include the basic needs method that looks at the level and type of household food expenditure (Klasen, 2014) and the Human Development Index that illustrates capability deprivation, including skills levels, physical ability and levels of self-esteem (rooted in the Sens capability approach) (UNDoESA, 2009).

3.3.1.2 Policies to combat poverty

Measures to combat poverty range from social security policies to area-based programmes and advocacy groups calling for change. Many countries use social security and assistance to mitigate deprivation, vulnerability and overall poverty. Social security measures include cash transfers from government to identified groups, including the disabled and elderly (Ravallion, 2012). For these to be effective, they need to be well-designed, sustainable in the long term and include accountability measures, such as oversight of officials (Kanbur, 2008).

The multi-dimensional nature of poverty requires a range of poverty-reduction strategies (Alcock, 2006). Advocacy groups typically consist of representatives of the poor fighting for better conditions and services (Pradhan & Ravallion, 2000). Area-based programmes focus on the most poverty-stricken locations (Ravallion, 2012).

Education plays a key role because it can provide the skills necessary to gain employment and thus participate in society (Glennerster, 1998). This is particularly important when industries are demanding skilled labour as a result of technological changes with requisite higher basic skills needs in mathematics and literacy (Glennerster, 1998; Kakwani & Silber, 2008). In addition, the quality of teachers and facilities – especially at the preschool level – and the involvement of the family in children’s education are important elements in uprooting poverty (Glennerster, 1998).

3.3.2 Income inequality

Income refers to the flow of money to households or individuals through government transfers or from wages from labour, payment for goods and services and returns on investments through dividends, interest or rents (Keeley, 2015). Income inequality then refers to the gap in income between the very wealthy and the balance of the population (Piketty, 2014; Keeley, 2015). Debates on income inequality tend to focus on wage inequalities within labour pools because wages contribute significantly to household income (Piketty, 2014).

Both historic and new factors resulting from modernisation cause income inequality. Historic factors involve distorted land ownership patterns, uneven investment in human capital, unequal agrarian structures and the rural-urban bias (Cornia, 2004). Unequal patterns of land ownership and access lead to unequal levels of agricultural and non-agricultural productivity, and thus unequal income levels (Carter, 2004). If people are unable to access educational opportunities, they are often unable to access decent work resulting in lower levels of income (Checchi, 2014). And if public spending is directed more towards urban social and economic infrastructure than rural, there is inequality of opportunity in the rural areas with resultant income inequality (Keeley, 2015).

Modern factors driving income inequality are globalisation and liberalisation. Globalisation, which resulted from the liberalisation of financial markets among other things, made it easy to move capital to more price-competitive locations, and thus receive higher returns from capital (Cornia, 2004), contributing to growing income inequality because this favours capital owners more than labour (Dabla-Norris, Kochhar, Suphaphiphat, Ricka & Tsounta, 2015). This results in returns on non-wage incomes (including dividends, shares and rents) being higher than wage incomes and a deepening of the divide (Stiglitz, 2012). Consequently, globalisation has effectively grown the gap between non-wage and wage income (Cornia, 2004).

Liberalisation of the labour market led to a decline in unionisation and an increase in labour flexibility (Cornia, 2004). This supported fewer regulations on minimum wages thus those with financial power tended to continue receiving high salaries, while those without earned less contributing to an increasing wage gap (Dabla-Norris *et al.*, 2015).

There is also a global trend to pay top executives with stocks and shares providing them with wage and non-wage incomes widening the divide between themselves and wage earners even more (Stiglitz, 2012). The more that top earners have this access to wealth through stocks and shares, the easier it is for them to access funds from the financial sector (Keeley, 2015) and exploit financial opportunities to generate more wealth (Dabla-Norris *et al.*, 2015).

Both modern and historical factors therefore contribute significantly to inequality and must be addressed concurrently.

3.3.2.1 Effects of income equality

High levels of income inequality negatively impact development as lower-level income groups do not have access to the same opportunities and outcomes as high-income earners and so cannot reach their full potential (Stiglitz, 2012; Dabla-Norris *et al.*, 2015). It entrenches the cycle of exclusion and undermines intergenerational progress (OECD, 2015b).

When productive assets are held in the hands of a minority, economic empowerment tends to occur in concentrated areas bypassing those who do not have access to economic assets, including groups such as the unskilled and small business owners (Cornia, 2004). It can also discourage investment because it can generate political and social instability resulting from low levels of social cohesion because of wide differences in the standard of living between societal groups (Dabla-Norris *et al.*, 2015). High levels of income inequality in a country typically indicate that financial power – and hence political power – is held by a minority (Stiglitz, 2012). This can result in policies being passed that do not favour the poor and which can hamper long-term growth (Stiglitz, 2012; Dabla-Norris *et al.*, 2015).

3.3.2.2 Policies to combat income inequality

Policy options that focus on reducing income inequality range from social to economic approaches. Social policies tend to emphasise aspects such as land reform and investment in and promotion of equal access to education across income groups (Stiglitz, 2012; Dabla-Norris *et al.*, 2015). The quality of education from pre-school to tertiary levels (Keeley, 2015) also needs to be the same for everyone to reduce disparities in the demand and supply of skills sets and innovation (Carter, 2004). Training and retraining of the labour force to mitigate the effects of globalisation can support workers in keeping up with technological advances (Singh & Dhumale, 2004). Land reform to address the uneven distribution of land ownership can help to equalise human capital investment and agricultural production and incomes (Carter, 2004).

Economic policies tend to focus on public spending and taxation to ensure redistribution of wealth. Expenditure is redirected to education and health with conditional grants given for specific activities and initiatives, and taxes imposed on wealth and property (Dabla-Norris *et al.*, 2015) to generate the necessary revenue; this can help close the gap between the rich and the poor (Stiglitz, 2014). Policies focused on providing financial services to marginalised or low-income groups can help reduce inequalities as can labour market policies that mandate minimum wages and non-discriminatory labour practices (Dabla-Norris *et al.*, 2015).

3.3.3 Environmental degradation

The natural environment, encompassing an extensive range of interconnected ecosystems, provides us with provisioning services such as food, fibre, water and medicines; regulating services including the regulation of climate, pests and diseases and preserving air quality; and supporting services such as soil formation and nutrient cycling (Common & Stagl, 2005). It also provides us with recreational and cultural services (Swilling & Annecke, 2012) and has spiritual or religious meaning for humans.

The United Nation's *2000 Millennium Eco-system Assessment* indicated that humans had in the previous 50 years altered the environment more rapidly than ever before to satisfy the demand for fuel, timber, food and freshwater. The environment has paid a significant cost in terms of degradation, resource depletion and biodiversity loss to support human wellbeing (Ekins, 2015) and the disregard for ecosystem health is now impacting on social systems through climate change and soil degradation (Common & Stagl, 2005). It is likely that this degradation will continue to deepen and hinder the world in meeting its developmental goals.

3.3.3.1 Biodiversity

Biological diversity (biodiversity) means the variability within and between living organisms from all sources including land-based, marine and other aquatic ecosystems, and the ecological complexes of which they are part (UN, 1992). Biodiversity plays a key role in ensuring we have a diversity of food, and are able to breed new food crops and develop medicines from wild species (Mother Nature Network, 2016). It also enhances the resilience of the ecosystems that provide us with clean air and water and arable soils (Mother Nature Network, 2016). Biodiversity is therefore a key element of human wellbeing and economic growth. It is being lost on the global scale, and in some areas at an accelerated rate. This loss is driven by pollution, changes in land-use and land management, deforestation and climate change (Kanianska, 2017).

3.3.3.2 Depletion of natural resources

Natural resources include fossil and mineral natural resources, materials from the natural environment, arable lands and ecosystems (Common & Stagl, 2005; Kanianska, 2017). Natural resources are used in production and provide people with amenity services (the beach, dams, mountains and wilderness) and basic life support services, such as clean air and water (Common & Stagl, 2005). Natural resources face mounting pressure from rapid population growth, economic development, biodiversity loss, pollution and climate change (Kanianska, 2017). They need to be managed efficiently, but natural resources are often undervalued and mismanaged, which impacts the economy and human wellbeing (Kanianska, 2017). Ecosystem management can help to retain the balance between economic growth, societal development and ecosystem health to ensure long-term sustainability (Kanianska, 2017).

3.3.3.3 Climate change

The term climate change refers to long-term shifts in the composition of gases in the global atmosphere (UN, 1992), and the resultant effects on the global climate system. The current shift is driven by human activities (UN, 1992) that are releasing growing volumes of greenhouse gases, including carbon dioxide, methane and nitrous oxide (Common & Stagl, 2005).

The concentration of these gases in the atmosphere is warming the planet, resulting in sea level rise, reduced volumes of ice and snow and more frequent and severe extreme weather events, among other impacts (Common & Stagl, 2005). Continued emissions to support economic and population growth will drive further warming trends and result in long-lasting changes in all components of the climate system (Common & Stagl, 2005). Climate change is a significant concern because it threatens to destabilise economic development, significantly impact the natural environment and disturb the welfare of society (Costantini & Monni, 2008).

There are two primary approaches to dealing with climate change and its impacts. The first is mitigation to reduce the volumes of greenhouse gases being emitted and the second is adaptation to support communities in weathering the now unavoidable consequences of climate change (Common & Stagl, 2005). A range of policy tools have been created to support mitigation and adaptation efforts, including strategies to shift consumption and production patterns for mitigation (Kanianska, 2017) and insurance products, protective infrastructure, disaster warning and response systems, and agricultural and water management techniques for adaptation (OECD, 2013b).

3.3.3.4 Unsustainable consumption and production patterns

The way that we produce and consume goods is contributing to many of today's environmental problems. There are knock-on effects on society, the economy and business. We must use natural resources and energy more efficiently and reduce greenhouse gas emissions and other environmental impacts. We must do this while improving the quality of life for billions of people and ensuring that there are sufficient resources left for future generations.

This means changing the way that we produce and consume, and the way in which we dispose of goods. We need to focus on water and energy efficiency, leaner and cleaner production methods and smarter consumption (Swilling & Annecke, 2012). It is critical to extend the reach of public information and education campaigns to raise awareness at the household level of the cost of unsustainable production and consumption, and to grow awareness of climate change (Swilling & Annecke, 2012; OECD, 2013b; Kanianska, 2017).

Table 3.2 indicates the themes and codes drawn from the review of literature focused on poverty, inequality and environmental degradation.

Table 3.2: Triple challenges: identified themes and codes

Themes	Codes
Poverty	powerlessness, lack of knowledge and social exclusion, limited access to productive resources, gender discrimination, unfair tax system and labour practices, deprivation and vulnerability, lack of income, inability to spend on consumables, exclusion, deprivation, vulnerability and exclusion
Inequality	wage inequality, inequality of opportunity, inequality of outcome, concentrated political power
Environmental degradation	climate change, extreme weather, climate conditions, greenhouse gas emissions, climate change mitigation, adaption to climate change, biodiversity loss, pollution, mitigating pollution, ecosystem management, ecosystem health, unsustainable consumption and production patterns, energy efficiency, use and dispose of products and services, water efficiency, better products, smarter consumption, leaner and cleaner production

3.4 Different economic growth paths: possible solutions

Economic growth is associated with the progress of a country towards a defined goal of economic prosperity that supports human wellbeing (Costanza, Hart, Talberth & Posner, 2009). The conventional growth path has been critiqued for its inability to do this, leading to the emergence of alternative paths. This section explores the conventional economic growth path and known alternatives.

3.4.1 Conventional economic growth path

Conventional economic theory assumes that development is a result of economic transformation (Costanza *et al.*, 2009), modernisation and technological progress (Todaro & Smith, 2003) and that created wealth will trickle down to benefit a broad spectrum of society (Kakwani, Khandker & Son, 2004). Theories such as those of Rostow, Harrod-Domar and Lewis support this notion (Todaro & Smith, 2009). Some theories view economic growth as a linear process from a primary sector-based economy through industrialisation to a service-based model, while others view economic growth as a structural shift from a traditional society to a modernised, urban one (Todaro & Smith, 2009). Some view international relations – richer countries supporting poorer ones to achieve economic growth – as a key lever for growth (Todaro & Smith, 2009). The dominant economic growth path has failed to yield the expected results leading to “new growth” theories such as Keynesian theory that advocates for state intervention and industrialisation (Fukuda-Parr, 2011).

There are two primary critiques of this approach.

3.4.1.1 GDP: an inadequate measure of growth

Economic growth is traditionally measured using the standard of GDP, which is the sum of goods and services produced within a country within a specific timeframe, normally a year. There is an increasing understanding that using GDP as a measure of the standard of living is inadequate and that economic growth rates cannot be used as the sole standard for understanding wellbeing (D'Acci, 2011; Széll, 2011; Fioramonti, 2015) or environmental welfare (Costanza *et al.*, 2009; Bleys, 2011).

GDP remains a measure of economic quantity not quality, accounting only for monetary transactions, which are not a complete representation of human productivity within the social and environmental system (Costanza *et al.*, 2009). It does not account for charitable work or non-economic activity such as parenting, housework and unpaid voluntary activities. GDP as a measure effectively ignores the element of human community and its existence within and interaction with natural ecosystems (Costanza *et al.*, 2009; Moore and Schmidt, 2013). GDP is also not an adequate measure of environmental wellbeing because it does not include the environmental costs associated with the generation of wealth from non-renewable resources (Moore & Schmidt, 2013). This leads to the devaluing of environmental services and contribution encouraging their further degradation in the name of economic progress (Costanza *et al.*, 2009). A clear example is pollution caused by economic activities that directly affect the wellbeing of people, and ultimately economic performance (Fioramonti, 2015).

It also does not consider or mitigate the income and wealth inequality within a country that translates into opportunity inequalities (Moore & Schmidt, 2013). The concentration of wealth in the hands of a few does not generate social and economic benefits to all in society.

A highly unequal society becomes unproductive as the workforce declines and social and political frustrations grow leading to lower investment levels (Costanza *et al.*, 2009).

3.4.1.2 The fallacy of trickle-down growth

The trickle-down theory posits that when the wealthy benefit from economic growth, they will invest further in productive activities creating employment opportunities for the poor spreading the benefits of growth to the less fortunate (Stiglitz, 2012). In this way the benefits of economic growth will ultimately address the challenges of poverty and inequality in society (Stiglitz, 2012) – the wealthy would receive profits and the poor would receive salaries and wages, the wealthy would own property and receive rent and the poor would receive housing (Kakwani & Pernia, 2000). This approach dominated thinking about economic development in the 1950s and 1960s.

There are, however, countries with high growth rates and high levels of income inequality; in other words, the economic benefits received by the wealthy are not necessarily reinvested into the real economy (production of goods and services), thus blocking the ability of wealth to trickle down (Stiglitz, 2012). Economic growth based on the trickle-down theory does not necessarily address social inequality or the long-term effects of poverty (Kakwani & Pernia, 2000) because growth on its own does not address inequality (Stiglitz, 2012). If the process increases inequality then the benefits are necessarily restricted to the few (Kakwani & Pernia, 2000).

3.4.2 Pro-poor economic growth path

Pro-poor growth was seen as a decided departure from the notion of trickle-down development (Ranieri & Ramos, 2013b) and became popular in the 1990s following the World Bank's *World Development Report's* emphasis on its importance as a principle development goal to reduce poverty (Kakwani & Pernia, 2000).

There are two approaches to pro-poor growth. The first emphasises the change in incomes of the poor, particularly those below the poverty line (Klasen, 2010). The incomes of this group should grow much faster than any other group and their standard of living should show measurable improvement against standard poverty measures (Anand, Mishra & Peiris, 2013). The second approach takes a broader view defining pro-poor growth as that growth able to absorb labour from the labour market using policies and programmes that create employment and that generate income for the poor, women and other traditionally excluded groups (Kakwani & Pernia, 2000). It can also be understood as growth that benefits the poor giving them opportunities to improve their economic situation or standard of living or through welfare programmes (Kakwani, 2003).

According to Harmáček, Syrovátka and Dušková (2017), pro-poor growth broadly speaks about the effects of growth on poor people in a society, which aligns to Amar and Zghidi's (2016) definition of pro-poor growth as growth interested in the welfare of the poor.

3.4.2.1 Pro-poor growth, poverty and inequality

Poverty, as noted previously, is a multidimensional issue, therefore policies that promote pro-poor growth range from social spending programmes to the promotion of labour-intensive sectors and direct programmes that aim to increase the incomes of the poor. Macroeconomic policies are used to promote labour-intensive industries or to grow industrial activity in rural areas or areas in which the poor live (Kakwani & Pernia, 2000; Kakwani *et al.*, 2004). This is viewed as a key poverty-reducing mechanism, particularly in the rural areas where agriculture is typically the primary economic activity (Ravallion, 2012).

Primary and secondary sector growth reduce poverty, while tertiary sector growth has minimal effect, hence both the sectoral composition of growth as well as its geographical composition are important (Kakwani & Silber, 2008; Ravallion, 2012). Policies promoting primary sector agricultural growth should therefore also focus on developing non-farm growth in manufacturing and services coupled with human resource development to ensure that the poor are able to use the opportunities granted to benefit from interventions (Kakwani *et al.*, 2004; Ravallion, 2012). Social spending is viewed as a key component of pro-poor growth, including spending on known factors to reduce poverty, such as basic education, including subsidies, and health (Ravallion, 2012), including family planning services (Kakwani & Pernia, 2000). Pro-poor growth tends to be more focused on the outcomes of growth and the impact on the poor; it does not, however, explore the creation process that leads to growth (Fourie, 2014) and therefore might not support inclusivity or address existing inequalities (Dash, 2015). It also does not address environmental degradation, which is a significant challenge in the South African context.

3.4.3 Inclusive growth path

Income inequalities are growing in most countries, including high-income countries (OECD, 2015b). The increasing interest in inclusive growth is a response to this trend and the realisation that growth processes affect racial and gender groups and people living in different geographic locations in different ways (Ranieri & Ramos, 2013a). It is clear that how people engage in the growth process is as important as the outcomes of the process (Ranieri & Ramos, 2013b).

This section aims to define inclusive growth, identify its determinants and measures, as well as describe the policy interventions necessary to achieve it.

3.4.3.1 Defining inclusive growth

Inclusive growth focuses on the impact of both the processes and outcomes of growth creation on inequality and poverty (Ranieri & Ramos, 2013a). The process element focuses on participation in decision making and the production of goods and services (Fourie, 2014). The outcomes element focuses on benefit sharing aligned with development aspects (Chang, 2014). These development aspects are measured through changes in poverty and inequality levels. Inclusive growth definitions can therefore be grouped in “process-outcome” and “poverty and inequality” definitions. These are discussed further below.

3.4.3.1.1 Participation in process and sharing in outcomes

Inclusive growth encourages a process that allows people to actively participate in the growth-generating process by expanding the opportunities for participation, including in decision making (Ranieri & Ramos, 2013a).

All members of society must be able to contribute to the growth process on an equal basis regardless of their individual circumstances (Ali & Zhuang, 2007; Fourie, 2014; Chang, 2014). This growth path aims to support social justice and equitable development (Pal, 2014).

It also focuses on the sharing of the benefits of growth resulting in increased incomes (de Mello & Dutz, 2012; Aoyagi & Ganelli, 2015) or other non-income benefits, such as human capital development (Fourie, 2014; Pal, 2014). Inclusive growth can therefore also be characterised as broad-based growth that includes non-discriminatory participation (Klasen, 2010; Pal, 2014) and as shared growth because it emphasises the participation of people in the production cycle through employment (Fourie, 2014).

The two elements of participation in the process and sharing of the benefits should be intertwined because if there is participation without sharing the resultant growth will be unjust and if there is sharing without participation, the result is welfare growth (Fourie, 2014).

3.4.3.1.2 Focus on reducing poverty and inequality

Inclusive growth is automatically pro-poor growth because it aims to reduce poverty and will benefit groups that are disadvantaged (Ranieri & Ramos, 2013a; Chang, 2014; Aoyagi & Ganelli, 2015; Dash, 2015). It can be understood as disadvantage-reducing growth (Klasen, 2010; Aoyagi & Ganelli, 2015) with an emphasis on reducing existing disadvantages at racial, gender and income levels (Klasen, 2010), and doing so over time (Fourie, 2014). But it is distinct from pro-poor growth in that it focuses on everyone in society, including the labour force and the middle class (Amar & Zghidi, 2018), as well as the wealthy (Ranieri & Ramos, 2013a).

This approach emphasises the creation of productive employment opportunities (Alexander, 2015) that are accessible to all (Ali & Zhuang, 2007) over redistribution. While redistribution schemes, such as government social transfers, can increase incomes, they do so only in the short term and not necessarily in an inclusive manner (Chang, 2014). Redistribution is therefore only used to address extreme poverty by providing social safety nets (Ali & Zhuang, 2007) while the goal remains long-term poverty alleviation by enabling people to participate in the creation of wealth and jobs, and to benefit from economic growth (Astone, 2015). Inclusive growth can be pro-poor to differing degrees depending on how it is implemented (Dash, 2015). The focus is on measuring whether this growth path has reduced absolute poverty (the number of people below the poverty line) or relative poverty (improvements in the incomes of the poor relative to the non-poor over time) (Fourie, 2014).

3.4.3.2 Drivers and principles of inclusive growth

3.4.3.2.1 High sustained pace and pattern of economic growth

The pace and pattern of growth is important for this approach because this determines the level of job creation and economic opportunities achieved (Asian Development Bank, 2011). A rapid pace of growth facilitates poverty reduction and a broad-based pattern that reaches a large part of the labour force reduces inequality (Braga, Chandra, Favaro, Gnanasamba, Hagan, Hernandez, Ley, Lui *et al.*, 2009) extending the benefits of growth across different segments of society (Lanchovichina & Lundström, 2009). Economic growth should therefore result from balanced productivity across sectors, and be balanced in terms of sectors, skill levels, race, gender, regions and class (de Mello & Dutz, 2012). Growth must create productive job opportunities that can absorb significant percentages of labour into decent jobs (Asian Development Bank, 2011).

3.4.3.2.2 Productive employment

Productive employment is the primary instrument of sustainable and inclusive growth. Productive employment, based on employment and productive growth, occurs when an individual is able to make full use of the resources available to them as the economy changes over time (Braga *et al.*, 2009). Productive employment encompasses both employment growth that generates new jobs and new income-generating activities and productive growth that increases incomes for those employed and revenues and profits for those self-employed or owning businesses (Lanchovichina & Lundström, 2009). High levels of growth are needed to create productive and decent employment opportunities (Ali & Zhuang, 2007; Ranieri & Ramos, 2013a), but these opportunities must align with the available skill sets in the country to avoid cross-sectoral imbalances (Pal, 2014).

The inclusive growth analysis framework emphasises investments in productive resources and individual capacity building, as well as the creation of new opportunities for productive employment on the labour demand side (Braga *et al.*, 2009). This can be done through investments in education and health infrastructure and removing the bottlenecks that prevent the creation of job opportunities or hinder opportunities for self-employment (Ali & Zhuang, 2007; Ranieri & Ramos, 2013a). It requires a broader than usual analysis of employment by sector, size of company, urban-rural location and nature of business – formal or informal (Lanchovichina & Lundström, 2009).

3.4.2.3.3 Equality of opportunity

The third principle of inclusive growth is equality of opportunity (Bhalla, 2011; Alexander, 2015), which arises when people with the same abilities have equal opportunities to succeed regardless of their social or economic circumstances (Sørensen, 2006).

Inequality of opportunity can arise from factors such as gender, family background, ethnicity and birthplace (Riva, 2015). It can also arise from factors beyond an individual's control, such as parental occupation and education, religion, gender and race (Singh, 2010). These are all distinct from inequalities due to a difference in efforts for which the individual is responsible. Inequalities due to the aforementioned factors can reflect social exclusion derived from the weaknesses of existing systems of property and civil rights, and thus need to be addressed through public policy interventions (Ali & Zhuang, 2007; Singh, 2010).

These interventions address a range of inequalities. Inequality between families can result from income, wage or wealth inequalities (Sørensen, 2006). This translates, for example, into a variance of economic resources available for investment in the length and quality of children's education, which determines their future earnings and can entrench future inequalities (Sørensen, 2006). Governments can establish policies to ensure equal access to education of equal quality thus ensuring that children have an equal start in life (Sørensen, 2006) and they can invest in ensuring access to clean water and sanitation and providing social safety nets to prevent extreme deprivation (Ali & Zhuang, 2007).

If these interventions resulted in full equality of opportunities, there would only be inequalities in outcomes from a difference in efforts; these could be viewed as "good inequalities" and they are inherent in any growth process (Ali & Zhuang, 2007). It must be noted, however, that public policy cannot shape family culture, which also impacts how a child uses her/his ability and approaches opportunities in life (Sørensen, 2006).

3.4.2.3.4 Income and non-income factors

Inclusive growth outcomes encompass both income and non-income parameters (Dash, 2015), such as access to education and health services (OECD, 2015b). Other parameters include access to infrastructure and electricity, which can open up opportunities for production and hence growth (Dash, 2015). Participation in growth decision-making processes can support the reduction of gender inequalities, which can play a significant role in reducing poverty (Dash, 2015).

The section below explores tools that measure the inclusiveness of economic growth paths.

3.4.3.3 Measures of inclusivity

The Asian Development Bank developed the Framework of Inclusive Growth Indicators in 2011. This framework emphasises the combination of economic and social indicators to evaluate equality of opportunities and it includes governance as an indicator in recognition of the importance of accountable and effective institutions in supporting an inclusive growth path (Asian Development Bank, 2011).

The 35 indicators are grouped into five categories with income and non-income indicators for each. Examples of non-income indicators include mortality rates, percentage of paved roads, levels of corruption and prevalence of underweight and overweight people.

The second measure is McKinley's Inclusive Growth Index. This index is designed as a national level tool to assess inclusive growth by measuring the increase in growth that expands economic opportunities and the extent to which those opportunities and the benefits generated are shared (McKinley, 2010). It measures growth, productive employment and infrastructure development; income poverty, gender equity and overall equity; human capabilities; and social protection. Human capabilities are viewed as an enabler and social protection as a security net for the most vulnerable (McKinley, 2010). Some examples of indicators within this index are access to electricity and telecommunications, value added by each industry or sector, and share of employment in different industries (McKinley, 2010).

The third is an inclusive growth measure designed by Anand *et al.* for a 2013 International Monetary Fund working paper. This measure aims to integrate equality and growth as the drivers of inclusive growth (Anand *et al.*, 2013). It employs a social mobility curve to measure the rate of wealth or income transfer from the wealthy to the poor by capturing increased income and/or growth and the level of distribution (Anand *et al.*, 2013).

The fourth measure is the World Economic Forum's Inclusive Growth and Development Framework with seven pillars utilising a range of indicators. The seven pillars are education and skills; basic services and infrastructure; corruption and rents; financial intermediation of real economy investment; asset building and entrepreneurship; employment and labour compensation; and access to fiscal transfers, tax codes and social protection for equitable taxation systems. The key indicators in this measure are GDP and labour (GDP and development), income Gini, wealth Gini and poverty gap (inclusion), intergenerational equity and sustainability (dependency ratio, public debt, carbon intensity of GDP and net savings) (World Economic Forum, 2017).

All of the above inclusive growth measures include economic growth as a key factor along with improving human capabilities and investing in infrastructure. Three of the four emphasise employment except for Anand *et al.*'s (2013) social mobility curve.

There are several policy interventions needed to promote inclusive growth. The following section explores these across the categories of social, economic, infrastructure and governance.

3.4.3.4 Policy interventions for inclusive growth

3.4.3.4.1 *Economic policy interventions*

- **Entrepreneurial support.** Inclusive entrepreneurship exists when everyone can participate and succeed in business, regardless of their social or economic background. Inclusive entrepreneurship tends to focus on groups typically less represented in the business environment, such as youth, women, some ethnic groups, the disabled, unemployed and elderly (OECD & European Union, 2017). Policies should aim to raise awareness of entrepreneurship among these groups, as an alternative to productive employment and to encourage their participation. They should also address market barriers that hinder these groups' participation in entrepreneurship and their success, including those related to financial markets, education and skills, the ability to build networks and to amass social capital (OECE & European Union, 2017). Youth, in particular, need coaching and mentoring, as well as grants and loans to start and expand businesses (OECD/European Union, 2017). The World Economic Forum's Inclusive Growth and Development Framework emphasises that support must be balanced across low- and high-skilled sectors, as well as across capital- and labour-intensive sectors (de Mello & Dutz, 2012). There is also the need to support higher education institutions to provide a resource base and to trigger innovation in entrepreneurship (OECD, 2016a).
- **Structural transformation.** Structural transformation and broad-based growth is necessary for inclusive growth to occur (Braga *et al.*, 2009; Chang, 2014; Alexander, 2015). Sectors such as agriculture and manufacturing are key for boosting inclusive growth (Anand *et al.*, 2013; Aoyagi & Ganelli, 2015) as is a focus on small business and the informal sector (Chang, 2014). The goal is to increase productivity and create employment opportunities (OECD, 2015b). Structural transformation of the economy requires good governance and stability (Chang, 2014) to enact the necessary pro-competitive reforms (de Mello & Dutz, 2012). These reforms include enabling access to finance and telecommunication, services as well as investing in small-, micro- and medium-sized enterprises (SMMEs) to drive productivity and innovation (de Mello & Dutz, 2012).
- **Productive employment.** Inclusive growth needs to create productive employment (Alexander, 2015) to tackle unemployment through job creation and skills development (OECD, 2015a). These employment opportunities must, however, align with the available labour market supply to avoid creating sectoral imbalances and further deepening rural–urban disparities (Pal, 2014). They must also result in wage benefits or increases in wage benefits to reduce poverty (Chang, 2014). This requires job strategies (Chang, 2014) to stimulate demand for semi- and unskilled labour in the formal market and to grow levels of self-employment in the formal and informal economies (Fourie, 2014).

This will require a focus on training, investing in labour institutions and labour-intensive industries, as well as engendering healthy industrial relations (Chang, 2014). It is important to note that not all jobs contribute to growth, and that not all sectors are able to generate significant numbers of employment opportunities. Strategies must focus on those sectors and jobs that are likely to have better development outcomes (Chang, 2014).

- **Financial inclusion.** The financial inclusion of small firms, owners of small business, women and marginalised groups is important to realise inclusive growth (Pal, 2014) because it impacts on economic growth and income inequality (Cournède, Denk & Hoeller, 2015; Mohammed *et al.*, 2017). Financial inclusion is defined as an act of providing financial services to low-income and marginalised groups, including women and SMMEs (Rao, 2009; Pal, 2014; Mohammed *et al.*, 2017; Tita & Aziakpono, 2017). Such services should be available, affordable and accessible to everyone (Banaras Hindu University, 2011; Tita & Aziakpono, 2017). Exclusion factors include any hindrance to access, such as lack of knowledge of available services, costs, distances to institutions and the integrity of regulatory and institutional infrastructure (Mohammed *et al.*, 2017; Tita & Aziakpono, 2017). This access allows people to save and invest money, access credit and fully participate in economic activities (Tita & Aziakpono, 2017). Financial services that are important for inclusive growth also include those that promote financial literacy and provide credit counselling facilities (Banaras Hindu University, 2011).

Special attention must be paid to enabling access for women and the rural poor, who have historically been excluded from the financial system (Banaras Hindu University, 2011; Mohammed *et al.*, 2017). Microfinance plays an important role in unlocking opportunities for these groups (Rao, 2009). In India, for example, microfinance has helped many to establish and grow businesses, enabling them to access more economic opportunities (Banaras Hindu University, 2011). Financial inclusion is important because it shapes who can invest in human capital, business and other livelihood and income-generating activities and who cannot (Levine, 2011). It influences resource allocation, labour market dynamics and individual's economic opportunities. It must be noted though that ownership of a bank account does not on its own improve lives – access to credit is more important (Tita & Aziakpono, 2017).

- **Inclusive fiscal policy.** To encourage inclusivity, the tax system needs to generate more revenue from fixed items such as immovable property and from environment-related taxes (OECD, 2016a). Tax policies need to be progressive to avoid generating income in ways that disadvantage the poor (Chang, 2014).

The tax system must balance efficiency and equity; efficiency in that it must not hinder economic activity and equity by ensuring that people with equal income pay equal tax, and those with more income pay more tax (Bryson, Perret, Thomas & O'Reilly, 2016).

3.4.3.4.2 *Social inclusion policies*

- **Human capital investment.** Inclusive growth requires that we address education inequalities between race, gender and regions (Bhalla, 2011; Chang, 2014; Pal, 2014). An investment in education and skills development is likely to have the most significant welfare impact now, and in the future (Pal, 2014; Alexander, 2015) because it will empower the labour force to both contribute to and benefit from growth (Lanchovichina & Lundström, 2009). All people, particularly the poor, need to be equipped with the skills and provided with the opportunity to fulfil their productive potential (World Economic Forum, 2017). Education and training must focus on labour market needs (OECD, 2016a) and focus on reskilling and upskilling labour (Ali & Zhuang, 2007; Fleischer, Botiatizis, Asadai & Koeni, 2018). Special attention must be given to addressing gender inequality in educational access to generate growth characterised by equity, justice and inclusion (Committee of Feminist Economists, 2007). Gender inequality in education directly translates to gender inequality in employment (Mitra, Bang & Biswas, 2015). Inclusion should focus on growing the number of girls and women receiving education and also on growing the number of female teachers and the number of scholarships awarded to women (Committee of Feminist Economists, 2007).
- **Inclusive social protection.** Social protection is important for inclusive growth because it reduces poverty through direct transfers and redistribution (Chang, 2014) and, when properly designed, can also promote entrepreneurship (de Mello & Dutz, 2012; Chang, 2014). Policies should support an inclusive social protection system that is able to respond to individual and household needs and challenges in the labour market (de Mello & Dutz, 2012). This includes supporting micro-enterprises, artisans and the informal sector (Rao, 2009). Conditional cash transfer programmes in Brazil and Mexico are able to successfully respond at these levels (Aoyagi & Ganelli, 2015). Safety nets can act to mitigate the effects of external and transitory livelihood shocks, as well as meeting the needs of the chronically poor (Ali & Zhuang, 2007). These safety nets take the form of labour market policies and programmes acting to reduce the risks of un- and underemployment or low wages resulting from inappropriate skill levels or poorly functioning labour markets. They can also take the form of social insurance programmes designed to cushion the risks of ill health, disability, work-related injuries, and old age or are social assistance and welfare schemes or cash or in-kind transfers.

These are intended for the most vulnerable groups with no other means of adequate support, such as single-parent households, victims of natural disasters or civil conflicts, handicapped people, or the destitute poor (Ali & Zhuang, 2007; Asian Development Bank, 2011). Another form is child protection to ensure the healthy and productive development of children (Ali & Zhuang, 2007). The design of social protection systems is key to ensuring a basic level of income security as well as effective access to healthcare, which both help to redress inequalities, reduce or prevent poverty, raise labour productivity, empower people to engage in decent work, and promote inclusive growth (World Economic Forum, 2017). The social system also needs to act throughout the lifecycle from support from childbirth to services for the elderly (Fleischer *et al.*, 2018).

- **Spatial development inclusion.** Infrastructure is a key element for development and growth. Unequal investment in infrastructure in urban and rural areas results in skewed and ongoing spatial inequality (Pal, 2014; Suryanarayana, 2015; Berdegúe, Carriazo, Jara, Modrego & Soloaga, 2015). Policymakers should consider regional factors that hinder inclusivity such as deficiencies in infrastructure, budgeting allocations and the ownership and exploitation of natural resources (de Mello & Dutz, 2012). Rural and poor areas find it harder to secure infrastructure loans from private funders, banks and government (Rao, 2009) – this includes loans for infrastructure such as education and health services, as well as for agricultural infrastructure such as storage, preservation and transportation (Bhalla, 2007). Policies need to support investments that boost the interconnectedness of spaces (OECD, 2015b) and that promote regional-level cooperation and integration to create a higher demand for a country's goods and services (Ali & Zhuang, 2007). In addition, land policies should address growing urbanisation rates and the competition between industry, housing and agriculture for land (Rao, 2009).
- **Inclusive governance.** The politics of inclusive growth rest on good governance, which requires a commitment from political institutions, enhanced public participation and strong institutions and processes that enable people to hold their government to account (Asian Development Bank, 2011; Chang, 2014; Alexander, 2015). Institutional reforms are often necessary to support inclusive accountability, voice, delivery and policy design (OECD, 2015b). Leaders must be held accountable at all levels (Pal, 2014) through an evaluation of their performance and ability to integrate across portfolios (OECD, 2016b). The voice of citizens, civil society, advocacy groups and special purpose organisations and business must be heard by government (OECD, 2016b). Inclusive delivery implies that service delivery mandates are designed and agreed upon by the broader public in consultation with government through a creation of a shared vision and values (OECD, 2016b).

This requires mobilisation of people, skills groups and talents to unleash public participation in designing inclusive policies (OECD, 2016b). The political economy needs to support these types of processes. It needs to promote social voice – especially that of women (Hameed, 2007), institutional reforms and the democratisation of decision making (de Mello & Dutz, 2012; Chang, 2014; Alexander, 2015).

3.4.4.5 Summation of the inclusive growth approach

In summation, an inclusive growth path relies on policy decisions across social, economic, infrastructure development and governance arenas. Within the social arena, policy reforms focus on developing human capital, providing social protection and supporting social inclusion. These policies address any discrimination or disadvantage that may hinder the contribution to or receipt of the benefits derived from growth (Chang, 2014; Lanchovichina & Lundström, 2009; de Mello & Dutz, 2012; Alexander, 2015). Within the economic dimension, policies aim to increase productivity through employment or self-employment and focus on supporting entrepreneurship and promoting regulations that encourage the entry of new businesses, as well as ensuring financial inclusion, implementing progressive tax policies and redistributive public spending (de Mello & Dutz, 2012; Chang, 2014; Pal, 2014). Policies focused on infrastructure development aim to bridge spatial inequalities between urban and rural areas, emphasising the provision of roads, electricity and telecommunications (Pal, 2014; OECD, 2015). Within the governance arena, policy reforms focus on making the system more efficient, effective and accountable, building institutional capacity and supporting active citizenship participation in decision making (Chang, 2014; Pal, 2014; OECD, 2015).

While inclusive growth clearly is able to address issues of poverty and inequality, it neglects the environment, which is a key element of sustainable economic growth. The green growth path provides a focus on this critical aspect.

3.4.4 Green growth path

The concept of “green growth” first emerged in South Korea following the 2008 global financial crisis. The country published a *National Strategy for Green Growth* in 2009 along with a five-year plan. In 2010, it established a Global Green Growth Institute, a non-profit organisation, to promote green growth as a new model of economic growth that would reduce poverty and promote job creation, social inclusion and environmental sustainability (Atkisson, 2012). Delegates at the 2010 G20 Seoul Summit agreed that green growth formed an important part of sustainable development (Barbier, 2012). The OECD subsequently studied the green economy and worked with its member states to promote the green growth path. Other international institutions, including the World Bank and UNEP, followed suit (Kasztelan, 2017).

This section explores the varied definitions of green growth as well as the policies needed to make it a reality. It also explores how such a path could help address some of South Africa's most pressing challenges.

3.4.4.1 Defining green growth

There are many definitions of green growth, including those that see it as a resource-efficient, cleaner (minimised pollution and environmental impacts) and more resilient (effective management of natural resources to prevent disasters) process (Hallegatte, Heal, Fay & Treguer, 2012). Some view it as a strategy for pursuing sustainable development – in making growth environmentally sustainable – but not as a replacement for conventional growth policies (Capozza *et al.*, 2013). It is also understood as a new national development paradigm that can create new growth engines and jobs (Kasztelan, 2017).

Toman (2012:3) provides a broad definition that captures the most salient points: “Green growth means promoting development and economic growth, while ensuring that natural assets continue to provide the resources and environmental services on which our wellbeing relies”. Dercon (2014) includes the ability to respond to climate change as an element of the green growth path. Essentially, green growth aims to stimulate economic growth and development while ensuring that natural resources continue to provide the environmental services important for wellbeing (Bowen, 2012).

Table 3.3 outlines the understanding of this concept by some countries that are pursuing it and selected global organisations that are studying, promoting and supporting it.

Table 3.3: Prominent understandings of the green growth concept

Republic of Korea: “Green growth refers to sustainable growth that mitigates greenhouse gas emissions, and prevents environmental degradation.” “[It is] growth achieved by saving and using energy and resources efficiently to reduce climate change and damage to the environment, securing new growth engines through research and development of green technology, creating new job opportunities, and achieving harmony between the economy and environment...”
Government of Rwanda: “...an emerging concept that recognizes that environmental protection is a driver of global and national economic development. It refocuses society on achieving qualitative growth rather than simply increasing GDP...”
OECD: “...aims to foster economic growth and development, while ensuring that natural assets are used sustainably, and continue to provide the resources and environmental services on which our well-being relies...”
World Bank: “...growth that is efficient in its use of natural resources, clean in that it minimizes pollution and environmental impacts and resilient in that it accounts for natural hazards...”
UN's Economic and Social Commission for Asia and the Pacific: “...environmentally sustainable economic progress to foster low-emission, socially inclusive development...”
Global Green Growth Institute: “...new revolutionary development paradigm that sustains economic growth while at the same time ensuring climatic and environmental sustainability...”

Source: Adapted from Kasztelan, 2017:487

The term is sometimes used interchangeably with green economy. The concept of a green economy first emerged in 1989 when it was mentioned in the *Blueprint for a Green Economy* report prepared by a group of United Kingdom environmental economists. The green economy can be understood as an economy that improves human wellbeing and social equity and that reduces environmental scarcities (OECD, 2013a). It is viewed as a low-carbon, resource-efficient and socially inclusive economy (Toman, 2012; Alfredsson & Wijkman, 2014). Yet in other understandings of the concept, it is a system for economic activity related to the production, consumption and distribution of goods and services that improve human wellbeing over the long term while not exposing future generations to ecological scarcities (Kasztelan, 2017). Adopting a green economy will affect methods of production and consumption and thus impact on employment and incomes (Jarvis, Varma & Ram, 2011). It gained traction after the 2008 global financial crisis with UNEP establishing a green economy initiative to promote green economic sectors. In 2009, UNEP released the *Global Green New Deal* report that proposed restructuring the economy to create a green economy (Kasztelan, 2017). The concept was also the main theme of discussion during the UN Conference on Sustainable Development in Rio in 2012. Subsequently, many organisations introduced green economy initiatives, including the UN Development Programme's (UNDP) Green Low-Emission Capacity Building Program, its Reducing Emissions from Deforestation and Forest Degradation programmes and its Environmental Programme's Poverty-Environment Initiative (Smit & Musango, 2015). Varied funding mechanisms have been established to support the transition to a green economy, such as the Global Environment Facility, the Least Developed Countries Fund, the Forest Carbon Partnership Facility and the Adaptation Fund (Allen & Jussila, 2013). Both the green growth path and green economy initiatives aim to make economic activities more resource and energy efficient and both promote economic transformation that encompasses elements of economic and social justice (Kasztelan, 2017). There is still, however, a lack of clarity on the elements that make up a green economy and on how nations should pursue this path while also addressing their current socioeconomic challenges, such as poverty. There is also a lack of expertise in designing and implementing green economy policies, and issues of power, participation and institutional coordination exist. They are, however, clearly linked and closely related and because both focus on social and economic justice, they are used interchangeably in this report.

3.4.4.2 The rationale for adopting a green growth path

Our current growth path risks current and future human wellbeing through its unsustainable exploitation of nature resources and the resultant impact on the environment, and thus livelihoods, particularly in a time of climate change (OECD, 2013a).

While about 660 million people have been raised above the poverty line in the past two decades, this has been done at the expense of the environment (Withagen & Smulders, 2012). As the population grows, a lot more will need to be done to combat poverty and create employment (OECD, 2013a). The green growth path firmly entrenches the environment into decision making, reconciling environmental sustainability with economic growth and social enhancement, including building the resilience of society to economic shocks (Withagen & Smulders, 2012).

3.4.4.2.1 *Green growth and poverty*

A healthy environment supports human wellbeing, particularly the wellbeing of the poor. The welfare of low-income populations in developing countries is closely linked to their ability to access environmental goods and services (Dercon, 2014); they are therefore the most seriously affected by the reduction and/or degradation of natural resources (Altenburg & Assman, 2017). In addition, they are often significantly affected by the by-products of degradation, such as pollution and the unavailability of safe, fresh water (Altenburg & Assmann, 2017). Degradation of the natural resource base makes it harder for these groups to generate and income and accumulate wealth (Dercon, 2014), which impacts on their future generations' ability to do the same (OECD, 2013a).

There is an argument that poor people are more concerned with economic growth that will create job opportunities and increase incomes than with the impact of the growth path on the environment (Withagen & Smulders, 2012). The focus is on growth that must first meet people's basic needs, then attention can be paid to the environment – a “grow now, clean later” mentality (Hallegatte *et al.*, 2011). This argument, however, does not acknowledge that the voice of the poor is often not heard in policy spaces on this issue, and when it is, it may be overshadowed by the voices of an elite (Hallegatte *et al.*, 2011). The poor may not display a significant degree of interest in parks and recreational spaces in urban areas because their immediate concerns around food security and employment are more pressing (Hallegatte *et al.*, 2011). Environmental aspects that they do comment on are those that affect their living conditions and wellbeing. These include poor waste management and public infrastructure services, which can result in floods that destroy homes and infrastructure; polluted water bodies that directly impact health; and poor soil quality, deforestation and limited access to water in rural areas that affect agricultural production (Withagen & Smulders, 2012).

The green growth path must therefore ensure a just transition, based on social dialogue and civic participation to identify the known and potential impacts on the poor and to chart a course that will ensure the creation of green jobs (UNFCCC, 2011).

Such a transition must also enhance access of the poor and vulnerable to services, resources and opportunities. It will require a fundamental shift in action and thinking. (UNFCCC, 2011).

3.4.4.2.2 *Green growth and job creation (green jobs)*

Transitioning to a green growth path will reshape the labour market because it will create new job opportunities, which will require new skills (ILO & OECD, 2012). These are termed as green jobs, which are defined by the ILO as jobs that contribute to the preservation or restoration of the environment (Strietska-Illina, 2011). These jobs can be in traditional sectors or in new sectors, but most importantly they should support adaptation to climate change, protect and restore ecosystems, minimise waste and pollution, limit greenhouse gas emissions and improve energy and raw material efficiency (Strietska-Illina, 2011).

Promoting green jobs will lead to a decline of job opportunities in existing sectors, such as those related to fossil-fuel extraction and consumption (ILO & OECD, 2012), but it will also provide a significant opportunity to create more jobs, decent jobs, which will help to address poverty and inequality (UNFCCC, 2011). Therefore, green job creation must be viewed as a specific objective, and not just as an automatic result of economic growth, and these jobs must be productive and meet the criteria of decent work (Gueye & Fyfe, 2015). A particular focus must be put on creating employment for the youth, women, informal workers and the unemployed; this will require political buy-in to pro-green growth strategies (OECD, 2013a), such as the transition to low-carbon energy production, which is projected as an industry that can create significant number of decent jobs (Dercon, 2014). Particular attention must be paid to imparting skills of value and ones that align to the needs of a green economy (UNFCCC, 2011) to facilitate a transition that is fair (Strietska-Illina, 2011).

3.4.4.2.3 *Green growth and skills development (green skills)*

Every job can potentially become greener. Therefore, integration of sustainable development and environmental awareness into education and training at all levels, starting from early childhood development (ECD), is important (Strietska-Illina, 2011). Climate change also needs to feature in education for sustainable development (UNFCCC, 2011). Transitioning to a green growth path will require both skilling and reskilling of the labour force. The suitable supply of appropriate and quality skills is vital for successful transformations that enhance productivity, employment growth and development (Strietska-Illina, 2011).

Skills requirements are affected by a transition to a green economy in three ways. The first is the restructuring of the economy towards more environmentally friendly production methods, which reduces the demand for some skills and increases the demand for others. The second is related to new regulations and technologies and practices that emerge as a result of the restructuring, which might need entirely new skills.

The third is related to the skills needed to “green” existing industries and processes (Strietska-Illina, 2011). While this shift in the volume, composition, quality of employment across sectors can result in more and better job opportunities, it will not happen by default – it will need to be carefully designed (Gueye & Fyfe, 2015) and will need coherent and integrated policies to support it (Jarvis *et al.*, 2011).

Approaches to skills development range from formal qualifications to short and tailored courses linked to up- and re-skilling workers to take up new and better positions (Strietska-Illina, 2011). It must be noted though that skills development is not enough on its own to counter structural adjustments caused by greening the economy. Other critical supporting actions are necessary such as enhanced labour market information systems, social dialogue and employment services (Strietska-Illina, 2011) as well as investments in educational and training institutions and curricula to address any shortage of skills and the mobility of workers (World Bank, 2012), and to mitigate skills mismatches (ILO & OECD, 2012).

3.4.4.2.4 *Green growth and structural change (green industrialisation)*

As stipulated in the above sections, current production systems are unsustainable – they are inefficient and wasteful and a burden on the planet (UN Industrial Development Organisation, 2010). There is an urgent need to reduce our consumption of raw materials, adopt the use of renewable resources in production processes and redesign products to require less energy and water inputs, among other resources (UN Industrial Development Organization, 2010). Greening industrial development is therefore a key focus of the green growth path, which then also needs to increase productive growth and incomes (Altenburg & Assmann, 2017).

The process is characterised by increased investments in economic sectors that build on and enhance natural capital or that reduce ecological scarcities and environmental impacts (Pegels, 2015). These sectors include renewable energy, low-carbon transport, energy-efficient buildings, clean technologies, improved waste management, freshwater provision and sustainable agriculture and forestry and fisheries management (Pegels, 2015). These investments must be driven and supported by national policy reforms and the development of international policy and market infrastructure (Pegels, 2015).

Several sectors in particular are key to the transition. Manufacturing, which is highly productive and a job creator (Altenburg & Assmann, 2017), will need to produce environmentally sensitive products that are energy efficient and low in emissions (Chapple, 2008). This sector currently uses about 35 percent of global electricity supply, which contributes about 20 percent to carbon emissions. The renewable energy sector is another that can contribute to green growth by providing energy and employment (Pan, Ma & Zhang, 2011).

The transport sector provides the opportunities for job creation, but also for mitigating emissions through the uptake of efficient urban transport systems and the manufacturing of alternative fuel vehicles (Pan *et al.*, 2011). This sector currently uses more than half of global liquid fossil fuel reserves. Agriculture and forestry are two others that can provide dual benefits within a green growth path. Both can grow employment opportunities, including in tourism, while regenerating natural resources bases (Pan *et al.*, 2011; ILO & OECD, 2012).

The green growth path is able to create new sources of growth through enhanced productivity, innovation and new services, industries and markets. Productivity relates to reducing energy consumption and waste. It will boost innovation due to the demand for new ways of doing things to address environmental problems (OECD, 2011). New services, industries and markets for green growth include those for products such as components for renewable energy technologies, biofuels, waste management and green transport systems and environmental value chain systems, plus the design of these (Altenburg & Assmann, 2017). These industries are all capable of creating more employment opportunities, and they contribute to macroeconomic stability by generating additional revenue (OECD, 2011). These are also all likely to boost small business development (infoDev, 2014; ILO, 2015).

3.4.4.3 Green growth policy framework

A review of the literature identifies a range of policy options able to support a transition to a green growth path. The success of the transition will depend on policy, institutional setting and social structures, among other factors (OECD, 2012b).

At the national level, strategies and policies should encourage environmentally friendly behaviour by businesses and consumers; improve the optimal reallocation of labour, capital and technology towards greener operations; and provide motivation for the development of eco-innovations (Kasztelan, 2017). They also need to be integrated with other government strategies and policies, particularly those related to economic policymaking, public financial management and development planning (OECD, 2012b).

The most prevalent policies identified in the literature are highlighted below.

- **Pricing ecosystem services.** Monetising the benefits and costs associated with the use of ecosystem services can make their contribution more visible and can result in better and more cost-effective decision making (OECD, World Bank & UN, 2012). For example, linking the costs of pollution to operating costs through a carbon tax can promote uptake of more environmentally friendly production systems as can pricing water usage to discourage unsustainable consumption (OECD, 2012b). Other measures include reviewing environmentally harmful subsidies (OECD, World Bank & UN, 2012).

These options also generate revenue for government, which can be used to subsidise services for the poor reducing their vulnerability to economic shocks (OECD, 2012a).

- **Public procurement.** Governments can use their public procurement mechanisms to support sustainably produced goods and services (UNEP, 2012). This can support the emergence and growth of more sustainable industries (UNEP, 2012) and help to foster greener activities (de Serres, Murtin & Nicoletti, 2010).
- **Efficiency incentives.** Providing incentives for efficiency can promote innovation. This policy tool can be used to manage the behaviour of the market in relation to the production system (OECD, 2013a). The flipside of incentives are mechanisms to punish those not in compliance, such as pollution charges (OECD, 2013a). This additional revenue can be channelled to social expenditure (OECD, 2012b). Policies that support international collaboration in research and technology agreements can also support the diffusion and adoption of technologies (OECD, 2012b).
- **Regulatory mechanisms.** Regulatory mechanisms are an important tool in environmental policy. They can be effective in sustainable management of forest, land, cleaner water and air (OECD, 2012b). For example, a city may decide to achieve a certain level of environmental protection by adopting air pollution, wastewater treatment or noise-level standards (UNEP, 2012). There are other “command and control” regulations that impose technology and/or performance standards on businesses, including those that ban certain products or practices or require businesses to obtain special permits to produce or undertake these products or activities (de Serres *et al.*, 2010).
- **Green infrastructure investment.** This is necessary to enhance access to services, such as energy and water, without crippling economic growth or neglecting social wellbeing (OECD, 2011). This includes infrastructure relevant to climate change adaptation and resilience, such as countering sea-level rise, mitigating the impacts of floods and supporting the agricultural sector in producing drought-resistant crops (Dercon, 2014). It also encompasses investments in efficient public water, transport and energy infrastructure (OECD, 2011). These types of policies need to be accompanied by those that encourage local development and linkages (Dercon, 2014).
- **Green innovation policies.** These sets of policies, sometimes supported by targeted industrial policies and environmental policies (Withagen & Smulders, 2012), support the development of low-carbon technologies. They can take the form of public-private ventures to finance green technologies and infrastructure (Dercon, 2014) and can encourage the development and deployment of technologies through incentives.

- **Developing individuals' skills.** This includes targeting individual's ability to be employed productively and meaningfully in the economy and to adopt environmentally friendly behaviour in daily life (UNEP, 2012). This is important because failures in education and training systems can negatively affect the transition (World Bank, 2012). Capacity development should also focus across government departments to ensure that core economic ministries and planning and sectoral ministries have the necessary skills to formulate and implement policies relevant to green growth (OECD, 2012b).
- **Adopting voluntary approaches.** These include instruments, such as rating and labelling programmes, that seek to improve consumer awareness about the environmental impact of products and/or practices, or about the availability of less damaging alternatives (de Serres *et al.*, 2010). One example is the Pollutant Release and Transfer Registers, which are publicly available inventories of potentially harmful pollutants affecting air, water or soil (de Serres *et al.*, 2010). Another are so-called voluntary agreements, which are negotiated agreements between the government and particular industrial sectors to address a specific environmental concern (de Serres *et al.*, 2010).

3.4.4.4 Summation of the green growth approach

The green growth approach is focused on encouraging environmentally sustainable consumption and production. This is apparent in the policy options for supporting such a path, which emphasise the environmental and the economic dimensions of sustainable development. It is not clear, however, how this path will address issues such as poverty and inequality without comprehensive and specific policy actions (Pegels, 2015). There is a need for a growth path that will integrate environmentally friendly growth with social equity, encompassing a focus on human capital investment, inclusive employment and well-designed redistribution policies (Kasztelan, 2017). Table 3.4 illustrates the codes/themes identified in the review of the traditional, pro-poor, inclusive and green growth paths.

Table 3.4: Economic growth paths identified themes and codes

Themes	Codes
Traditional economic growth	technological progress, industrialisation, service-based economy, international relations, GDP, trade liberalisation, financial market legalisation, labour market flexibility
Pro-poor growth	income for the poor, absorb labour, create employment, promotion of labour-intensive sectors, social spending, health and education, access to credit, labour intensive industries and geographically placing industries in rural areas, agricultural productivity, economic activity in rural areas, manufacturing and services, human resource development
Inclusive growth	participation, non-discriminatory, marginalised or poor, productive economic activities, spread of benefits, material wealth shared evenly, broad-based, labour-intensive growth, reduce regional, ethnic, or gender disadvantages, equitable benefit sharing from growth, poverty eradication, reducing inequality, social safety nets, income deprivation, economic growth, productive jobs, economic opportunities, pattern of growth, broad-based growth, economic diversification, productive job opportunities
Green growth	green jobs, green skills, climate change, economic growth, resource efficient, environmentally sustainable, human wellbeing, poverty reduction, welfare of low-income populations, environmental quality, different type of skills, new job opportunities, employment intensive, education for sustainable development, greening industries, green growth strategies, regulatory mechanisms, green infrastructure, low-carbon investment, green innovation

3.5 The preferred path: the IGG path

3.5.1 Introducing the IGG path

As demonstrated in the previous sections, the inclusive growth path does not include the environment and the green growth approach is not necessarily inclusive (Avis, 2018). Neither will support sustainable development unless they address equality, poverty reduction and human rights concurrently (Schalatek & Alexander, 2012) along with environmental issues. UNEP (2017) has included the element of inclusive social equity in its definition of a green economy to overcome this shortfall, describing the green economy as one that improves human wellbeing and social equity and reduces environmental risks. There is a need for a growth path that is both green and inclusive. This section explores how IGG is defined and how it responds to the triple challenges discussed in the problem statement. It concludes with a framework drawn from all four growth paths, which will be used to analyse the NDP.

3.5.2 Defining IGG

IGG can be understood as growth that supports shared economic opportunity, social equity and human wellbeing while minimising environmental risks and natural resources depletion (UNDP, 2014; McKenna, Martinez, Gutierrez-Espeleta & Dasgupta, 2016).

It is growth that enables the reduction of humanity's ecological footprint, while significantly improving the opportunities of people living in poverty to participate in the process and outcomes of economic growth, thereby lowering inequality (Pegels, 2015). Economic growth in this framework derives from economic diversification, job creation, poverty and inequality reduction and enhanced environmental sustainability (UNECA, 2016b).

3.5.3 Rationale for an IGG path

The African Development Bank (AfDB) notes IGG as growth that will help developing economies move towards sustainable development by ensuring that environmental sustainability does not occur at the expense of social progress (Avis, 2018). It also considers development challenges, such as unemployment, poverty, environmental degradation and the vulnerabilities caused by climate change (UNECA, 2016a).

African countries, including South Africa, mostly depend on natural capital depletion for economic growth; they will require significant investment to be able to reduce their dependency on unsustainable resource use (UNDP, 2014). Growth will also need to be inclusive to address challenges of poverty and inequality – both within groups within a country, but also between countries in the sub-Saharan region (UNDP, 2014). Hence, IGG is ideal for countries like South Africa.

Numerous pieces of legislation and policies have been drafted in South Africa to address sustainability challenges and promote the transition to a green economy. These include the NGP's Green Economy Accord, the *National Climate Change Response Policy*, the *National Environmental Management Act* and the *Integrated Resource Plan* (Swilling, Musango & Wakeford, 2016).

3.5.3.1 IGG and inclusivity

To understand how an IGG path will impact inclusiveness, it is necessary to look at the ability of the poor and marginalised to participate in a green growth process and how they will benefit from growth outcomes (Avis, 2018). This means understanding how green growth policy affects sectors and economic activities relevant to the poor, in particular the agricultural sector and the informal economy. It also means exploring how green growth policies affect employment opportunities for and the productivity of the poor and marginalised, including low-skilled labour (Avis, 2018). These aspects will determine the employment and productive factors that will affect the inclusiveness of the path, as well as the sectoral and structural transformation that may need to take place (Pegels, 2015). In addition, these groups must be included in decision making about the growth process itself.

To determine whether people will benefit from the outcomes of green growth, it is necessary to understand how this path will impact on the incomes of the poor and marginalised, as well as understanding the extent of income distribution that will occur on a green growth path. We also need to ask whether a green growth path will expand the access of the poor to goods and services, and how it will address spatial inequalities (Pegels, 2015).

An IGG path then incorporates support for greening the economy while simultaneously putting in place measures to ensure that the poor are involved in decision making and that they benefit from participation in productive employment as well as the outcomes of that productivity.

3.5.3.2 IGG and structural transformation

There are numerous opportunities for embedding IGG through structural changes to the economy. Priority sectors include agriculture, manufacturing, renewable energy and the informal sectors. In the agricultural sector, a more sustainable path needs to be found to address inherent environmental and historic social inequities. Transformational actions are required within an integrated framework to stimulate growth that is able to do this (AfDB, OECD, UN & World Bank, 2013). The sector offers significant potential to contribute to food security (UNFCCC, 2011), job creation, poverty alleviation and environmental regeneration (UNDP, 2014). Some actions that would make this sector both greener and more inclusive are the promotion of organic agriculture, investments in improved water use, reducing post-harvest losses, better management of soil, and encouraging the uptake of more sustainable diets (UNFCCC, 2011).

The informal sector must be included in any green economy transition. This sector is traditionally closely linked to the environment – either as a primary source of income or as a secondary buffer against risk (International Institute for Environment and Development [IIED], 2016). Many people participate in the informal economy to diversify their incomes, including through subsistence food production. There is an opportunity to strengthen the existing linkages between formal and informal markets and it is particularly important to focus on women (IIED, 2016). Ignoring the informal sector will result in the most vulnerable being left behind, which runs counter to the ethos of the Sustainable Development Goals (IIED, 2016).

3.5.3.3 IGG and poverty

As noted in the previous section, many of the poor are dependent on environmental assets for incomes and livelihoods. In rural areas, this includes a direct reliance on farming, fishing, hunting and wild harvesting, including from forests (Poverty–Environment Partnership [PEP], 2012). In urban areas, reliance often relates to informal sector employment in recycling and water and energy distribution (PEP, 2012). The IGG path pays attention to how the poor will be affected or will benefit from the greening of growth (PEP, 2012: UNDP & partners, 2015).

Strategies that pursue policy and governance reforms need therefore to ensure that poor men, women and youth are given greater security of access to environmental assets, and that environmental asset-based livelihoods are more profitable to ensure a viable path for moving out of poverty (PEP, 2012). In addition, they must consider that a shift from unsustainable to sustainable activities may lead to a loss of employment and reduced access to wild foods and products or loss of incomes due to restrictions placed on the use of natural assets, as well as inequality due to a failure to distribute the benefits of green growth fairly (UNDP & partners, 2015). The trade-offs need to form part of all considerations.

There are several ways that an IGG path will positively impact the poor, including by providing more efficient access to clean water and energy services (AfDB *et al.*, 2013) and reducing health risks by ensuring a cleaner environment and improving environmental infrastructure for sanitation, drainage and waste collection, as well as greener transport options (PEP, 2012). In addition, it can help to build resilience of communities and ecosystems to climate change-related shocks and can assist in reducing conflicts driven by natural resource scarcity and ecosystem degradation (PEP, 2012). The above activities relate to diminished “costs” for the poor, but the IGG path can also provide significant benefits when implemented. For example, integrated waste management can create jobs, while reducing pollution and helping to conserve natural resources (UNDP & partners, 2015).

The transition towards IGG should ensure that jobs created are decent, that re- and upskilling takes place, that marginalised groups are not left behind and that overall wellbeing is improved in the process (AfDB *et al.*, 2013).

3.5.3.4 IGG and governance

Supportive policies and institutions are important factors for achieving IGG. These will foster design, planning, implementation, innovation and capacity building for this growth path (UNECA, 2016a). Public policy should be directed to social, environmental and economic goals that will result in sustainable livelihoods generating positive changes for the marginalised and leading to the required structural changes (UNFCCC, 2011). These policies will need to assist in integrating systems that promote multi-sectoral approaches (UNECA, 2016b). They will also need to focus on developing capacity in leadership, governance, management, quality financial and technical planning skills in the planning, monitoring and implementation process (UNECA, 2016b). Finance mechanisms and resources will need to be mobilised, including those focused on helping the poor benefit from a transition to a green growth path (Bass, Steele, Toulmin, Greenfield, Hopkins, Chung & Nielsen, 2016).

An IGG path should be participatory and transparent, support social justice objectives and embrace diversity (Bass *et al.*, 2016).

3.5.4 Measuring IGG

The GGKP has developed a measuring framework for IGG with five elements. These are discussed briefly below (GGKP, 2016):

- **Natural resources that support economic activity.** This measure accounts for the natural assets used for economic growth, such as land, forests, fishing stocks, among others. It evaluates the risk associated with depletion of these resources.
- **Natural resource efficiency and absolute decoupling from economic growth.** This measure analyses the rate of efficiency during the process of economic growth generation; it looks at the rate of wastefulness in the production and consumption process, and how this affects the environment. It also explores recycling, waste management, renewable resources and resource preservation.
- **Socioeconomic resilience to ecological risks.** This measure examines how resilient growth is to environmental crises, such as climate change, pollution and natural disasters.
- **Economic opportunities and efforts related to environmental policies.** This measure identifies the opportunities created for transformation from green structural transformation, including government spending, taxation, regulations and business operations. It encompasses research and development, sustainable value chains and green jobs.
- **Inclusivity of environmental policies.** This measure analyses the costs and benefits of green growth, including access to environmental goods and services, participation in decision making, and the distributional impact of environmental policies. The latter is focused on the types of jobs created and lost and how people benefit from ecosystem service payments and energy subsidies.

Five building blocks contribute to the creation of an IGG path: reviewing national and social policies, harmonising policies and support, promoting local rights and capacities, supporting inclusive green markets, and creating new measures of progress.

Government would need to review social and economic policies to align with IGG outcomes and create policies to support the transition (PEP, 2012). It would also need to secure and broaden the rights of the marginalised over natural resources and ensure that they are included in decision making processes (PEP, 2012). It would have to promote inclusive green markets by supporting innovative business models and expanding access to markets and value chains of green services and products (PEP, 2012). New measures of progress need to be created that go beyond GDP to accurately gauge poverty inequality and environmental health (PEP, 2012).

Table 3.5 compares the five economic growth paths discussed in this chapter. Pro-poor growth focuses on poverty and growing the incomes of the poor through social spending, labour-intensive employment and regional development. Inclusive growth focuses on reducing inequality and growth through investing in human capital, stimulating productive employment, supporting entrepreneurship, boosting financial inclusion and focusing on broad-based patterns of growth. Green growth attempts to reconcile economic growth with environmental sustainability by greening industries, using clean energy for production and consumption, promoting green construction and infrastructure and supporting green innovation and finance.

The IGG path is focused on economic growth that is environmentally conscious, reduces poverty and boosts equity. It aims to do this through inclusive and green finance, policy design and planning, as well as the promotion of social services and labour-intensive production. It is capable of addressing environmental, social and economic challenges, and thus is able to support sustainable development.

Table 3.5: Comparison of the economic growth paths

	Traditional growth	Pro-poor growth	Inclusive growth	Green growth	IGG
Definition	Economic growth is an increase in aggregate output in a nation within a timeframe	Growth that increases income for the poor (Klasen, 2010)	Growth that reduces inequality and poverty and benefits the marginalised (Ranieri & Ramos, 2013a; Chang, 2014)	Growth that promotes development, economic growth and sustainable natural resource management (Toman, 2012)	Growth that results in a low-carbon, resource-efficient and socially inclusive development path (Avis, 2018)
Rationale	Assumption that benefits can trickle down and improve the standard of living of the population	Focuses on growing incomes and lifestyles of the poor faster than other groups as measured by the poverty measures (Anand <i>et al.</i> , 2013)	Focuses on growing participation of the marginalised and poor in economic growth process through employment that increases the sharing in income and other non-income benefits (Fourie, 2014)	Green growth reconciles environmental sustainability with economic growth and social enhancement (Withagen & Smulders, 2012)	Looks at social inclusiveness, environmental sustainability and economic sustainability. Economic growth should be green (environmental sustainability) and inclusive (social equity) (GGKP, 2016)
Main focus	Increase per capita income	Reduce poverty levels	Reduce inequality and poverty levels	Reduce environmental degradation	Reduce environmental degradation, poverty levels and inequality
Tools to promote growth	<ul style="list-style-type: none"> • Technological advancement • International trade • Management of monetary policy and fiscal framework 	<ul style="list-style-type: none"> • Social spending • Labour-intensive industries • Agriculture • Manufacturing • Development of industries in geographically poor spaces 	<ul style="list-style-type: none"> • Productive employment • Entrepreneurship • Broad-based growth • Financial inclusion • Inclusive fiscal policy • Human capital investment • Inclusive governance 	<ul style="list-style-type: none"> • Green industries • Clean energy sources • Green/sustainable procurement • Green innovation • Environmental policy • Green infrastructure • Green finance 	<ul style="list-style-type: none"> • Sustainable agricultural and informal sector development • Provision of basic services, water and energy • Inclusive green policy planning and design • Inclusive, green finance

3.5.5 Building a framework for IGG

The IGG framework draws on the literature review to identify key themes, linked to the five pillars of sustainable development, and related sub-themes of such a path. These themes and sub-themes were subsequently used as codes to determine the prevalence and prioritisation of each. The following key terms were discovered as relates to IGG: growth, economy, green, climate, development, inequality, social, change, income, labour, poverty and productivity. The IGG framework was developed through a process of theoretical and content analysis.

The framework comprises five dimensions: environment, economy, social, spatial development and governance dimensions identified in this chapter as key to sustainable development. The environmental dimension consists of green finance, green industries, natural resource management and green skills and jobs. The economic dimension comprises growth and structural transformation, SMME development, financial inclusion, job creation and inequality reduction. The societal dimension focuses on social protection, education and training and poverty reduction. The spatial development dimension includes economic infrastructure development and rural and regional development. The governance dimension comprises public participation and strength of institutions.

Table 3.6 provides an overview of the IGG dimensions, themes and codes.

Table 3.6: IGG framework

#	Sustainable development dimensions (categories)	Themes and codes	
A	Environmental inclusion: confinement of production and consumption within the ecological limits of the natural environment to ensure its integrity and health is maintained	Green industries	renewable energy, waste sector, low-carbon transport systems, green construction, clean technology, forest management, sustainable fisheries, sustainable agriculture, green manufacturing, sustainable procurement
		Natural resource management	mitigation of greenhouse gas emissions, prevention of environmental degradation, reduce climate change effects, efficient use of natural resources/sustainable use of natural resources
		Green finance	carbon tax, green (private or public) funding
		Green skills and green jobs	skilling, reskilling programmes, investment in green qualifications
B	Economic inclusion: enable and promote local economy sustenance without irreversibly damaging the natural environment and alleviating poverty	Growth and structural transformation	informal economy, labour-intensive sectors (agriculture, manufacturing), rate of growth (pace)
		Small business development	funding of start-ups, entrepreneurship support, innovation
		Financial inclusion	microfinance, financial literacy, business finance, financial institutions placed in remote areas, access to credit, youth, woman and rural business financing
		Job creation	labour absorption, self-employment, employment opportunities, productive employment, green jobs
		Inequality reduction	participation, non-discrimination, equality of opportunity, equitable sharing, income distribution

C	Social inclusion: actions and policies that improve quality of life. These factors promote social protection, poverty reduction and human capital development	Social protection	conditional cash transfers programme (grants), social insurance inclusion, social spending directed to the poor and marginalised, inclusive fiscal policy, inclusive social policy
		Education and training	ECD, skills development, equal education opportunities, technical, vocational education and training (TVET)
		Poverty alleviation	access to education, access to health services, provision of basic services, food security, income poverty, exclusion, deprivation, vulnerability
D	Spatial development inclusion: investment in capacity and quality of the built environment and productive activities in all spaces	Economic infrastructure development	transit-orientated development, bulk water services, electricity network, transport networks, waste management
		Rural development	developing sustainable small towns, promoting rural markets, promoting rural economies, rural economy infrastructure, urban-rural bias
E	Governance inclusivity: factors that promote proper planning, leadership and management, ethical conduct and democracy	Strong institutions	accountability, anti-corruption, monitoring and evaluation, leadership, co-operative governance
		Public participation (public voice)	transparency, accessibility, engagement, bottom-up decision-making

3.6 Chapter summary

This chapter has explored the conventional and alternative economic growth paths to determine their contribution to reducing poverty and inequality and promoting environmental sustainability. The alternative growth paths are reactionary solutions to the failure of the conventional model based on trickle-down economics. Pro-poor growth aims to address poverty while inclusive growth aims to address poverty and income inequality. Neither address environmental degradation, despite the very real impact this has on the poor and marginalised. In addition, the inclusive growth path does not address the effects of globalisation on income inequality, the financialization of the economy on wage gaps or the impact of technology on the labour market and desired skillsets. This path also does not emphasise quality of resources, such as education and health, focusing instead on access. The inability to effectively deal with inequality arising from processes of globalisation and financial liberalisation is seen across all the growth paths, including the IGG path.

Chapter 4: Reflection on policy frameworks using an IGG lens

4.1 Introduction

This chapter analyses the grand economic policies and strategies implemented post-1994. It provides an overview of economic exclusions pre-democracy and reflects on each economic strategy using the IGG framework developed in the literature. The aim was to determine whether or not these policies displayed IGG determinants and characteristics, which would make them able to successfully address South Africa's socioeconomic challenges.

Economic growth was more concentrated in upstream production (telecommunication, energy, steel, paper and chemicals) pre-1994 (The Presidency, 2006). There were numerous barriers to entry for new businesses, which hampered competition. Regulatory requirements placed a burden on small businesses, including municipal regulations, tax and labour law administration and sector-specific requirements (The Presidency, 2006). The lack of capacity and leadership in state organisations also hampered public-sector investment in social services and infrastructure development (The Presidency, 2006). The apartheid government intentionally excluded black people from opportunities in the labour market and from ownership of businesses and land (Presidency, 2014).

4.2 Post-apartheid grand economic policies analysis

4.2.1 RDP

The ANC adopted the RDP before the 1994 democratic elections; it effectively acted as an election manifesto and development strategy (ANC, 1994). It focused on developing social infrastructure and providing the poor with access to services, on the assumption that this would contribute to economic growth (RDP, 1994; Hirsch, 2005; Moyo & Mamobolo, 2014). The RDP had several key programmes to support attainment of the vision. These included programmes focused on meeting basic needs, developing human resources, building the economy and democratising the state (Corder, 1997).

The RDP's strategy is outlined below related to inclusive and green growth.

4.2.1.1 Economic inclusion

The RDP aimed to stimulate the economy by improving trade union participation (unionisation), promoting international trade, upgrading infrastructure, reforming the financial sector and promoting resource-based industries (ANC, 1994). It aimed to do this by focusing on the areas detailed below.

- **Structural transformation.** The RDP aimed to reduce the income and wealth inequalities created by the apartheid system (ANC, 1994; Bond & Kosa, 1999) through several policy mechanisms focused on specific sectors. This included broadening access to financial products for SMMEs and informal and women-owned businesses; providing support for the manufacturing sector via a favourable monetary policy; supporting the shift to a labour-intensive agricultural sector characterised by good labour practices and working conditions; and including impoverished and rural communities in the fisheries and forestry sectors (ANC, 1994). The tourism industry was to be developed through the promotion of eco-, and cultural tourism with black entrepreneurs and communities given access to tourism services, finance and management skills (ANC, 1994). There was significant focus in the RDP on developing SMMEs through skills development, government support, procurement and the provision of infrastructure (ANC, 1994).
- **Labour market reform.** The RDP recognised the need for a combination of skills development, affirmative action, minimum wage regulation and promotion of social security to ensure decent working conditions (ANC, 1994). It aimed to create jobs through the Public Works Programme, which focused on training unemployed people from poor communities, particularly women and youth, to build and repair infrastructure (ANC, 1994; Bond & Kosa, 1999).
- **Inequality reduction.** The RDP aimed to include those previously excluded from the business sector through affirmative action policies that would enable access to capital and business development and restructure ownership and participation patterns in the country (ANC, 1994).

4.2.1.2 Social inclusion

- **Education and training.** The RDP envisioned a human resource development system that built human capabilities and knowledge enabling people to improve their standard of living and quality of life (ANC, 1994). This was to be done through education and training, arts and culture, sports and recreation, and youth development. The RDP acknowledged that institutions and systems would need to change and thus legislation and policies needed to be reoriented at all levels of government to address past injustices in the education and training system (ANC, 1994).

There was a particular focus on empowering women and youth, as well as providing significant support for ECD.

Mechanisms put in place included support for enhanced teacher training, compulsory school education, distance learning, further education and training (FET) colleges, and special education that catered to the disabled (ANC, 1994).

- **Social protection.** The RDP aimed to reform the social welfare policy framework to cater for the previously disadvantaged, specifically women, children, people in rural areas, youth and those living in informal settlements (ANC 1994). It focused on mechanisms such as social insurance, social assistance in the form of work opportunities in the Public Works Programme, health services, provision of food and cash transfers (ANC 1994). The grant system was reconfigured to provide grants for children, the elderly and disabled (Bond & Kosa, 1999).

4.2.1.3 Spatial inclusion

- **Rural development.** The RDP aimed to create balanced development by integrating rural and urban development (ANC 1994:82). It generated a significant amount of strategies on stimulating local economic activity, rural capacity building and infrastructure development while also promoting efficient urban governance and management (ANC, 1994).
- **Land reform.** Land reform was to play a central role in rural development to increase productivity, generate income and employment opportunities, and increase food security (ANC, 1994). Fewer subsidies were to be given to large farms and agricultural schools were to be opened in rural areas (ANC, 1994). Land reform was also to provide security of tenure, especially for women.
- **Expansion of economic infrastructure.** The provision of electricity to households, small businesses and agricultural enterprises both in urban and rural areas was to be accompanied by the economic infrastructure that enables expansion in productivity, including telecommunications and transport infrastructure (ANC, 1994).

4.2.1.4 Inclusive governance

- **Increasing accountability of the state.** Growing the capacity of the public service was viewed as vital for efficient service delivery (ANC, 1994). A dedicated ministry oversaw funding and reporting to enhance parastatal accountability (ANC, 1994).
- **Growing participation in decision making.** Government was to partner with civil society, non-governmental organisations (NGOs) and community-based organisations; development was to driven by the people (ANC, 1994).

4.2.1.5 Environmental inclusivity

- **Equitable access to resources.** The RDP acknowledged that the apartheid policies had distorted access to natural resources while also contributing to the degradation of the environment. It noted that development processes would consider environmental consequences and include communities in decision making. Government would also revise environmental legislation and promote effective ecosystem management. There would be an enhanced focus on managing waste and reducing pollution. It noted that coordination of environmental management was scattered over departments making effective implementation difficult (ANC, 1994).

4.2.1.6 An analysis of the RDP

The RDP's economic philosophy centred on a social democratic approach in that the state was to participate in improving livelihoods and reducing inequalities. It aimed to create coherent socioeconomic policies that would build human dignity and a just society (RDP, 1994; Hirsch, 2005; Moyo & Mamobolo, 2014). In the initial phase, it generated recognisable social benefits such as access to free public healthcare and education, school feeding schemes, clean water and social welfare (Corder, 1997). Visser (2014) notes that the RDP's approach to meeting basic needs created a strong welfare system that supported vulnerable and previously disadvantaged groups, including the aged and disabled. The RDP also dealt with deprivation as an aspect of poverty through its focus on providing access to basic services, including health, nutrition, housing, water and sanitation. It did focus on the environment, noting the need to manage natural resources and to broaden access to these resources to marginalised groups. The RDP did align with the IGG framework, particularly as regards the social inclusion category and the poverty alleviation and inequality reduction themes. It was therefore more oriented towards pro-poor growth and inclusive growth than green growth.

Visser (2014) argues though that the RDP did not have enough capacity and financial resources to be effective. The public service lacked the skills to implement the programme and it was perceived as a broad strategy that did not detail how it would be implemented (Visser, 2014). The RDP received significant criticism from the international community. A 1994 article in the January *Financial Times* stated that the RDP was a "road to hell" and another by the Democratic Party published in South Africa's *Argus* newspaper at the time noting that it was "fiscally irresponsible", among other media reports (Hirsch, 2005).

In the midst of international criticism, government released a *White Paper on Reconstruction and Development* at the end of 1994 that reflected a shift from the perspective that growth would happen as a result of development to the perspective that development would occur as a result of economic growth (Mathebula, 2015). This might have happened because government was dealing with inherited debt and thus had fewer resources to dedicate to social upliftment (Hirsch, 2005). The lack of funds was one of the reasons the RDP ministry was closed in 1996, along with the rivalry between ministries competing for resources and governance issues (Mathebula, 2015). The RDP ended up as a project rather than a national development strategy (Visser, 2014); it was unable to support its transformative agenda. In 1996, government adopted a new strategy in the hopes of realising its vision.

4.2.2 GEAR

Government adopted GEAR in 1996. GEAR focused on macroeconomic reforms, including the reduction of fiscal deficits, budget reforms, tighter management of the fiscus, the promotion of trade liberalisation and tax reforms. GEAR aimed to achieve a 6 percent growth rate by 2000 and create about 400 000 jobs a year (Department of Finance, 1996). Visser (2014) indicates that the tone of GEAR implied a shift in approach that economic development and growth would result in redistribution, and that the private sector was the primary vehicle to create that growth. It used the mechanisms below to further its agenda.

4.2.2.1 Economic inclusion

- **Structural transformation.** GEAR aimed to enhance industrial innovation and stimulate competitiveness and the labour-intensity of some sectors. There was a focus on enhancing education for industry skills and on enabling access to new technologies. More attention was to be given to relationships that would support growth in regional and international trade. The policy focused more on enablers than tangible tools to achieve these goals (Department of Finance, 1996).
- **SMME development.** GEAR supported SMME development through the establishment of a range of financing and skills development institutions. It perceived SMME development as key to creating jobs and boosting incomes, particularly for women and those in rural areas (Department of Finance, 1996).
- **Macroeconomic policy.** GEAR prioritised macroeconomic mechanisms with an emphasis on attracting foreign direct investment, improving industrial competitiveness and promoting private investment and public-private partnerships.

Liberalisation of the economy included a gradual relaxation of exchange rate controls and inflation management, the lowering of tariffs to expand trade and industrialisation, and tax incentives (Department of Finance, 1996).

- **Job creation.** GEAR established the South African Qualifications Authority to coordinate the quality assurance of formal learning, restructure industry training boards, and impose a levy-based industrial financing mechanism. GEAR suggested regulating flexibility in the labour market through wage agreements, determinations of minimum wage and collective bargaining arrangements and enhancing productivity through skills development (Department of Finance, 1996).

4.2.2.2 Social inclusion

- **Education and training.** GEAR focused on restructuring and decentralising school management, establishing a national qualification framework, building a culture of learning in schools, improving the quality of teachers and building and renovating classrooms (Department of Finance, 1996).
- **Social protection.** The strategy does not comment much on social protection, except to note that the partnership between government and voluntary organisations would be promoted to enable welfare services to reach the vulnerable, and thereby contribute to poverty alleviation, especially in rural areas. It started a process of exploring alternatives to social grants (Department of Finance, 1996) and initiated the outsourcing of social welfare to the private sector.

4.2.2.3 Spatial inclusion

- **Economic infrastructure development.** The policy mentions the provision of water and sanitation as important elements for poverty reduction. Housing and infrastructure development were to be accelerated with infrastructure for airports, energy, telecommunication, hospitals and schools prioritised along with provision of water and sanitation (Department of Finance, 1996).
- **Rural development.** GEAR continued to use land reform as a component of rural development noting that the programme would address asset redistribution, specifically in rural areas. It would run in parallel with farmer support programmes to provide emerging farmers with marketing support and the adoption of appropriate technologies. The aim was to balance distribution of income and economic activity (Department of Finance, 1996).

4.2.2.4 Analysis of GEAR

GEAR focused less than the RDP on the following elements of inclusive growth: financial inclusion to enhance economic participation, inclusive governance, spatial inclusion and environmental inclusion. While the country's GDP grew by 5 percent on average between 2005 and 2007, the redistributive effect of the policy was not evident because South Africa experienced jobless growth that was also accompanied by a decline in productive sectors, such as manufacturing (Mohamed, 2010; Visser, 2014). Some criticised the policy for following a neoliberal approach that was more focused on supporting and protecting markets than addressing industrial policy and inherited socioeconomic challenges (Mohamed & Roberts, 2006). The assumption was that taking a liberal approach to capital control would attract foreign direct investment. These flows, however, ended up going to the private sector, which invested it in financial assets and not fixed investments (Mohamed, 2010). The expected job creation therefore did not materialise. It is evident the GEAR strategy followed the trickle-down thinking connected to conventional economic growth thinking. Its primary focus on economic growth with less attention paid to the environment, governance and other themes makes it less inclusive and green.

A decade later, AsgiSA was introduced with a particular focus on addressing unemployment through the stimulation of productive economic sectors.

4.2.3 AsgiSA

Government introduced AsgiSA in 2006 to create a labour-absorbing economy that would generate shared growth (The Presidency, 2006). The initiative had an ambitious target of doubling economic growth to 6 percent and reducing unemployment to 15% by 2014 (The Presidency, 2006). AsgiSA was the first South African policy to explicitly mention inclusive growth. It worked through six focus areas.

4.2.3.1 Economic inclusion

- **Sector investment-industrial development:** AsgiSA identified tourism, agro-processing (such as biofuels) and business process outsourcing (such as call centres) as priority sectors because they were labour-intensive, growing internationally and suitable for small business and broad-based black economic empowerment (B-BBEE) expansion (The Presidency, 2006).
- **Transforming the second economy.** The initiative aimed to address barriers faced by SMMEs, including access to finance and the impact of regulatory requirements.

It also promoted the use of preferential procurement to encourage the entry of small black-owned businesses into the formal economy. Funding mechanisms were established towards this end. In addition, there was a focus on revitalising underutilised economic factors, such as indigenous knowledge, land skills and livestock farming by encouraging the formation of cooperatives, fast-tracking the land tenure process, and ensuring that the housing market was adequately funded (The Presidency, 2006).

- **Creating jobs and developing skills.** The focus was on growing the inclusion of women, youth and black-owned businesses in economic opportunities. An aim was to increase the numbers of women participating in the Expanded Public Works Programme, which would also include ECD and home-based care practitioners. The initiative called for the establishment of youth advisory centres and the enrolment of 10 000 youth in a National Youth Service (The Presidency, 2006).
- **Financial inclusion and inclusive macroeconomic policy.** AsgiSA was committed to increasing access to finance for youth and women, skills development, enterprise development, funding of housing, small businesses and other broad-based initiatives (The Presidency, 2006).
- **Microeconomic factors.** The policy acknowledged that strategies were needed to address the volatility and overvaluation of the currency, to target inflation and improve public sector budgeting and spending. The budget element was to be championed by the National Treasury (The Presidency, 2006).

4.2.3.1 Social inclusion

- **Education and skills.** AsgiSA proposed that adult basic education programmes were boosted, FET colleges upgraded, career guidance programmes implemented, and that maths and science-focused schools were further promoted. It also supported the accelerated deployment of experienced managers and professional to local government (The Presidency, 2006).

4.2.3.2 Spatial inclusion

- **Infrastructure investment.** Government aimed to expand investment in infrastructure particularly for provincial and municipal water supply, roads, energy distribution, housing, telecommunications and health infrastructure, as well as business centres, police stations, courts and correctional services. It promoted the use of public-private partnerships to do this (The Presidency, 2006).

4.2.3.3 Inclusive governance and institutions

- **Reform of governance and institutions.** AsgiSA aimed to improve local governance and service delivery through capacity development initiatives measures to improve monitoring and evaluation of government performance (The Presidency, 2006).

4.2.3.4 Environmental inclusion

There is brief mention of the environment in this policy, and only in relation to land management.

4.2.3.5 Analysis of AsgiSA

AsgiSA focused more on the economic inclusion category than on those within other IGG categories. It covers policies to promote SMMEs, and the aspects of financial inclusion, job creation and the stimulation of labour-absorbing sectors. It barely mentions the themes of rural development, social protection and poverty alleviation. This illustrates again the dominance of the economic dimension in developmental processes in South Africa. AsgiSA also aligned more with the conventional GDP-based growth path, despite its emphasis on promoting labour intensiveness and shared and broad-based economic growth. This was a reaction to the jobless growth resulting from GEAR. The environmental, spatial development and governance elements were not priorities at that time.

4.2.4 NGP

The then newly formed Economic Development Department (EDD) introduced the NGP in 2010. The NGP was said to be both a framework for economic policy and a job strategy. The aim was to create decent work opportunities, inclusive and productive growth, and stimulate productive capacity in the country. It would incorporate the industrial development plan that had been developed in 2009 as an industrial policy. The NGP aimed to create 5 million jobs by 2020 (Hirsch, 2005).

4.2.4.1 Economic inclusion

- **Structural transformation.** The policy targeted specific industries with job-creation potential. These included agro-processing, the mining and manufacturing sectors, and tourism and business services (EDD, 2011b). It developed a local procurement accord supported by the *Preferential Procurement Policy Framework Act* that aimed to promote localisation to rebuild the country's manufacturing sector. It proposed new preferential regulations focused on mandated levels of local content to boost job creation.

All stakeholders committed to work with the proudly South African brand and implement the accord as per their different sectoral commitments (EDD, 2011a).

- **Macroeconomic measures.** This encompassed a review of administrative pricing and a focus on increasing the competitiveness of markets by tackling monopolistic pricing in inputs and wages. It also introduced reforms in the industrial policy space. There were plans to develop trade policies conducive to the export market and to promote regional growth. Government would work with African partners to identify mutually beneficial opportunities for trade and development and it would work with local development finance institutions and state-owned enterprises to address backlogs in regional logistics and water and electricity infrastructure (EDD, 2011e).
- **Small business development.** Government pledged to further support SMMEs by opening a support centre – a one-stop-shop and funding facility, as well as ensuring that it paid small suppliers within 30 days. It renewed focus on B-BBEE growth and identified weaknesses in the regulations (EDD, 2011e).
- **Job creation.** The NGP noted the need to promote and support the functioning of labour centres and ensure decent work conditions. It proposed labour market reforms, with a focus on protecting contract workers, and limiting abuse of the Council of Conciliation, Mediation and Arbitration, expanding the role of the Unemployment Insurance Fund (UIF) in funding programmes that would create jobs and assist the unemployed in finding jobs (Kaplan, 2013). It did not, however, address the issue of an acceptable wage (Fine, 2012).
- **Technology focus.** There was an enhanced focus on growing research and development, extending access to use of information and communications technology (ICT) and new technologies that would support economic growth and job creation (EDD, 2011e).
- **Macroeconomic policy.** The NGP also advocated for reforms in monetary and fiscal policy and reprioritised public spending to enhance growth sustainability over time (Kaplan, 2013). The NGP promoted a looser monetary policy that would still maintain low inflation and support a more competitive exchange rate and lower interest rate. It noted that corruption and wasteful expenditure would need to be eliminated at all costs (EDD, 2011e).

4.2.4.2 Social inclusion

- **Education and training.** The NGP committed to improving human capital and growing productive employment.

It aimed to do this by expanding opportunities through using existing facilities to their capacity, growing the number of artisans in the country, encouraging internships and work placement opportunities, and encouraging the uptake of training programmes by the training sector. It also committed to increasing the funding for training, and generating funds through the skills levy raised from businesses. Training was to be administered through sector education training authorities (SETAs) (EDD, 2011d).

4.2.4.3 Spatial inclusion

- **Rural development.** The focus was on developing public infrastructure and supporting rural development programmes that could create jobs. It noted the importance of enabling rural access to financial institutions and services (EDD, 2011e) and providing more support in terms of education and skills development to uplift rural lives and increase productivity.
- **Economic infrastructure development.** The NGP identified infrastructure as a key driver of job creation, particularly in the energy, transport and communication sectors (EDD, 2011e).

4.2.4.4 Environmental inclusion

- **Promoting new economies.** The NGP identified the green economy as a new sector with significant potential to create jobs, including in innovation, construction and public employment to protect the environment. Through the Green Economy Accord, government committed to rolling out solar water heaters, among other initiatives, and to prioritise funding towards green investments, such as renewable energy, waste recycling and energy efficiency projects. The focus would be on localisation, skills development and youth employment (EDD, 2011c).

4.2.4.5 Analysis of the NGP

The NGP was the first grand policy to explicitly mention a green economy or the greening of the economy. Its primary focus, however, remained on economic structural change, job creation and skills development. Less attention was given to the spatial and governance elements. The NGP partly aligns to the IGG framework. It is, however, considered more a vision for the country with stated objectives, rather than a robust plan to deal with South Africa's challenges (Nattrass, 2011).

4.3 Analysis of the economic policies against the IGG themes

Table 4.1 analyses the policies discussed in this chapter against the conceptual drivers of an IGG framework. It identifies which and where these policies align to measures that would support an IGG path. It is evident that a green economy supported by green finance and green skills was not envisioned in policies prior to the NGP, although both the RDP and AsgiSA acknowledged the need for natural resource management. All policies covered the economy and its drivers in detail, but marginalised aspects of inequality and the need for financial inclusion. All policies covered social themes, but neglected issues of governance related to active public participation in decision making.

Table 4.1: Post-1994 grand national policy alignment with IGG framework themes

Themes	RDP	GEAR	ASGISA	NGP
Green industries				<ul style="list-style-type: none"> • Green innovation • Green construction • Public Works Programme • Renewable energy • Green technologies • Efficient transport system
Natural resource management	<ul style="list-style-type: none"> • Environmental regulatory reform • Effective waste management systems • Environmental impact assessments (EIA) • Community involved in natural resource management 		<ul style="list-style-type: none"> • EIAs 	
Green finance				Industrial Development Corporation green funding
Green skills and green jobs				
Growth and structural transformation	<ul style="list-style-type: none"> • Manufacturing • Agriculture • Fisheries and forestry • Upstream and downstream mineral-based industries • International trade 	<ul style="list-style-type: none"> • Trade liberalisation • Fiscal policy reform • Labour market reforms • Monetary policy reforms • Industrial development • Industrial innovation, stimulate competitiveness of labour-intensive sectors • Attraction of foreign direct investment • Liberalisation of the financial markets 	<ul style="list-style-type: none"> • Tourism • Business process outsourcing • Agro-processing • SMMEs • Secondary economy 	<ul style="list-style-type: none"> • Agriculture (agro-processing) • Local procurement • Manufacturing • Preferential procurement • Review of administrative prices (electricity price) • Promoting competition • Addressing monopolies • Trade policy reform • Development finance

				<ul style="list-style-type: none"> • Research and development (technological innovation) • Fiscal policy reform (reprioritisation of public spending) • Monetary policy reforms (competitive exchange rate)
Small business development	<ul style="list-style-type: none"> • Skills development (women and rural population) • Women and rural entrepreneurship • Industrial Development Corporation and the Small Business Development Corporation • Public procurement 	<ul style="list-style-type: none"> • Small Business Centre, Ntsika Enterprise Promotion Agency, Khula Enterprise Finance Limited 	<ul style="list-style-type: none"> • Access to finance • Preferential and affirmative procurement • Financial Service Charter • Khula finance enterprise, Micro Agricultural Financial Institutions of South Africa 	<ul style="list-style-type: none"> • One-stop shop for SMME support and funding • Local procurement • Access to finance • Small suppliers paid in 30 days • Skills development • Cooperative development • Youth entrepreneurship (Small Enterprise Development Agency, Small Enterprise Finance Agency)
Financial inclusion	<ul style="list-style-type: none"> • Non-discrimination in financial sector • Financial institution employment equity • Community banks • Finance for informal and women-owned business • Transformation of South African Reserve Bank (transparency and accountability) 		<ul style="list-style-type: none"> • Access to finance (youth and women) • Funding housing assets • Funding for small business 	

Job creation	<ul style="list-style-type: none"> • Social security • Skills development • Affirmative action • Public Works Programme • Collective bargaining • Basic conditions of employment 	<ul style="list-style-type: none"> • Human resource development (South African Qualifications Authority) • Industrial training • Skills development 	<ul style="list-style-type: none"> • Empower women (agriculture and creative industries) • Expanded Public Works Programme • Skills development (youth and women) 	<ul style="list-style-type: none"> • Labour market reforms • UIF • Protect contract workers • Promote social economy • Youth brigades • Expanded Public Works Programme • Community Works Programme • Economic infrastructure development
Inequality reduction	<ul style="list-style-type: none"> • Affirmative action • Develop local government sphere • Youth development initiatives • Land reform 		<ul style="list-style-type: none"> • Secondary economy • Develop cooperatives • Finance housing market • Promote livestock programme • Land reform • B-BBEE (broad-based empowerment) 	
Social protection	<ul style="list-style-type: none"> • Social welfare system • Social security system 	<ul style="list-style-type: none"> • Promote partnership between government and welfare organisations 		
Education and training	<ul style="list-style-type: none"> • ECD • Compulsory education for age 7-15 years • Adult basic education • Distance learning for higher education • Special education 	<ul style="list-style-type: none"> • Restructuring and decentralising school management • A national qualification framework • Improve teaching profession • Build and renovate classrooms 	<ul style="list-style-type: none"> • Artisan training • Adult basic education • Umsobomvu youth fund, Dinaledi programme (maths and science schools), Quality Improvement, Development, Support and Upliftment Programme for Public Schools programme (improve literacy and numeracy), Joint Initiative for Priority Skills Acquisition 	<ul style="list-style-type: none"> • Research and development • Artisans' training • Funding for training • Internships for FET graduates • Improve SETAs • Improve performance of and intake to FET colleges • Adult basic education (ICT and upskill labour force) • Improve basic school system • Matric second chance programmes

Poverty alleviation	<ul style="list-style-type: none"> • Provision of basic services • Nutrition programme • Free primary health care 	<ul style="list-style-type: none"> • NGOs to contribute in poverty reduction especially in rural areas 	<ul style="list-style-type: none"> • Secondary economy • Water supply, road, energy distribution, housing and health infrastructure • Telecommunications 	
Economic infrastructure development	<ul style="list-style-type: none"> • Municipal Infrastructure Investment Framework • Transport infrastructure • Telecommunication • Electrification 	<ul style="list-style-type: none"> • Water, sanitation, housing, energy and social infrastructure (health and education) • Telecommunications 	<ul style="list-style-type: none"> • Water supply, road, energy distribution, housing and health infrastructure • Business centres, police stations, courts and correctional services • Telecommunications 	<ul style="list-style-type: none"> • Public infrastructure development • Energy, transport, water infrastructure • Telecommunications
Rural development	<ul style="list-style-type: none"> • Rural Development Strategy • Spatial development initiatives • Community workers • Land reform 	<ul style="list-style-type: none"> • Land reform • Agricultural support 		<ul style="list-style-type: none"> • Rural banking services • Stimulate agricultural value chains • Small farmer support • Education and skills development
Strong institutions	<ul style="list-style-type: none"> • Public service capacity 		<ul style="list-style-type: none"> • Public service capacity • Monitoring and evaluation • Regulatory impact assessments • Development finance 	
Public participation (public voice)	<ul style="list-style-type: none"> • Partner with civil society, NGOs, and community-based organisations 			

4.4 Chapter summary

It is evident that South Africa had many challenges pre-1994 including low rates of economic growth and high levels of unemployment, poverty and inequality. The RDP, formulated as a response to this, displays most of the elements of inclusive growth – from structural transformation and support for SMMEs to rural development and investment in economic infrastructure. It focused particularly on the agricultural, forestry and fisheries, manufacturing and mineral-energy sectors and employed the Public Works Programme as both a social welfare tool and vehicle for infrastructure development. It used land reform to address spatial inequalities and emphasised the need for enhanced investment in education and training. There was also a focus on ensuring inclusive governance.

GEAR prioritised economic mechanisms and macroeconomic strategies to promote growth while reducing the focus on social, spatial and governance inclusivity. The emphasis was on tightening the fiscal policy, controlling and managing inflation, expanding economic infrastructure to support industrialisation, and restructuring public services. It addressed poverty through educational reforms, social protection schemes and access to infrastructure, and addressed inequality through labour market reforms and financial liberalisation. It did not share the same focus as the RDP on financial inclusion, promoting participation in governance or spatial development inclusion.

AsgiSA's approach to economic growth focused on infrastructure development and investment in labour-intensive sectors, agro-processing and business process outsourcing, SMMEs and tourism. It addressed poverty and inequality through SMME development and funding, as well as the Public Works Programme and institutional skills transfer programmes. AsgiSA promoted structural transformation to bring about shared growth with an emphasis on supporting labour-intensive industries, supporting SMME development and financial inclusion for marginalised groups. There was an enhanced focus on monitoring and evaluation to promote good governance.

The NGP continued this focus on structural transformation and economic inclusion with an emphasis on infrastructure development and the promotion of key and new sectors, such as the green and knowledge sectors. It aimed to address spatial inequality through rural economic development and by improving access to finance for small-scale farmers and cooperatives. In addition, it proposed labour market reforms to enhance participation in and protection of the labour market. It also focused on improving the educational system, with the support of private partnerships.

Procurement was again noted as a promising vehicle for enabling access to previously marginalised groups, particularly youth, to the market.

AsgiSA and the RDP both considered financial inclusion a critical element, but there is uncertainty as to whether this has led to a shift in the reality of current financial access patterns. The focus on the Public Works Programme as a way of creating jobs and transferring skills in the RDP, AgsiSA and the NGP is perhaps misguided given the extent of its ability to create social mobility and the extent to which people take part in this programme and increase their incomes and participation in the economy over time is not clear.

All of the policies discussed in this chapter have focused on economic inclusion. They all promote job creation, growth and structural transformation and SMME development. But they, particularly GEAR and the NGP, do not pay enough attention to the themes of financial inclusion and inequality reduction. All policies also look at social issues, particularly poverty relief and education and training elements. But AgsiSA and the NGP, in particular, marginalise social protection as an element of social inclusivity. The policies cover aspects of spatial inclusion, such as economic infrastructure development and rural development, although less so by GEAR and AgsiSA. And while the policies do cover aspects of inclusive governance, they tend to ignore the important element of active public participation.

It is evident from this analysis that South African economic policy post-1994 has prioritised elements in the economic inclusion category over those in the environmental category, creating an imbalance between inclusive and green factors. Elements from the social inclusion category are present in all policies, although dominated by education and training. The policies tend to ignore, however, the impact of poverty on the ability to access education and training. All of the categories and themes identified in the IGG framework are connected and so equally important. This review of the country's post-1994 grand economic policies indicates a significant imbalance in prioritisation and intervention in the economic, social, environmental, spatial development and governance dimensions.

Chapter 5: Research findings and NDP analysis with IGG lens

5.1 Introduction

The purpose of this chapter is to present and analyse the study's findings. The chapter responds to the research question of whether the NDP's approach to economic growth displays the IGG characteristics identified in the literature. It focuses primarily on the elements of economic and environmental inclusion. The chapter presents an overview of the NDP, discusses economic and environmental inclusion and presents and analyses the themes that make up the pillars of the IGG conceptual framework.

5.2 Overview of policy frameworks

5.2.1 International policy framework

In 2000, 180 UN-member countries met to discuss global challenges and ways to overcome them. These challenges included poverty, food insecurity, inequality of different types and climate change (UN, 2015). This meeting resulted in the formation of the MDGs – eight goals that aimed to overcome these challenges by 2015 (UN, 2015). Based on the successes and lessons learned from the process of working towards MDGs, the UN released a new set of 17 goals in 2015 – the SDGs, which aimed to end poverty and inequality by 2030 (UN, 2015).

The goals relevant to this research are illustrated in table 5.1. They were selected based on their linkage to issues of inequality, poverty and inclusive economic growth. They cover many of the aspects relevant to an IGG path, such as economic inclusivity, including structural transformation and job creation, and social inclusivity, including poverty reduction.

Table 5.1: SDGs relevant to the pursuit of an IGG path

SDG aims	Relevant targets
<p>SDG 1: Eliminate poverty in all its forms everywhere by 2030</p> <p>The related MDG had met its goal of halving the number of people living in poverty by 2015, but about 800 million people still live in extreme poverty.</p>	<ul style="list-style-type: none"> • Target 1.b: Implement sound policy frameworks at the international, regional and national levels based on pro-poor and gender-sensitive development strategies. • Target 1.4: Ensure that all people, especially the vulnerable and poor, have equal rights to economic resources as well as access to ownership and control over land and other forms of economic assets, such as appropriate new technologies and financial services, specifically microfinance.
<p>SDG 8: To promote sustained, inclusive and sustainable economic growth that will result in full productive employment and decent work for all by 2030</p> <p>Despite gains made by the associated MDG, economic growth has not been able to absorb an ever growing labour force.</p>	<ul style="list-style-type: none"> • Target 8.2: Grow the productivity of economies through technological upgrading, diversification and innovation, with an enhanced focus on supporting value-added and labour-intensive sectors. • Target 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and that encourage formalisation and growth of SMMEs, including through enabling access to financial services. • Target 8.4: Promote resource efficiency in production and consumption and make sure that economic growth is significantly decoupled from environmental degradation. • Target 8.6: Substantially reduce the proportion of youth not in employment, education or training by 2020.
<p>SDG 10: To reduce inequality within and among countries by 2030</p>	<ul style="list-style-type: none"> • Target 10.2: Empower and promote the economic, social and political inclusion of all irrespective of gender, age, race, origin, disability, ethnicity and economic status. • Target 10.3: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and actions. • Target 10.4: Adopt policies, especially economic and social protection policies, that aim to progressively achieve greater equality.

Source: UN, 2015

5.2.2 Regional policy framework

The African Union released *Agenda 2063: The Africa we want* report in 2015 with seven aspirations for the continent. These aspirations provide a cornerstone for African development to 2063. The aspirations relevant to this research are discussed briefly below (African Union Commission, 2015):

- **Aspiration 1:** By 2063, Africa's prosperity will be based on inclusive growth and sustainable development. The continent will be capacitated to shape its own development path, and undertake sustainable stewardship of its resources. African economies will be able to create shared growth and decent employment, as well as enabling economic opportunities for all its people. The continent aspires to perform well in global quality of life measures by practicing strategies of inclusive growth, growing agricultural production and investing in science and technology, as well as research and innovation. Africa aims to provide basic services to all its people, empower its youth and promote gender equality (African Union Commission, 2015:2).
- **Aspiration 6:** Development on the continent will be driven by its people who will be actively involved in decision making. No-one shall be left behind regardless of age, gender, political or religious affiliation or locality. Special attention shall be paid to empowering women, including ensuring the rights to sign contracts, register businesses and own and inherit property. A particular focus will be placed on ensuring that rural women have access to productive assets and that youth are able to access education and skills development, as well as the financial resources to enable them to realise their potential (African Union Commission, 2015:8).

These African Union aspirations aim to generate inclusive growth and support sustainable development. The focus on creating shared growth and encouraging the participation of the people in the development process is key and is aligned to the IGG framework.

5.2.3 Domestic policy framework

South Africa is following an unsustainable energy-intensive economic growth path based primarily on maximising economic growth as measured in terms of GDP, particularly through mining, manufacturing and agricultural activities. In the context of climate change, the challenge for South Africa is to develop and implement robust mitigation and adaptation measures to steer the country onto an internationally competitive economic trajectory (UNECA, 2015). The developmental and environmental challenges facing South Africa offer opportunities for promoting IGG and the transitioning to a green economy (UNECA, 2015).

South Africa hosted the Green Economy Summit in 2010 and has made a number of efforts to promote a green economy. The NDP acknowledges environmental concerns and dedicates a chapter to plans and strategies for building a low-carbon economy.

South Africa has a *National Sustainable Development Strategy* and an action plan, which was approved in 2011. There are also sectoral policies, included the Department of Energy's *Integrated Resources Plan*, the Department Of Science And Technology's *10-year Innovation and Global Change Research Plan*, the Department of Economic Development's *Green Economy Accord*, and DEA's *National Climate Change Strategy* and green economy model (UNEP, 2015).

In 2012, DEA established the Green Fund as an instrument to finance South Africa's transition to a green economy. It is administered by the Development Bank of South Africa with an R800 million initial allocation. The bank's role is to facilitate investment in green initiatives and support job creation and poverty reduction. The Green Fund promotes initiatives and programmes that reinforce climate change objectives and innovation for a green economy. Its focus is on green cities and towns, a low-carbon economy and environmental and natural resource management (UNEP, 2015).

At the provincial level, the Western Cape Province has developed a green economy agenda through its *Green is Smart Strategic Framework*. Limpopo Province crafted a *Green Economy Plan* in 2013 and KwaZulu-Natal Province has a *Green Economy Strategy* (UNEP, 2015). At the local government level, a number of plans have been formed to promote the greening of the economy and growth. These plans are mostly found within the metropolitan municipalities, such as the City of Cape Town, City of Johannesburg and City of Tshwane. These plans include the (UNEP, 2015):

- City of Johannesburg's *Integrated Waste Management Plan* (2011).
- City of Cape Town's *Public Environmental Awareness, Education and Training Strategy* (2011) and its *Information and Guideline Document on the Implementation of Green Procurement* (2012).
- City of Tshwane's *Green Economy Strategy* (2014).

Government established a state-funded National Cleaner Production Centre in 2002 to "promote the implementation of resource efficiency and cleaner production methodologies" to help industry lower costs (Council for Scientific and Industrial Research [CSIR], n.d.:1). The centre is a member of the UN Industrial Development Organisation and plays a role in the African Roundtable on Sustainable Production and Consumption (CSIR, n.d.). Companies such as Pick and Pay and Woolworths have developed and implemented programmes with the centre (UNEP, 2015).

South Africa faces a significant challenge in shifting the resource-intensive nature of its economy, which will require significant levels of capacity development and enhanced leadership by government and business (UNEP, 2015).

5.3 A context of poverty, unemployment and environmental degradation

South Africa has adopted several overarching development plans since 1994 in efforts to create a just society. These economic policies have not, however, resulted in inclusive and transformative growth. This section provides a high-level overview of the current state of poverty, inequality and environmental degradation in the country.

5.3.1 Poverty and unemployment

While some progress has been made in reducing poverty levels, both in monetary terms and multi-dimensional forms of deprivation, table 5.2 illustrates poverty rates and numbers in South Africa between 2006 and 2015, which are the latest figures available.

Table 5.2: South African poverty rates and numbers (2006–2015)

Year	No of people living in extreme poverty (below FPL) – official (number)	Population living below FPL – official (rate)	Number of people living below UBPL – (number)	Population living below UBPL – (rate)	Number of people living below LBPL – (number)	Population living below LBPL – (rate)
2006	13,4	28,4%	31,6	66,6%	24,2	51,0
2009	16,7	33,5%	30,9	62,1%	23,7	47,6
2011	11,0	21,4%	27,3	52,2%	18,7	36,4
2015	13,8	25,2%	30,4	55,5%	21,9	40,0

Key: FPL – Food poverty line; UBPL – Upper-bound poverty line; LBPL – Lower-bound poverty line

Source: Adapted from Stats SA, 2018

About 25.2 percent of people were living below the food poverty line in 2015; 40 percent were living below the lower-bound poverty line and 50 percent were living below the upper-bound poverty line – most lived in South Africa's rural areas (World Bank, Department of Planning, Monitoring and Evaluation & Stats SA, 2018).

South Africa's unemployment rate has averaged above 20 percent for the past two decades. The table below indicates the official and expanded unemployment rates from 2005 to 2019.

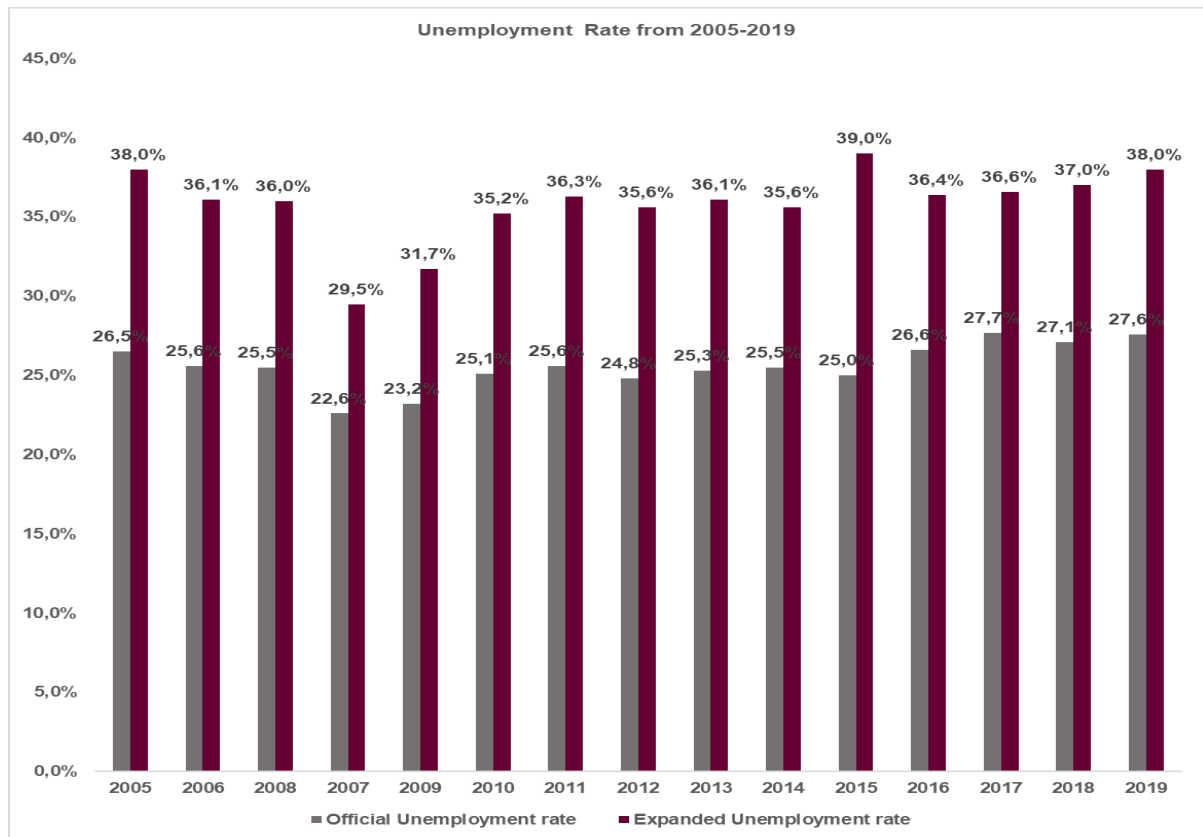


Figure 5.1: Unemployed South African population (2005–2019)

Source: Stats SA, 2019b

The 2019 unemployment rate is 27 percent but reaches 38 percent when discouraged workers are included (Stats SA, 2019b). More than 5 million of the economically productive population are not employed; about 9 million if discouraged workers are counted (Stats SA, 2019b). The composition of the primary, secondary and tertiary sectors has changed drastically since 1994 as has their contribution to employment and growth. The finance, trade, construction and community services sectors have contributed more to employment than other sectors. This shift, particularly as regards the services sector, has resulted in more demand for skilled than unskilled labour (OECD, 2015).

5.3.2 Economic inequality

Economic inequality has remained high despite numerous government interventions. Figure 5.2 below indicates the country's Gini-coefficient from 2000 to 2014. These are the latest available figures.

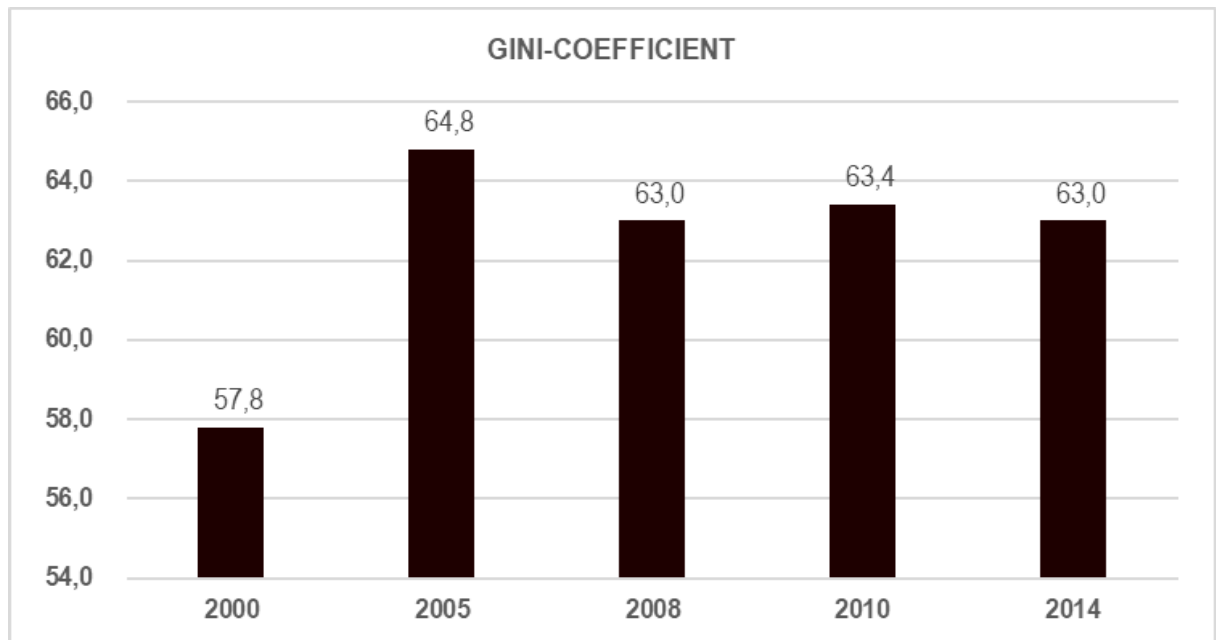


Figure 5.2: Gini-coefficient in South Africa (2000–2014)

Source: Stats SA, 2018

The Gini-coefficient of South Africa was 0.63 in 2014, which is the highest within OECD countries (OECD, 2015). The Gini-coefficient was 0.56 in 1995, increased to 0.73 in 2006 then declined to 0.69 in 2011 – it is assumed that this decline was due to an increase in social grant spending by the state (OECD, 2015). Wealth in the country is significantly more unequally distributed than incomes, with an estimated 0.95 Gini-coefficient of wealth income (Orthofer, 2016). The top 10 percent of the wealthiest people accrue 51 percent of the country's national income, while the bottom 20 percent of the poor receive only 1 percent (Orthofer, 2016). Wealth still predominantly resides with the white population in South Africa (Marias, 2011). Although this indicates that inequality is aligned with racial demographics, inequality within racial groups is growing, as is class inequality (Marais, 2001).

Economic growth in South Africa is also spatially concentrated in specific provinces, and cities. Figure 5.3 indicates this spatial economic inequality using the GDP rates of the nine provinces.

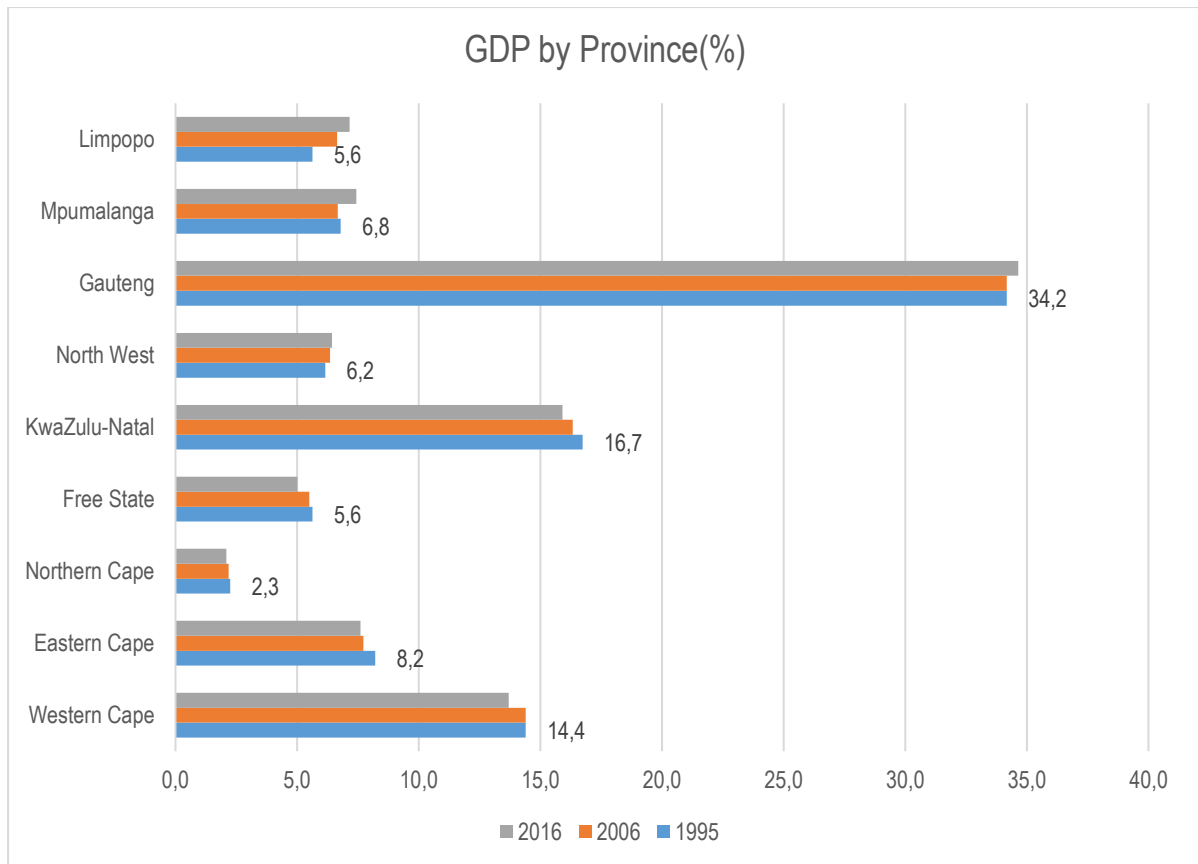


Figure 5.3: GDP by province as a percentage of South Africa's GDP

Source: Stats SA, 2016a

There are substantial inequalities in the spatial distribution of economic output on the provincial level, with most of the predominantly rural provinces collectively contributing a significantly lower amount in terms of GDP (Mkhize & Hamadziripi, 2010). Gauteng has historically been the most productive, followed by KwaZulu-Natal and the Western Cape. Regional income inequalities have risen accordingly with growth concentrated in the cities of these three provinces (OECD, 2016c), which has also driven growth in urban poverty levels as people migrate to the cities in search of opportunities. This trend has been supported by globalisation and trade liberalisation, which enables foreign direct investment that perpetuates the generation of benefits in some regions and not in others (Nel & Rogerson, 2009).

5.3.3 Environmental degradation

South Africa also faces significant environmental challenges, particularly around water availability and biodiversity loss, which has placed pressure on land resources. The total land area of South Africa is 127 million hectares of which 82 percent (100 million hectares) is arable land (DEA, 2016). Only 14 percent of agricultural land (14 million hectares) receives sufficient rainfall for non-irrigated crop production (DEA, 2016).

South Africa also faces significant challenges as regards water quality caused by industrial activities that produce chemical waste (DEA, 2016). The impacts of climate change are already being seen in South Africa, and are projected to intensify over the coming decades. These impacts vary across the country, but are expected to include changes to long-term temperature and rainfall patterns and more frequent and severe extreme weather events, including floods and droughts (DEA, 2016).

South Africa needs to address its environmental challenges, including energy shortages, ineffective waste management and biodiversity loss, in parallel with its social and economic challenges. Transitioning to a green economy will enable the country to do this and, in the process, reshape the labour market by creating demand for different type of skills and new job opportunities (ILO & OECD, 2012). The green economy offers a significant opportunity to overcome poverty and inequality by creating more and better jobs (UNFCCC, 2011).

5.4 Analysis of the NDP

5.4.1 An overview of the NDP

President Jacob Zuma established the NPC in 2010 to produce a diagnostic report on South Africa's shortcomings and achievements since 1994. The commission, chaired by Trevor Manuel, comprised individuals from government with diverse areas of expertise. As a result of the commission's work, the NDP was introduced in 2012.

The NDP aims to reduce poverty and inequality by 2030 through a number of interventions, including stimulation of the economy (NPC, 2012). The plan's central goals are to expand employment and entrepreneurial opportunities on the back of a growing, more inclusive economy (NPC, 2012). The NDP aims to increase the nation's GDP to 5 percent in 2019 with growth stabilised at 4.5 percent by 2030 (NPC, 2012). It also aims to reduce the country's official unemployment rate to 14 percent by 2020 and 6 percent by 2030 by growing the number of people working, especially in rural areas, from the current 20 percent to 30 percent in 2019 and 40 percent by 2030 (NPC, 2012) There is an ambitious plan to eliminate income poverty by 2030 by reducing the proportion of households with monthly incomes below R419 a month per capita from 39 percent to zero, as well as reducing the Gini-coefficient from 0.68 to 0.60, see table 5.3 below (NPC, 2012).

Table 5.3: NDP goals: status, targets and difference (2012)

Factors	Current status	Targets	Difference
Grow GDP	1.5 percent average	5 percent	3.5 percent increase
Reduce unemployment	25 percent average	14 percent (2020) 6 percent (2030)	11 percent (2020) 19 percent (2030)
Lower the Gini-coefficient	0.68	0.60	0.8
Eliminate income poverty	39 percent (households with a monthly income below R419 per person)	0 percent	39 percent

The structure of ownership and control of means of production inherited from the apartheid era still reproduces inequalities. There are extreme backlogs in investment in historically black communities in both household and economic infrastructure and in government services like education and healthcare (NPC, 2012). This aligns with the traditional causes of inequality identified in the literature review (Carter, 2004; Cornia, 2004; Checchi, 2014).

The NDP notes the intent to deal with inequality by ensuring that skilled, technical, professional, and managerial posts better reflect the country's racial, gender and disability makeup and that ownership of assets is broadened to historically disadvantaged groups (NPC, 2012). This also aligns with the literature that notes that improving access to and the quality of education and skills development contributes to reducing inequality, as well as enabling access to ownership of land (Carter, 2004; Keeley, 2015; Dabla-Norris *et al.*, 2015).

5.4.2 Economic inclusion

The framework developed in chapter 4 identifies the following themes relevant to economic inclusion: structural transformation, small business development, job creation and financial inclusion and inequality reduction. Table 5.4 illustrates the alignment of the NDP's chapter 3 with the themes of the IGG framework. A fuller list of themes and codes can be found in addenda A. They have been condensed to avoid duplication in this table.

Table 5.4: Elements of economic inclusivity in the NDP

	Themes	Growth and structural change	Small business development	Job creation	Income inequality	Financial inclusion
Codes						
Labour-absorbing sectors		■				
Pace of growth		■				
Entrepreneurship support			■			
Innovation			■			
Employment				■		
Income distribution					■	
Funding start-up			■			
Self-employment				■		
Economic participation					■	
Business finance						■
Informal sector		■				
Equality of opportunity					■	
Access to credit						■
Microfinance						■
Financial literacy						■
Financial institutions placed in remote areas						■
Youth, rural and women financial services						■
	■	■	■	■	■	■
	Chapter dedicated to theme/code	Section dedicated to theme/code	Paragraph/s on theme/code	A few lines on theme/code	A few words on theme/code	

Table 5.4 indicates that the NDP's chapter 3 is primarily focused on growth and small business development. The pace of growth to be stimulated by supporting labour-absorbing sectors that would create jobs and implementing regulatory mechanisms. Small business development was be promoted by providing support for entrepreneurial activity and investing in innovation. It places a secondary importance on measures to enable access to business finance, start-up funding, support for self-employment and economic participation.

There is even less emphasis on the informal sector, despite this being highlighted as a priority sector or on enabling equality of opportunity. Very little attention is paid to growing financial literacy, providing access to financial institutions in rural areas, enabling access to credit or ensuring that rural people, women and youth can access financial services.

The sections below discuss these themes within economic inclusion in more depth.

5.4.2.1 Structural transformation

The literature indicates that the pace and pattern of growth should be broad based with balanced productivity across labour-intensive and absorptive sectors (de Mello & Dutz, 2012); this includes SMMEs and informal sectors that have the potential to improve productive employment (Lanchovichina & Lundström, 2009). It further notes that a focus on implementing structural reforms of the agricultural and industrial sectors can result in expanded or new value chains and diversification of goods produced (Ali & Zhuang, 2007; Anand *et al.*, 2013; Aoyagi & Ganelli, 2015). Both manufacturing and agriculture can be greened through a focus on environmentally sustainable production methods (ILO & OECD, 2012; Altenburg & Assmann, 2017). Within an IGG framework, agriculture and the informal sectors are viewed as key (Chang, 2014), mostly because of the close links between these sectors and natural resource use (UNDP, 2014; IIED, 2016). The aim is to create jobs and reduce poverty by including the lower skilled and marginalised population in the production process of growth (Anand *et al.*, 2013; Aoyagi & Ganelli, 2015).

The NDP proposes the following solutions for growing the economy and creating jobs: growing investment, particularly in infrastructure development; supporting productive growth; growing exports and employment; and addressing the spatial divide, raising the social wage and investing in skills and human development (NPC, 2012). It also emphasises the role of labour-absorbing industries (SMMEs, services sectors and domestic-orientated activities, such as hairdressing, office cleaning and repair services). The NDP aimed to support these through regulatory reform, uptake of private-private procurement processes and the promotion of market competitiveness (NPC, 2012).

The focus on productive growth emphasises the sectors that align with the IGG framework. These are agriculture, manufacturing, SMMEs and the green economy.

While the NDP does mention the green economy as a sector with the potential to grow the economy and create employment, it provides more coverage on this in the environmental chapter than in chapter 3 focused on the economy.

It places more emphasis on promoting international trade by growing exports, improving labour markets and increasing private investment (NPC, 2012).

5.4.4.2 SMME development

The NDP prioritises SMME development and outlines five primary channels for supporting this sector. These include skills development, access to debt/and equity funding, small business support, regulatory environment and public-private procurement (NPC, 2012). This strategy is supported by literature that notes that public procurement can be used to promote green products and services (de Serres *et al.*, 2010; UNEP, 2012).

The plan also emphasises business finance as a key factor, but while it stresses the need for SMMEs to access funding, it does not elaborate on the direction or extent of such funding. It rather notes that the private sector should provide support to SMMEs and support franchising models, which typically have lower failure rates (NPC, 2012). The NDP highlights the importance of development finance and the role of the National Empowerment Fund in financing industries and entrepreneurs (NPC, 2012).

The NDP's focus on close collaboration with schools and TVET colleges does align with the literature that notes that higher education institutions play an important role in SMME development acting as information hubs, network platforms and research and development spaces to motivate and induce entrepreneurship (OECD, 2016a). The IGG framework notes that marginalised groups should benefit from start-up funding, while those already in business should benefit from funding for expansion and growth. The literature notes the importance of policies that address the barriers to market and entrepreneurial activity for marginalised groups, particularly women and youth as these are key levers for inclusive growth (de Mello & Dutz, 2012; OECD & European Union, 2017). The NDP emphasis on addressing the regulatory environment will support this need.

The IGG framework notes that support for SMMEs taking on green activities will create new services, industries and markets, which can create employment (infoDev, 2014; Altenburg & Assmann, 2017; ILO, 2015). But the NDP does not focus much on the linkages between the green economy and small business development.

The literature notes that small business support services should be accessible to women and rural communities to enable access to the resources and business skills necessary to start and run businesses (European Union, 2017).

There is, however, no explicit detail on the mechanisms necessary to support rural businesswomen to access business skills and induce innovation and entrepreneurship within marginalised groups, such as the unemployed, youth, women and discouraged workers in rural areas.

5.4.4.3 Financial inclusion

Financial inclusion is defined as the provision of financial services to marginalised groups, labour-intensive sectors and small business (Pal, 2014). Financial inclusion increases productive investment in education, business and economic assets; more particularly, it is gender empowering and able to reduce income inequalities (Rao, 2009; Pal, 2014). The literature notes that the marginalised must be considered in the broadening of access to financial services and that both government and the private sector must broaden business lending and access to working capital (Banaras Hindu University, 2011; Mohammed *et al.*, 2017). The financial sector has an important role to play in contributing to inclusion and economic transformation by broadening access to banking services, especially credit, and promoting a savings culture (Tita & Aziakpono, 2017).

The NDP does note that development finance should play an investment role in the industrial, agriculture, infrastructure and housing sectors because they are central to growing the economy and creating jobs (NPC, 2012). It also notes that the National Empowerment Fund will enable black-owned SMMEs to access finance and other enterprise support (NPC, 2012).

The NDP does not, however, detail the extent of mechanisms or method of implementation for lending to SMMEs and enabling access of banking services to the poor. It also does not emphasise the need to bring financial services to rural communities and businesses, nor does it stress the need for enhancing financial literacy of the financial services and products available. The role of the financial sector in stimulating economic growth and supporting green industries does not get enough attention in the document.

5.4.4.4 Job creation

South Africa's unemployed population is mostly unskilled with a secondary school education and they are based in rural provinces and cities and are mostly female (Stats SA, 2018).

According to the literature reviewed, job creation should respond to the available skills in the labour force to avoid mismatch of skills (Pal, 2014). Job strategies therefore need to absorb semi-skilled and unskilled labour from formal and informal sectors (Chang, 2014; Fourie, 2014).

Inclusive growth literature notes the importance of stand-alone job strategies that are not merely elements of economic growth strategies. The NDP, however, views job creation as an element of economic growth. It discusses the importance of labour-intensive sectors, a conducive environment, competitive business for exports, improved government capacity and mobilisation of stakeholders as important elements for employment creation. Sector strategies include the promotion of agro-processing and manufacturing, as well as retail and service sectors, tourism and culture and minerals and metal sectors (NPC, 2012).

5.4.4.5 Inequality reduction

The NPD recognises that the apartheid regime restricted participation in the economy for most of the population resulting in the current skewed economic structure. Its approach to overcoming inequality is multidimensional and addressed in different chapters.

Chapter 3 focused on the economy notes the multiple acts and policies put in place to address inequality, including the Employment Equity Act (1998), Skills Development Act (1998), the land reform policies and the B-BBEE Act (2003) (NPC, 2012). The B-BEE Act aims to benefit the marginalised by increasing the number of black people in control of productive assets and in management of companies. A range of policies and B-BBEE charters and scorecards exist to support this, as well as several preferential procurement and skills development initiatives (NPC, 2012). The NDP acknowledges that this policy has not brought about the desired changes because marginalised groups lack the capital to access ownership in major parts of the economy.

Factors important for promoting equal opportunities include equal access to basic services, health and education. Equal access to quality education and skills training are critical for reducing poverty and inequality levels. Where necessary, financial support must be provided for poor students (Sørensen, 2006; Ali & Zhuang, 2007).

The NDP, in chapter 9, echoes the importance of education and of providing equal opportunities. It also notes the need to build a high level of relevant skills to transition to a low-carbon economy (NPC, 2012).

Chapter 6 on land reform highlights the importance of redressing unequal access to land in the country and the need to create inclusive rural areas (NPC, 2012). The literature notes that uneven land ownership patterns result in unequal access to income (Carter, 2014; Checchi, 2014). Land reform has been slow in South Africa.

The 1994 target was to redistribute 30 percent of land within five years, but by 2011, only 11 percent had been redistributed (NPC, 2012).

Chapter 15 addresses the aspects of equal opportunity, inclusion and redress noting that success in life should be dependent on individual choices, talents and efforts and not on circumstances at birth (NPC, 2012). This aligns with the equity of opportunity literature that states that place of birth, race, gender, family, and social and economic circumstance should not determine one's success in life (Sørensen, 2006; Singh, 2010). The NDP has addressed the traditional causes of inequality, that is land ownership patterns, human capital inequalities and rural-urban divide; however, modern factors such as the impact of the financial market and the increase of non-wage income (dividends, rents, shares) in the economy – wealth inequality – are not addressed.

5.4.3 Social inclusion

The social inclusivity dimension includes the themes of “social protection”, “education and training”, and “poverty alleviation” along with codes identified in the literature review. Table 5.5 outlines the alignment of the NDP with IGG elements.

Table 5.5: Elements of social inclusion in the NDP

	Themes	Social protection	Education and training	Poverty reduction
Codes				
Access to education				
Access to health				
Cash transfers/grants				
Social spending				
ECD				
Skills development				
TVET				
Provision of basic services				
Food security				
Equal education				
Chapter dedicated to theme/code	Section dedicated to theme/code	Paragraph/s on theme/code	A few lines on theme/code	A few words on theme/code

It is evident that the NDP gives sufficient attention to poverty reduction. Education and health have chapters dedicated to them with substantive sections discussing plans for education and training. It also addresses social protection, with elements discussed in many chapters. These are discussed in greater depth below.

5.4.3.1 Social protection

Social protection encompasses social insurance, conditional cash transfers, social spending, inclusive social policy and inclusive fiscal policy. The NDP views social protection as the responsibility of the state, business, community organisations, labour and broader society (NPC, 2012). It notes that social protection should follow a developmental agenda, which is transformative, promotive, preventative and protective (NPC, 2012). It should support economic development and expand the poor's consumption patterns by enabling access to social and economic opportunities (NPC, 2012). It should be transformative by addressing inequalities and vulnerability through appropriate regulation and policies (NPC, 2012). It should be promotive by growing people's capacity to actively participate in the economy and in social life (NPC, 2012). It should be preventative in that it mitigates vulnerability resulting from natural, economic or social disasters (NPC, 2012).

Lastly, it should be protective by reducing levels of deprivation (NPC, 2012). This coincides with Kanbur's (2008) thinking that well-designed and sustainable long-term social protection strategies are necessary.

Chapter 11 on social protection notes the need to build opportunities and structures that will help develop individual capacity to participate in productive employment, the broader economy and in social life (NPC, 2012). Social protection mechanisms would focus on all areas of vulnerability including food insecurity and malnutrition (NPC, 2012), as well as labour market vulnerability caused by "the nature of their jobs, low income levels and unemployment" (NPC, 2012:354).

The NDP views employment as the most effective social protection measure, particularly given the high levels of unemployment in the country, which hinders poverty alleviation. In addition, the country's youth bulge results in a "high dependency ratio because the majority of the working-age population is not in employment" (NPC, 2011:364). As Ali and Zhuang (2007) and the Asian Development Bank (2011) note, safety nets can be in a form of labour market policies and child protection programmes.

In response, the NDP proposed the escalation of the Public Works Programme and the expansion of employment services to help create jobs and to help the unemployed find jobs, as well as develop their skills (NPC, 2012).

Mechanisms providing social protection to the unemployed include the UIF and the Compensation of Occupation Injuries and Disease Act (COIDA) (1993). COIDA provides income support to those people that have contracted an occupational disease or been injured at work (NPC, 2012). The UIF provides financial support to those who have contributed to the fund while working; it therefore only reaches 5 percent of the population (NPC, 2012). The NDP notes that the design of this fund should be restructured to accommodate skills development and enable access to contract or informal employment opportunities, and support SMME development (NPC, 2012).

One of the gaps in social protection is the deficiencies in providing the unemployed working age population with active assistance that promotes employability and adaptability, as well as creating incentives to work and absorb the unemployed through various active labour market policies. For those who are able to work, the right to work would provide a means to improve their standard of living. (NPC, 2011:361)

The literature notes that social policy needs to work with economic policy to address poverty and inequality. This aligns with the social investment approach to development (World Economic Forum, 2017).

Social protection should extend from birth to retirement (Fleischer *et al.*, 2018). This poses a challenge for South Africa though as the sustainability of social protection is dependent on the availability of funds and the effectiveness of the funding system (NPC, 2012). There is significant pressure on this system in South Africa because high levels of unemployment leave many dependent, with far fewer people able to contribute (NPC, 2012). Sustainability of the system therefore depends on growing employment opportunities (NPC, 2012).

5.4.3.2 Education and training

The second theme is education and training and encompasses skills development, ECD, equal educational opportunities and TVET. Skills development and education are primary drivers in building human capital and promoting inclusiveness (Lanchovichina & Lundström, 2009; Pal, 2014; Alexander, 2015).

The NDP focuses on education and training opportunities from ECD to adulthood. The goal is to enable access to quality education and training for all people to enable them with equal opportunity to lead the lives they aspired to, and to help build an inclusive society (NPC, 2012). The plan prioritises ECD and recommends expanding its scope considerably to make ECD compulsory for children aged between 2 and 5 years of age, standardising guidelines for practitioners, investing in training, encouraging innovation and increasing funding for this sector (NPC, 2012).

The goals set for basic education are to improve literacy, numeracy and science outcomes, grow the number of learners with maths and science degrees, and increase the learner retention rate (NPC, 2012).

Educational opportunities are to be provided through universities, TVET colleges and adult basic education and training facilities (NPC, 2012) The plan also recommended providing support for universities to enable them to hire more qualified staff, grow the number of PhD graduates and foster a research and development culture (NPC, 2012).

This is in line with inclusive growth measures, which use education and skills development as indicators (McKinley, 2010; Asian Development Bank, 2011). Other studies highlight that investment in green skills development is necessary for a green transition and the creation of green jobs (UNFCCC, 2011). The NDP places relatively little emphasis, however, on green skills or the skills necessary for a low-carbon economy.

5.4.3.3 Poverty alleviation

The third theme of poverty alleviation encompasses access to health, education and basic services, as well as reducing food insecurity, exclusion, deprivation and vulnerability. The NDP notes training and skills development as a tool that can prevent vulnerability arising from unemployment. It proposes that the Expanded Public Works Programme should target beneficiaries from low-skilled unemployed groups and that youth with a Grade 12 qualification should benefit from the incentives provided to the private sector to provide workplace training, thus enabling them to access higher paying jobs (NPC, 2012).

The NDP identifies food and nutritional security as a priority, locating it above income security. It notes that social protection should ensure that people are food secure, with a particular focus on the food and nutritional security of pregnant mothers to promote infant health and decrease child vulnerability (NPC, 2012). It also prioritises dealing with undernutrition in rural and urban areas. These are factors responding to poverty reduction as stipulated by the IGG framework. The NDP suggests a household food strategy, among others, to improve nutrition and the strengthening of policies that promote uptake of school feeding schemes (NPC, 2012).

5.4.4 Environment inclusion

The NDP highlights six steps to be taken to realise the vision of environmental suitability, and outlines guiding principles for a transition to a greener economy. Figure 5.4 illustrates the guiding principles to be used in such a transition.



Figure 5.4: Guiding principles for the transition

Source: NPC, 2012: 200

These guiding principles indicate that the transition should be just, transparent and opportunity focused.

The six steps are described below (NPC, 2012):

- **Sustain ecosystems and use natural resources efficiently.** This step refers to the ecosystems that provide cultural, supporting, regulating and provisioning services. Actions include conserving and rehabilitating natural assets, strengthening planning and efficient management of natural resources, reducing the carbon footprint through carbon taxation and other measures, and promoting clean energy sources, such as solar and wind.
- **Build sustainable communities.** This entails developing efficient public transport systems, adopting a holistic approach to low-cost housing, ensuring compliance with green building regulations, and enhancing waste management systems. It also implies developing consumer behavioural strategies to conserve water and electricity.

Other measures include providing support to institutions focused on conservation and rehabilitation and finding ways to replicate this work, and including sustainable development indicators in development processes.

- **Undertake effective mitigation against climate change.** This includes the promotion of local manufacturing of green technologies that will feed into the renewable energy and clean technology sectors. South Africa's emissions are mostly from the energy sector, transitioning to renewable energy will therefore play a key role in mitigation efforts. Changing the energy ratio to include renewables and gas is key. The carbon tax system will be used to promote environmental sustainability with the revenue generated invested in green sectors, research and development, and incentives for improving vehicle efficiencies. The plan notes that South Africa aimed to be an early adopter in the mitigation space to enjoy a competitive advantage in this sector.
- **Adopt an adaption approach.** This country's approach to adaption includes strengthening economic and societal resilience. This is to be done by decreasing poverty and inequality levels, creating employment, improving health care, growing levels of education and skills development and maintaining the integrity of ecosystems. The plan notes this will require robust policies and investment in research to identify appropriate adaptation measures. The National Research Foundation, Agricultural Research Council, Water Research Commission and the National Disaster Management Centres were to play an important part in this process.
- **Manage a just transition.** This transition should be just in that it must protect the marginalised and poor from transitioning costs associated with mitigation strategies. These costs could include increased costs of energy, food and transport, as well as job losses from carbon-intensive sectors. South Africa will have to consider public infrastructure investment that will assist in the decoupling process, including new power stations. All investment decisions related to infrastructure should account for the long-term impacts of mitigation and adaptation interventions.
- **Enhance government systems and capacity.** Government should build capacity, strengthen departments, and align national skills development strategies with climate change.

The transition was envisioned in two phases. Phase one to start in 2015 focused on piloting, planning and investing and phase 2 from 2020 focused on implementation.

Environmental inclusivity encompasses the themes of “green industries”, “natural resource management”, “green finance” and “green skills & green jobs” with accompanying codes. Table 5.6 provides an overview of the NDP’s alignment with these elements of an IGG path.

Table 5.6: Elements of environmental inclusivity in the NDP

Themes	Green industries	Natural resource management	Green finance	Green skills and green jobs
Codes				
Climate change		■		
Environmental degradation		■		
Efficient use of natural resources		■		
Renewable energy	■			
Waste sector	■			
Green construction	■			
Green manufacturing	■			
Mitigating greenhouse gas emissions		■		
Carbon tax			■	
Sustainable finance			■	
Sustainable procurement	■			
Skilling for green jobs				■
Promoting green jobs				■
Low-carbon transport systems	■			
Chapter dedicated to theme/code	Section dedicated to theme/code	Paragraph/s on theme/code	A few lines on theme/code	A few words on theme/code

According to the content analysis, the NDP places the most emphasis on the need to address climate change, environmental degradation and promote the efficient use of resources. While it places an emphasis on green industries, it neglects to give the necessary detail on green finance and green jobs and skills.

5.4.4.1 Green industries

The NDP notes that government would promote the *Integrated Resource Plan* and support the renewable energy sector, through carbon pricing mechanisms and encouraging private investment (NPC, 2012). It would also market and produce goods and services to promote job creation, especially in the renewable energy section (NPC, 2012).

This aligns with the literature that notes that investments must be directed to economic sectors that build on and enhance natural capital or that reduce ecological scarcities and environmental impacts (Pegels, 2015). These sectors include renewable energy, low-carbon transport, energy-efficient buildings clean technologies, improved waste management, provision of safe and fresh water, and sustainable agricultural, forestry and fisheries sectors (Pegels, 2015). The NDP focuses on most of these, but does not accord low-carbon transport equal consideration. It highlights the ability of expanding recycling infrastructure under the *National Waste Management Strategy* to also boost economic activity in poor, urban communities (NPC, 2012). And that investments in the forestry sector could also generate environmental benefits through the re-establishment of natural plant cover (NPC, 2012). The NDP does make a linkage between green investments and job creation and the reduction of levels of poverty and inequality (NPC, 2012). It notes in chapter 5 that small businesses should be able to capitalise on the green industrialisation process, particularly in the waste management sector, and grow, thus creating jobs (NPC, 2012).

There is an acknowledgement that trade-offs are inevitable, and that care must be taken in the design of the transition to a green economy to balance the effects of a decline in activity from energy-intensive activity by concurrently growing opportunities in green sectors (NPC, 2012).

5.4.4.2 Natural resource management

South Africa's environmentally related vision for 2030 is to reduce the country's dependency on carbon, natural resources and energy, while also making sure that the transition grows employment and reduces inequality (NPC, 2012).

To realise this, South Africa would invest in infrastructure and services that reduce environmental pressures by providing access to decent sanitation, housing and clean water and it would coordinate planning and investment in the built environment to reduce climate change impacts on the socioeconomically vulnerable (NPC, 2012). It would implement adaption strategies and invest in sustainable technologies and programmes to conserve and rehabilitate biodiversity assets (NPC, 2012).

This aligns with the literature that notes that green growth can be supported through green innovation and infrastructure development (OECD, 2011; Dercon, 2014).

The NDP notes that government would also invest in growing consumer awareness, invest in the production of green products, recycling infrastructure and waste-to-energy projects to promote a zero-waste society (NPC, 2012). Consumer awareness is a critical step in a transition to a green economy (de Serres *et al.*, 2010).

The plan outlines the necessary policy and regulatory frameworks that needed to be created to promote effective land-use and to determine the environmental and social cost of new developments (NPC, 2012). It also noted that government would promote and support small-scale farmers in becoming more environmentally sustainable and resilient (NPC, 2012).

5.4.4.3 Green finance

Green finance is mentioned in chapter 5 focused on the environment, touching on carbon tax and the carbon budget approach (NPC, 2012). The carbon budget approach rests on setting limits to carbon emissions at a given time, and the tax establishes the price for carbon emitted. The NDP notes that the tax would be imposed on contributing sectors (NPC, 2012). This aligns with the literature that notes that the pricing of ecosystem services can promote green growth and that carbon taxing can be useful in encouraging a shift to environmentally friendly production systems (OECD, 2012b). The plan, however, does not expand on other mechanisms for channelling financial resources to green economy activities.

5.4.4.4 Green jobs and green skills

The NDP aligns to some extent with the IGG framework in that it covers the need for environmental “education, skills, research and innovation capacity to support a transition to a low carbon economy and meeting the greenhouse gas emission targets” (NPC, 2012:297). The literature confirms that education about green growth and climate change needs to feature in all levels of education (UNFCCC 2011; Gueye & Fyfe, 2015).

Chapter 8 of the NDP focused on human settlements notes that “green economy zones have proven potential to create green jobs” (NPC, 2012:281), although chapter 5, focused on the building of a low-carbon economy, barely mentions green jobs and only touches on the Water Research Council, the National Research Foundation, Agricultural Research Council and the National Disaster Management Centre as tools for promoting a low-carbon economy (NPC, 2012:210).

The literature also stresses the importance of ensuring the green jobs are productive and decent (UNFCCC 2011; Gueye & Fyfe, 2015).

5.4.5 Spatial development inclusivity

The spatial development inclusion dimension includes the themes of “economic infrastructure development” and “rural development” along with relevant codes. Table 5.7 illustrates areas of alignment between the NDP and the IGG framework elements.

Table 5.7: Elements of spatial development inclusivity in the NDP

	Themes		Economic infrastructure	Rural development
Codes				
Bulk water services				
Electricity network				
Transport networks				
Developing small towns				
Promoting rural markets				
Promotion of rural economy				
Rural economy infrastructure				
Waste management				
	Chapter dedicated to theme/code	Section dedicated to theme/code	Paragraph/s on theme/code	A few lines on theme/code
				A few words on theme/code

The NDP focuses primarily on economic infrastructure and rural development, with a lesser focus on waste management. These aspects are discussed in more detail below.

5.4.5.1 Economic infrastructure development

As stressed in the literature, public resources need to be directed more towards social and economic infrastructure in rural areas to address the significantly higher levels of inequality of opportunity compared to urban areas (Keeley, 2015).

Chapter 4 of the NDP is dedicated to economic infrastructure and notes the importance of economic infrastructure as a foundation for social and economic development. It envisages a transition to a less energy-intensive and more energy-efficient economy (NPC, 2012).

The NDP recommended that investment in transport infrastructure and transport systems be extended to promote uptake of public transport systems (NPC, 2012). It also notes that ICT is the basis of the knowledge economy and investments in infrastructure to develop this sector were critical to stimulate the knowledge economy and grow participation in it (NPC, 2012). Chapter 8, focused on human settlements, emphasises the need for spatial planning to tackle inherited spatial inequalities, unlock development potential in underdeveloped areas, deal with informal infrastructure and coordinate governance between different levels of government as well as to improve overall spatial planning and governance (NPC, 2012).

5.4.5.2 Rural development

Chapter 6 of the NDP focuses on the building of an integrated and inclusive rural economy. South Africa's rural areas are still characterised by high levels of poverty and inequality, with most people experiencing social and economic exclusion despite the deployment of social grants and extension of basic services to these areas since 1994. The NDP prioritises rural development as a mechanism to bridge the urban-rural divide, and notes the need to develop the agricultural and non-agricultural sectors, revitalise rural towns and improve rural governance (NPC, 2012). It recommended focusing on commercial and labour-intensive agricultural operations to create employment opportunities and to stimulate the rural economy (NPC, 2012). This was to be done by increasing investments in water resources and irrigation infrastructure, building more innovative market linkages, and supporting growth of agro-processing businesses (NPC, 2012). Non-agricultural sectors were to be developed or stimulated through promotion of tourism, support for SMMEs, creating value chains for local producers and improving access to basic services (NPC, 2012).

5.4.6 Governance inclusivity

Inclusive governance contains the themes of “strong institutions” and “public participation” related to several codes. Table 5.8 illustrates alignment of the NDP with the IGG framework based on the content analysis.

Table 5.8: Elements of inclusive governance in the NDP

	Themes		Strong institutions	Public participation
Codes				
Anti-corruption			Dark Blue	
Accountability			Blue	
Leadership			Blue	
Co-operative governance			Blue	
Monitoring and evaluation			Light Blue	
Transparency				Blue
Accessibility				Blue
Engagement				Blue
Bottom-up decision making				Blue
	Dark Blue	Blue	Light Blue	Very Light Blue
	Chapter dedicated to theme/code	Section dedicated to theme/code	Paragraph/s on theme/code	A few lines on theme/code
			A few words on theme/code	

5.4.6.1 Strong institutions

Chapter 13 addresses the building a capable and developmental state. The NDP notes a primary challenge as the instability of administrative leadership, the erosion of accountability and poor organisational design (NPC, 2012). It notes the political interference in the recruitment process and how this has demotivated public servants and lowered confidence levels in these institutions (NPC, 2012). The struggle for power between the three spheres of government and lack of clarity in responsibilities between political and administrative functions has also led to tension and instability (NPC, 2012). The NDP proposes that South Africa first needs to stabilise the political-administrative interface to overcome these challenges (NPC, 2012). It also notes the need to make public service careers attractive, and based on skills and experience, as well as developing frameworks to support accountability, transparency (particularly regarding procurement) and oversight, which also encourage public participation (NPC, 2012). The NDP also focused on the need to eliminate corruption, which rests on political will, strong institutions, a solid legal foundation and an active community that hold public officials accountable (NPC, 2012).

It recommends establishing a system that can operate freely from political interference and can be supported by both public officials and citizens (NPC, 2012).

5.4.6.2 Public participation

Chapter 14 notes that transparency is important for public accountability; this relies on enabling access to information. The NDP suggests that more “open data” be made available (NPC, 2012) – this is data that does not require a formal request for its release. It notes in chapter 15 that active citizenry is key to building a transformed and united country (NPC, 2012) and recommends that the state engage with citizens in their own forums, rather than expecting citizens to engage through government platforms (NPC, 2012). This would support two-way information gathering and sharing (NPC, 2012).

The NDP emphasises the importance of upholding the 1997 Batho Pele principles that state that government should communicate with the public and understand their expectations and that citizens should be fully aware of their rights and the services they should expect from government. The goal of the principles was to encourage transparency and accountability and improve service delivery.

5.5 Integration of economic and environmental elements

Chapters 3 and 5 of the NDP align with other IGG dimensions, connecting with multiple framework dimensions and themes, such social, spatial development and governance.

Regarding social inclusion, chapter 3 notes the intention to develop a more competitive and diverse economy, the importance of skills and human capital formation and the role of social safety nets to support health and education outcomes. The NDP explicitly states that human development is vital for inclusive growth and that quality public services and a comprehensive social security net will enhance the population’s ability to benefit from labour market opportunities (NPC, 2012:115, 117, 119). It also notes the importance of addressing skills gaps and of targeting learners, school graduates and those in FET colleges in this regard focused on building entrepreneurship (NPC, 2012:143). It explicitly notes in chapter 9 the significance of education and training in creating jobs and growing the economy (NPC, 2012:133). And emphasises that the country should adapt its skills development system to align with the real needs of the economy (NPC, 2012:144).

Chapter 5 acknowledges that it is the poor and the vulnerable that will feel the impacts of climate change the most and that resilience of communities in which they reside should be prioritised (NPC, 2012:198).

This includes focusing on infrastructure and services enabling access to clean water for drinking and sanitation, affordable energy and secure housing (NPC, 2012:199). It also means effectively planning and pricing opportunities to reduce communities' environmental footprint by providing sustainable public transport, waste management and energy services (NPC, 2012:203). Economic progress clearly depends on social progress, which is also necessary for environmental sustainability.

Chapter 3 of the NDP further connects with the spatial development inclusion category with its focus on rural development and economic infrastructure. It refers to chapter 6 for a discussion on spatial dynamics and rural employment. This chapter highlights the importance of increasing agricultural output through rural development strategies, broadening land ownership patterns, investing in public services and infrastructure, and implementing proper planning processes. It notes the need for infrastructure and network services to be in place to support job creation and inclusive development (NPC, 2012:124). Chapter 5 also notes the vulnerability of the rural poor to climate change, and references the rural development chapter and the need to use land efficiently and effectively (NPC, 2012:204) and expand renewable energy systems to rural communities (NPC, 2012:205), as well as investing in waste management and recycling infrastructure in these communities (NPC, 2012:203).

Chapter 3 aligns with inclusive governance elements, such as strengthening the capacity of government to implement economic policy, as well as heightening levels of professionalism and accountability and eliminating corruption in the public service. Chapter 3 discusses the governance of state-owned enterprises and chapter 5 notes the importance of participatory, bottom-up approaches (NPC, 2012:205).

The implementation of an IGG path cuts across spheres, sectors and institutions. Many of the elements mentioned above are pivotal for a transition. This is acknowledged in the NDP (NPC, 2012)

5.5 A critique of the NDP

The Congress of South African Trade Unions (COSATU) published a comprehensive critique of the NDP in 2013. The union noted that the target for reducing unemployment was based on the narrow definition of unemployment and thus excluded a count of discouraged workers (COSATU, 2013), which is problematic if the aim is to ensure that the economically active are all productive and contributing to the economy.

The NDP puts its faith for job creation in the SMME and services sectors noting that government would relax regulations, promote exports and support entrepreneurship.

But, according to a study from Econx3, it is large firms that create jobs (COSATU, 2013). Regulations are also not the primary barrier to the success of SMMEs, but rather access to finance, shortage of skills and concentration of markets (COSATU, 2013). The union notes that the new jobs anticipated through interventions in this sector might not be realised, and even if they were that they could be low paying and relatively informal ones (COSATU, 2013), which does not align with the NDP vision.

The focus on SMMEs also contradicts the NGP and the Industrial Policy Action Plan with its focus on manufacturing and reindustrialisation as sources of employment and sectors able to generate positive spill-overs to the economy and to enable a move away from a financial and services sector-dominated growth path (COSATU, 2013). The NDP has not pushed this broadening and labour-intensive language of the previous policies effectively marginalising manufacturing in favour of the consumer-driven and service-centred economy that has known negative economic and social consequences (COSATU, 2013).

A further critique is that the NDP stance on inequality is not ambitious enough with its target of a Gini-coefficient of 0.60 by 2030 (COSATU, 2013). The OECD's standard of a fair inequality rate is between 0.25 and 0.35 (COSATU, 2013). Lastly, the union notes that the poverty line used to make the 2012 target was low at R418 per person pointing out that people living with R2 000 are still poor; the poverty target is therefore not realistic (COSATU, 2013).

Other critics note that while the NDP is broadly aligned with the UN Sustainable Development Goals, there are still areas requiring further capacity-building and work (Wits School of Governance, 2016). These include food security and sustainable agriculture, gender, green industrialisation, labour rights and working conditions, and other issues related to social, political, economic inclusion and equality of access to opportunities (Wits School of Governance, 2016). Rural women in South Africa still face many challenges in participating in the rural economy based on customary law. Their participation is influenced by traditional leadership and governance. The plan fails to acknowledge this (Chilenga, 2017).

There is also a lack of awareness in the plan of the need to balance the existing authorities between the ministries and spheres of government. There is a need for tactical management of these relationships (Naidoo & Maré, 2015).

5.6 Challenges and limitations to IGG action

While to a large extent the NDP encompasses the building blocks of an IGG path, there are several significant obstacles to implementation of such a path. These are detailed in the sections below.

5.6.1 Trade union opposition

Transitioning to a green economy will influence current production patterns, which will impact labour through the loss of jobs and changing skillsets associated with green jobs. Some jobs will be created, some jobs will be lost (Räthzel & Uzzell, 2011). South Africa's unions have spoken out about the transition (Cock, 2014).

COSATU advocates for a just transition that provides the opportunity to fight climate change, create jobs and promote a sustainable future path – the emphasis is on ensuring equity and justice (Newell & Mulvaney, 2013). It supports the greening of the economy and adopted a *Climate Change Policy Framework* in 2011 comprising 15 principles (Cock, 2014). The union notes the need for plans to reskill and absorb affected workers to be in place (Newell & Mulvaney, 2013), particularly coal workers will need to be integrated into the renewable energy sector (COSATU, 2019).

The concern about jobs is the biggest factor for unions. The South African Federation of Trade Unions (2018) recognises that the transition to renewable energy generation is necessary, but notes that this cannot happen at the expense of jobs. The transition must be done in a way that protects the welfare of energy and mining workers. It emphasises that unions need to work with industry, workers and communities during this transition (Räthzel & Uzell, 2011). The National Union of Metalworkers of South Africa is sceptical about green jobs noting that if the green economy created poor quality and “indecent” jobs like the brown economy, then it will reject the transition (Cock, 2014). It is particularly concerned about the impact on mining jobs (Seeliger & Turok, 2016).

The union advocates that the transition and the resultant green economy be led by workers because it was economic growth led by capitalists that has resulted in the need for a transition due to climate change challenges (Cock, 2014). The union notes that “it is not anti-green but pro-labour (Bell, 2018) and that if the means of production within the green economy are not owned by workers, it will be just another capitalist project (Cock, 2014).

5.6.2 Vested interests

There are vested interests in this transition – those who benefit from the status quo and those who will benefit from the transition. There is a need to understand the political economy that underlies such a transition (Resnick, Tarp & Thurlow, 2012).

It will instigate structural changes at policy, infrastructural, social and cultural levels (Newell & Mulvaney, 2013). In South Africa, the biggest player affected will be the mineral-energy complex (Gulati, Scholtz & Fakir, 2016). South Africa has been dependent on this sector to generate GDP and support exports for decades (Camaren & Wakeford, 2016). This dependence has created a powerful mineral-energy complex, with significant institutional, financial and knowledge capacity, which dominates other sectors (Camaren & Wakeford, 2016). The majority share of this sector relates to coal mining and energy generation, with significant implications for the coal mining industry and associated value chain (Resnick et al., 2012). Energy politics cannot be ignored as there are competing interests within this transition (Newell & Mulvaney, 2013). South African policies also emphasise re-industrialisation, which will keep the demand for electricity high (Resnick et al., 2012) and the need to keep the prices low to support industrialisation (Newell & Mulvaney, 2013; Camaren & Wakeford, 2016). The transition to renewable energy sources will push up energy prices in the short term because of the necessary investment in infrastructure and skills (Resnick et al., 2012; Gulati, Scholtz & Fakir, 2016).

There are also consequences for BEE transformation in that Eskom uses coal contracts to empower and include black industrialists and emerging miners in the mining industry (Burton, 2016). Despite these obstacles, the need for the transition is inescapable and the mineral-energy complex will need to be tackled head on (Khan & Mohamed, 2016).

5.6.3 Skills mismatch

A significant obstacle will be the lack of the relevant green skills, and the need to urgently skill, reskill and upskill workers for a new economy. The lack of technical skills may hinder the transition (Wakeford, Hasson & Black, 2016). Skills shortages can also drive up the prices of energy goods and services if they need to be imported or compensated for (Jagger, Foxon & Gouldson, 2013). It is not clear whether the institutions currently running green economy programmes, such as the National Research Foundation, the Water Research Council, the Agricultural Research Council and the Human Science Research Council (Nhamo, 2014), will be able to adequately support the transition.

5.6.4 Inadequacies of the education and training sector

Despite the significant emphasis in the NDP, and in the other grand policies, on education and skills development, the country is in an educational crisis.

Education in South Africa is influenced by many factors, such as geographic location and type of school. The Western Cape, Gauteng and Free State provinces have better educational outcomes, and fee-paying schools do better than no-fee schools (Roodt, 2018). Performance within education still aligns with income levels in the country – better performing segments are supported by the wealthy and lower-performing segments are supported by lower-income groups (Spaull, 2013).

South Africa is also at a significant disadvantage regarding maths and science skills. The country ranked 48 out of 49 countries for performance in the 2018 Trends in International Mathematics and Science Study (Roodt, 2018). There is a high drop-out rate prior to grade 12 (Spaull, 2013). Higher education fees are generally unaffordable for most South Africans, particularly black Africans (Langa, Ndelu, Edwin & Vilakazi, 2017). These factors might significantly affect the country's ability to transition smoothly or perpetuate existing levels of inequality in the transition.

5.6.5 Developing country dilemma

There are implications for developing countries that have been historically reliant on minerals and natural resources to drive their economies. They will have to forgo the human and physical capital invested in these sectors (Resnick et al., 2012). They might also need to forgo the revenue traditionally generated from resources, which are the source of funding for development initiatives and infrastructure development (Camaren & Wakeford, 2016). In addition, resources might be directed away from development towards the sourcing of green technologies and skills (Wakeford, Hasson & Black, 2016) to support an efficient transition (Resnik, Tarp & Thurlow, 2012). All of these factors will impact on the country's ability to generate revenue from resource extraction, spend money on development, and service debt. This presents developing countries with a significant dilemma in balancing economic, social and environmental demands.

5.7 Chapter summary

The NDP appears to have all the characteristics of an IGG path according to the IGG framework developed in chapter 3. The focus on environmental sustainability and economic development are, however, still segregated and do not speak to each other.

Within an IGG framework, environmental issues need to integrate with social interventions focused on addressing poverty and inequality, and green industries need to integrate with economic considerations around growth and job creation.

The content analysis of the NDP using the categories and codes developed in the IGG framework illustrates the gaps in alignment. These include the lack of attention paid to financial inclusion measures as well as the need to enable and grow public participation in policy decision making. Themes related to social inclusivity and spatial development inclusivity are well covered in the NDP with dedicated chapters and comprehensive information provided on economic infrastructure investment and supporting rural communities.

The NDP focuses more on natural resource management than on these elements, which are critical for a low-carbon economy. There are also shortfalls within the area of environmental inclusivity; in particular, there needs to be more attention paid to green industries, finance, jobs and skills. It must be noted that chapter 3 of the NDP views the green economy as a sector, rather than as a paradigm shift – which indicates an unclear understanding of the green economy and its role.

Chapter 6: Conclusion and recommendations

6.1 Introduction

The previous chapters have explored different economic growth paths to understand, in particular, the green and inclusive growth paths, and attempted to integrate them to determine the characteristics of an IGG path. They also reflected on the approach of South Africa's post-1994 grand economic policies to environmental and economic inclusion in development planning. The NDP's approach to economic growth was analysed in relation to the identified characteristics of an IGG path framework. This chapter concludes the study by reflecting on the research questions, the findings and recommendations for future studies.

6.2 Answering the research questions

The following section provides the findings of the study against the research questions:

- What are the characteristics of an IGG path?
- What were the approaches of the former grand economic growth policies (the RDP, GEAR; AsgiSA and the NGP) to economic growth and environmental sustainability?
- Does the current NDP include policy prescriptions that would result in IGG?
- What recommendations can be made to promote IGG?

6.2.1 What are the characteristics of an IGG path?

The characteristics of an IGG path are classified into five categories that represent the five dimensions of sustainable development. These are the inclusivity of economic, social, environmental, infrastructural and governance dimensions. Table 6.1 illustrates these five dimensions and their related themes, derived from the literature review and content analysis.

Table 6.1: IGG dimensions and themes

Dimensions	Themes
Economic inclusivity	structural transformation, SMME development, financial inclusion, job creation, inequality reduction
Environmental inclusivity	green industries, natural resource management, green finance, green skills and jobs
Social inclusivity	social protection, education and training, poverty alleviation
Spatial development inclusivity	economic infrastructure development, rural development
Governance inclusivity	public participation, strong institutions

6.2.1.1 Economic inclusion

Economic inclusion promotes and enables broad-based economic participation. Structural transformation of the economy focuses on stimulating labour-intensive sectors, such as agriculture, manufacturing and the informal sector to support a fast pace of growth. SMME development incorporates the support and funding of small and emerging businesses, as well as entrepreneurs. Financial inclusion is enabled by promoting financial literacy, providing access to financial services and locating financial institutions in all, including remote, areas. Job creation focuses on creating productive employment and broadening employment opportunities. Income inequality encompasses supporting participation in the economy, ensuring the equitable sharing of benefits and affording equality of opportunity.

6.2.1.2 Environmental inclusion

Environmental inclusion promotes the adoption of environmentally friendly industrialisation processes, ensures the maintenance of environmental assets and the funding of the green transition process. Green industries are those focused on renewable energy; efficient waste management; sustainable fishery, agricultural and forest management; green manufacturing; and low-carbon transport systems, among others. Natural resource management encompasses the prevention of environmental degradation, the mitigation of greenhouse gases, the reduction of climate change impacts and the efficient use of natural resources. Green finance includes the use of carbon taxes and the private and public funding of green programmes and projects. Green skills and jobs explores the necessary human capital development for a green economy and the measures to promote jobs in a green and inclusive economy.

6.2.1.3 Social inclusion

Social inclusion focuses on quality of life fairness and human capital development. Social protection encompasses measures such as social spending directed at the poor, conditional grants and green social programmes. Education and training incorporates ECD, skills development, TVET and the promotion of equal educational opportunities. Poverty alleviation comprises measures that boost food security and that broaden access to social services, including education and health.

6.2.1.4 Spatial development inclusion

Spatial development inclusivity ensures that previously undeveloped spaces are included in the economic growth process. Economic infrastructure development is a key element involving investment in transport and electricity networks, as well as in bulk water services.

Rural development encompasses the promotion of rural markets and economies, as well as investments in rural economic infrastructure to bridge the urban-rural divide.

6.2.1.5 Inclusive governance

Inclusive governance promotes inclusive decision making based on active public participation and the establishment of strong institutions. Strong institutions are necessary to coordinate the building process of an IGG path. Therefore, strong leadership, monitoring and evaluation, accountability, anti-corruption measures and improved public service are paramount. The focus on public participation aims to include the voice of marginalised groups in the governance process by being more transparent, making resources and knowledge more accessible and engaging with citizens at more appropriate levels.

These are the five building blocks of an IGG path developed during the literature review and used to create the IGG conceptual framework, in response to the first research question: What are the characteristics of an IGG path? The following section reflects on the extent to which South Africa's former grand economic growth policies reconciled economic growth and environmental sustainability. This is done to identify misalignments that could be avoided in future policies.

6.2.2 How did the former grand economic growth policies incorporate economic growth and environmental sustainability?

6.2.2.1 Overview of the RDP approach

The 1994 RDP approach to structural transformation focused on increasing the labour intensity of the agricultural, manufacturing, forestry and fisheries, tourism, SMME and the mineral-energy sectors. The latter sector was included because of its historic role in the economy, and its contribution to regional and international trade. Support for SMMEs would prioritise women entrepreneurs and rural dwellers, and would include the development of business skills and broadening access to credit. The policy approached the challenge of unemployment by accelerating the implementation and expansion of the Public Works Programme and investing in economic infrastructure. This programme was to focus on marginalised women, youth and rural dwellers.

It also aimed to support the adoption of more environmentally sustainable production practices in these sectors, particularly agriculture. The RDP identified measures to account for environmental degradation, such as incorporating environmental costs into national accounts, promoting efficient waste management and preventing pollution. It advocated for an educational programme to grow environmental consciousness in communities.

The RDP did aim to overcome inequality by promoting the entry of the previously excluded into the business sector through policies of affirmative action and land reform. As regards financial inclusion, the RDP promoted the opening of community banks in rural areas and mandated that financial institutions were transparent regarding the racial and gender composition of their staff and location of their branches, as well as their lending portfolios. The RDP prioritised economic inclusivity in its economic plans and displayed a value for community involvement and the participation of marginalised groups

The RDP displayed most elements of an IGG path, but its implementation was hindered by lack of funds and capacity. It was a short-lived policy that was replaced by GEAR in 1996.

6.2.2.2 Overview of the GEAR approach

GEAR focused primarily on economic measures (monetary policy, regulatory environment and fiscal policy) to stimulate the economy. Its structural transformation approach encompassed industrial innovation and the funding of industrial processes through the IDC. The policy did, however, also promote SMME development through the establishment of several funding organisations. GEAR used macroeconomic tools to enhance the pace of growth, including tax breaks for the private sector to induce investment, controlling the exchange rate to influence the rate of trade and foreign direct investments. It promoted the liberalisation of the economy, including creating more labour flexibility. Regarding job creation, GEAR focused on improving the quality of formal learning institutions and creating training boards for different sectors. There is less focus on the environment in this policy, which is understandable given that it is a macroeconomic strategy and not a development policy.

GEAR focused on improving competitiveness, liberalising trade, financialization and monetary policy – these all align with the conventional GDP-based growth path. While the measures undertaken during GEAR resulted in economic growth, it was jobless growth characterised by high levels of inequality. There was a clear need for a policy that promoted shared growth, hence the introduction of AsgiSA.

6.2.2.3 Overview of the AsgiSA approach

The 2005 AsgiSA tried to promote economic inclusion by supporting labour-intensive sectors, particularly tourism, SMMEs, agro-processing and business process outsourcing. It placed significant emphasis on SMMEs, particularly black-owned businesses, addressing issues of access to finance and regulatory hurdles.

It also promoted the participation of the private sector in building the SMME sector through mechanisms such as procurement. Regarding job creation, AsgiSA emphasised the role of the Expanded Public Works Programme and the need to focus this programme on women and unskilled people. It promoted financial inclusion by attempting to broaden access to finance for women and youth in particular, for housing and business development. It highlighted the importance of the environment in planning for land-use, promoting the use of EIAs. AsgiSA did attempt to create an environment conducive to shared growth with its focus on skills development, infrastructure programmes and investment strategies.

6.2.2.4 Overview of the NGP approach

The 2010 NGP also focused on promoting and supporting labour-intensive sectors, such as infrastructure, manufacturing, agro-processing, tourism, and the green and knowledge economies, as those with the potential to support structural transformation. It promoted the use of procurement of local goods and services to boost the economy and focused attention on levels of competition in the market, as well as monopolistic price setting. It did emphasise the development of SMMEs and the need to broaden access to finance. Regarding job creation, it focused on reducing the vulnerabilities of workers by promoting labour regulation, workers' rights and the notion of decent work. The NGP actively promoted the green economy, which aimed to promote the production of biofuels to lower carbon emissions and to support clean-coal and retrofitting initiatives. It supported the Green Economy Accord and aimed to increase investment in the green economy from both the public and private sectors. The NGP had limited time to realise its plan. It was replaced after two years by the NDP, which is the focus of this study.

The main finding is that these grand policies failed to integrate all of the IGG characteristics. The RDP was broad, but lacked coordination. GEAR, focused on economic growth, led to jobless growth. AsgiSA was reactionary in an attempt to deal with joblessness and inequality. The NGP was focused on structural transformation.

The section below explores whether the NDP displays the characteristics of IGG, and is able to guide South Africa onto an IGG path.

6.2.3 Does the NDP contain the characteristics of IGG?

To a large extent, the NDP contains the characteristics of an IGG path. Table 6.2 illustrates the coverage of the IGG themes in varied NDP chapters. This section succinctly describes the areas of alignment and identifies gaps and areas of misalignment.

Table 6.2: Exploring the NDP through an IGG lens

Dimensions	IGG themes	Chapter reference in NDP
Economic inclusivity	Growth and structural transformation	Chapter 3: Economy and employment
	Small business development	Chapter 3: Economy and employment
	Financial inclusion	Chapter 3: Economy and employment
	Job creation	Chapter 3: Economy and employment
	Inequality reduction	Chapter 3: Economy and employment
Environmental inclusivity	Green industries	Chapter 5: Environmental sustainability: An equitable transition to a low-carbon economy
	Natural resource management	Chapter 5: Environmental sustainability: An equitable transition to a low-carbon economy
	Green finance	Chapter 5: Environmental sustainability: An equitable transition to a low-carbon economy
Social development inclusivity	Social protection	Chapter 11: Social protection
	Education and training	Chapter 9: Improving education, training and innovation
	Poverty alleviation	Chapter 11: Social protection
Spatial inclusivity	Economic infrastructure development	Chapter 4: Economy infrastructure: The foundation of social and economic development
	Rural development	Chapter 6: An integrated and inclusive rural economy
Governance inclusivity	Strong institutions	Chapter 13: Building a capable and developmental state Chapter 14: Fighting corruption
	Public participation (public voice)	Chapter 13: Building a capable and developmental state Chapter 14: Fighting corruption

6.2.3.1 Areas of IGG alignment with the NDP

Chapter 3 of the NDP aligns with almost all of the themes of the economic inclusivity dimension in the IGG framework, as indicated in the heatmaps in the previous chapter. The chapter covers agriculture and manufacturing, among other sectors, related to growth and structural transformation.

Sectors such as business services, tourism, agro-processing, construction, green economy, retail, finance and the minerals and metals sector are discussed as also those with the potential to promote economic growth (NPC, 2012). Not all of these, however, align with the IGG framework, particularly the financial and minerals and metals sector.

The notion of labour absorption is emphasised, which aligns with the theme of job creation. This refers to those industries that need a significant number of workers, and thus are able to create job opportunities. The aim, as per the NDP, is to promote an economy that is labour absorbing by implementing microeconomic reforms, investing public funds and unblocking the constraints that hinder private investment. These sectors are specifically the services sector, SMMEs and domestically orientated activities, such as domestic work, office cleaning, hairdressing, retail and security (NPD, 2012:119, 128). The theme of small business development is also explicitly addressed as a sector to absorb labour and create mass employment. To promote small business, the plan recommends providing SMMEs with access to established supply chains and supporting start-ups and franchising operations (NPC, 2012:140,141) and encouraging private-public procurement of services and goods. It also notes that the regulatory environment needs to accommodate the needs of small business (NPC, 2012:143). It discusses the potential of the public sector to create jobs, specifically in the form of the Public Works Programme and the Community Works Programme (NPC, 2012:153).

The NDP's chapter 3 does discuss inequality reduction through transformation of the economy, land reform and support for SMMEs, as well as strengthening employment equity policies and mechanisms (NPC, 2012:138, 139, 140). It does not, however, explicitly address the dimension of financial inclusion.

Chapter 5 addresses issues of environmental inclusion, with a particular focus on natural resource management, and the need to support mitigation and adaptation efforts against climate change. It only briefly touches on green finance, carbon pricing and the carbon budget approach, however, and the only green industry it mentions is the renewable energy sector (NPC, 2012).

Chapters 9 and 11 align with some elements of the social inclusion theme covering aspects of the right to social protection and social security. The NDP does note that social protection measures are not sustainable in the long term, and thus the focus needs to be on job creation (NPC, 2012:355-379). The need to improve the quality of and access to education, at all levels, is discussed in chapter 9 (NPC, 2012:295-398).

The dimension of spatial development inclusivity is dealt with to some degree in chapter 6 focused on rural development and in chapter 4 that mentions economic infrastructure for rural development and promoting rural agricultural activities.

This chapter also covers the need for and importance of quality basic services, including education, health and public transport. It also notes the importance of the energy sector as a driver of growth, along with water resources and services, transport and ICT infrastructure (NPC, 2012:160-195).

Chapters 13 and 14 cover aspects aligns with the theme of governance inclusivity. Chapter 13 mentions building a capable developmental state and the need for strengthening accountability, improving interdepartmental coordination, and public services. Chapter 14 focuses on anti-corruption and the need to improve transparency and accountability and deploy improved oversight of government departments and state-owned entities (NPC, 2012:446-454)

6.2.3.2 Areas of IGG misalignment with the NDP

This section outlines the gaps in alignment between the IGG framework and the NDP.

- **Lack of integration.** The NDP has not integrated economic growth and environmental sustainability; they are discussed in separate chapters with inadequate linkages made. There is still a sense that economic and environmental sustainability are viewed as competing elements, instead of complementary dimensions. As an example, the focus on green industry, particularly renewable energy, is discussed only in relation to the environment, and not as a driver of economic growth.
- **Inadequate focus on income inequality.** The economic growth policies and strategies discussed in the previous section and the NDP do not address the effects of globalisation (trade and financial sector liberalisation) on inequality. The NDP also does not cover the issue of the wage gap between executives and workers, which contributes to high levels of inequality, or identify measures to address this imbalance.

Furthermore, the target set for reducing income inequality is unambitious in its aim to reduce the Gini-coefficient only 0.8 points from 0.68 to 0.60 over the NDP timeframe to 2030. This would indicate that the NDP has not captured the elements necessary to realise its vision of an equitable, fair and inclusive society.

- **Over-emphasis on economic progress.** The NDP embodies the thinking that growth will lead to development, with more emphasis placed on mechanisms to boost economic growth than on social inclusion and environmental justice. For example, there is significant emphasis on financing SMMEs and infrastructure development, with little attention given to building financial literacy as part of financial reform and a means of uplifting the poor and marginalised and even less attention given to placing financial institutions in rural areas to broaden access to finance. Skewed investment towards business over social elements such as education and health will affect equality of opportunity and outcomes.
- **Stresses quantity over quality of employment.** The strategy for job creation is focused on SMMEs, the rural economy and the Expanded Public Works Programme. The NDP does not detail how government will ensure that jobs within these sectors and the programme are decent and productive jobs, or are sustainable going forward. In particular, the role and impact of the Expanded Public Works Programme is not clear.
- **Discounts the role of the financial sector.** Green finance and financial inclusion are not intensively discussed in the NDP. However, the literature review indicated that green finance tools can be used to build environmental sustainability. The NDP does not mention the role of the financial sector in promoting green growth, which is a critical oversight given that finance is a critical driver of the economy. The financial sector, specifically the banking sector, needs to make an active contribution to greening the economy and growth through financial services.

The following section, in response to research question 3, provides recommendations related to policy and planning that would support a transition to an IGG path.

6.2.4 What recommendations can be made to promote IGG?

The following recommendations relate to fiscal, economic and industry policymaking and planning that would support the transition and contribute to sustainable development in South Africa.

- **Integrate economic and environmental planning.** Planning must integrate economic and environmental aspects, rather than placing them in parallel, to ensure inclusive economic and environmental prosperity. It must also place social justice on the same level, as all three elements are highly interconnected. Recognising their equal value and importance will enable the benefits of each to support and amplify benefits of another.

For example, a focus on education and training within social inclusion policy can encompass growing environmental awareness, which complies with the environmental inclusion criteria. Another example is when efforts to reduce inequality, falling within economic inclusion, also reduce the costs of environmental damage caused by those heavily reliant on natural resources as a source of energy.

- **Promote public participation.** To ensure that the poor and marginalised are able to participate in and benefit from a green transition, the poor should be included through public participation and policy planning from inception. This is an opportunity to shift the historic trend of viewing these groups as receivers of benefits from growth to viewing them as contributors to the generation of economic growth and benefits.
- **Promote green SMME development.** Public and private institutions working in SMME development need to prioritise support and funding for green businesses. Green technologies, innovation, projects and programmes should be developed and supported by both the private and public sector. This can be done through research and development, project funding and green value-chain promotion. The departments of small business and trade and industry, the Development Bank of South Africa and other institutions will need to amend their strategies to prioritise the building of a green SMME sector.
- **Unlock green finance.** The financial sector must be included in the promotion of IGG. Private financial institutions, including banks, will need to create or enhance financial tools to support green projects and initiatives, including loans and microfinance. The public sector will need to use its fiscal framework, including revenue instruments such as carbon taxes and incentives, to support the transition to an IGG path. Government departments, civil society and academia involved in the transition should include the financial sector in discussions. Policy research and planning that aims to unpack the role of the financial sector in a green economy should be supported. The financial sector should form part of an organised movement and actively participate on the platforms that promote IGG.
- **Reform social policy to combat climate change.** Social policy, including social protection, poverty alleviation and education and training elements, must be designed or redesigned to counter shifts in the labour market that might arise from a green transition, as well as acting to build adaptive capacity to climate change at the household and community levels.

- **IGG indicators.** These must be developed and embedded in monitoring and evaluation frameworks to ensure that current and future policies promote IGG and to ensure effective governance.

6.3 Recommendations for further or future research

- Exploring the role of the fiscal framework in promoting green growth to understand how public expenditure and revenue tools can support a just transition.
- Investigating which tools and techniques used to ensure policy coherence at all levels of government will be more effective in promoting and supporting an IGG path.
- Investigating the potential within South African provinces and sectors to support and promote green enterprise development, as well as any obstacles to such a transition.
- Exploring the potential role of the Expanded Public Works Programme in linking job creation to environmental conservation and regeneration.
- Studying further the relationship of social policy and ecological sustainability to identify connections and opportunities for strengthening the green economy.
- Analysing the role in and approach of the financial sector to a just transition to a green economy as an enabler of production and of access to green resources.
- Understanding better the role of small business in greening the economy to identify and understand the green business and value chains that can be explored by entrepreneurs.
- Investigating how higher education and training institutions could identify and deliver the skills necessary in the labour market for the building of green industries and the transition to an IGG path.
- Exploring the impact that transitioning to a green economy will have on the labour market with particular focus on the jobs that will be created, lost, transformed or substituted, and the necessary precautionary measures that will need to be taken.
- Studying the implications for adoption of a green economy on the informal sector and township and rural economies, with a focus on the local community's ability to participate and the need to overcome spatial inequalities.
- Analysing the costs and benefits of greening industry, including changes in production processes, supply chains and operation at multiple scales, as well as other practicalities.
- Analysis of social cost and benefits of a greener development path in South Africa.

6.4 Conclusion

This study set out to create a conceptual framework for an IGG path to be used in analysing the South African NDP. The aim was to understand whether South Africa's NDP, in place till 2030, had the necessary characteristics to build and support an inclusive and green economy and society.

The study used a qualitative methodology encompassing a literature review and content analysis to establish the categories and themes that characterise IGG. This enabled the identification of the determinants of an IGG path. The developed conceptual framework was used to house the five dimensions of sustainable development and the themes that resulted from the Atlas.ti data analysis process. The developed IGG framework illustrated the elements needed for a successful transition that would concurrently address poverty, inequality and environmental degradation. It also integrated the measures necessary for pro-poor, inclusive and green growth. If deployed, South Africa should be able to overcome its socioeconomic and environmental challenges and start building a low-carbon, inclusive and sustainable society.

The study found that the NDP contains many of the necessary elements, but it does not adequately link economic and environmental considerations and it does not do enough to address income inequality, particularly that which has arisen from globalisation and liberalisation. The country will also need to overcome significant obstacles in such a transition. These include pressure from trade unions about potential job losses, which is a valid concern, and the lack of skills, as well as lack of clear political will and guidance.

There is an urgent need for South Africa to transition to an IGG path to combat its socioeconomic and environmental challenges and realise sustainable development. It is hoped that this study illustrates that many of the necessary elements are in place and that it provides insight to the obstacles and limitations the country will face in this necessary transition.

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Addenda

Addenda A: Coding sheet

Quotation content	Codes
Economic growth	Economic
Local economic growth	Economic
Production patterns	Economic
Industrialisation	Economic
Trade liberalisation	Economic
GDP	Economic
Income	Economic
Create employment	Economic
Labour-intensive sector	Economic
Economic activity	Economic
Labour-intensive industries	Economic
Productive economic activities	Economic
Labour-intensive growth	Economic
Material wealth	Economic
Equitable sharing benefit from growth	Economic
Economic opportunities	Economic
Pattern of growth	Economic
Economic diversification	Economic
Welfare of low-income populations	Economic
Broad-based growth,	Economic
Job opportunities	Economic
New job opportunities	Economic
Efficient use of natural resources	Environmental
Conservation	Environmental
Ecosystem integrity	Environmental
Natural sustainability	Environmental
Climate change	Environmental
Greenhouse gas emissions	Environmental
Pollution	Environmental
Ecosystem management	Environmental
Water efficiency,	Environmental
Cleaner production	Environmental
Environmental quality	Environmental
Greening industries	Environmental
Green growth strategies	Environmental
Green innovation	Environmental
Green jobs	Environmental
Green skills	Environmental
Resource efficient	Environmental
Low-carbon investment	Environmental
Energy more efficiently	Environmental
Transparency	Governance

Participation	Governance
Accountability	Governance
Coordination	Governance
Strong institutions	Governance
Fair access and distribution of resources,	Social
Social justice	Social
Inclusiveness	Social
Human rights	Social
Culture recognition	Social
Reducing poverty	Social
Powerlessness	Social
Social exclusion	Social
Gender discrimination	Social
Deprivation and vulnerability	Social
Deprivation	Social
Vulnerability	Social
Lack of income	Social
Concentrated political power	Social
Social spending	Social
Health and education	Social
Social safety nets	Social
Poverty eradication	Social
Gender disadvantages	Social
Participation	Social
Non-discriminatory	Social
Infrastructure development,	Spatial
Local economic development	Spatial
Geographically placing industries in rural areas	Spatial