



INTRODUCTION

1 Introduction

1.1 What is the South Africa Environment Outlook Report?

The South Africa Environment Outlook (SAEO) Report provides a snapshot of the environment and an indication of whether or not it is improving over time. At this juncture, South Africa reflects a negatively impacted environment especially where sustainable practices are required. Additionally, the SAEO demonstrates how an affected environment impacts socio-economic activities and human well-being. The SAEO Report informs us on what is causing the environmental changes, and how we should respond to the activities negatively affecting our environment.

1.2 What are the objectives of the South Africa Environment Outlook Report?

At the 1992 United Nations (UN) Conference in Rio de Janeiro, there was a call on national governments to develop, on a regular basis, State of Environment Reports (SoERs) (UNCED, 1992). South Africa met this international call through the development of their first National State of Environment Report in 1999. Subsequent to that, South Africa published the 1st South Africa Environment Outlook Report in 2006 and a further 2nd South Africa Environment Outlook Report in 2012. These reports were never mandatory in terms of South African legislation. However, as a result of recent amendments that have been made to the National Environmental Management Act (Act No. 107 of 1998) known as “NEMA”, through the National Environmental Management Laws Second Amendment (Act No. 30 of 2013), national and provincial government is required to compile Environment Outlook Reports. This legal requirement for developing national and provincial Environment Outlook Reports came into effect from December 2014. In accordance with the 1992 UN Conference and the recent amendments to NEMA, the 3rd SAEO Report has now been compiled by the DEA.

The objectives of the Environment Outlook Report, as per a draft directive that was issued in terms of the National Environmental Management Laws Second Amendment (Act No. 30 of 2013), are to:

1. Provide objective, accurate and scientifically credible information about the condition and prospects of the environment;
2. Increase stakeholder awareness and understanding of trends and state of the environment, and their causes and consequences;
3. Facilitate the measurement of progress toward achieving environmental standards and targets;
4. Provide early warnings in terms of environmental degradation;
5. Make recommendations and influence the strengthening of environmental policies and programmes aimed at the remediation of environmental degradation; and
6. Provide a foundation for improved decision-making at all levels (DEA, n.d.).

The 3rd SAEO Report aims to address these objectives, through assessing the major environmental challenges in South Africa, and providing a reliable source of information regarding the overall and

high level state of the environment, the environmental change over time and consequential response to this change. This type of information is critical for both decision- and policy-makers.

1.3 What is the purpose of the South Africa Environment Outlook Report?

The purpose of the 3rd SAEO Report is to guide key institutions, decision and policy-makers and the public more aware of the environment and to enable individuals to understand that there is a deep interconnectedness between people and the environment. The 3rd SAEO Report highlights trends in resource use that should inform decision-making and future planning to ensure a more sustainable future for South Africans.

1.4 Influential policies

National policy is imperative in providing contextual information for the (South Africa Environment Outlook (SAEO) Report, as it provides insights into the Government’s vision from a sustainable development perspective. Such policy provides insights into the importance that the South African Government places on environmental issues. The National Development Plan: Vision for 2030 (NDP) stipulated 12 priority areas to eliminate poverty, create jobs and reduce inequality by 2030. Further to these 12 priority areas, the NDP also acknowledges the need for “building environmental sustainability and resilience” and that change is needed to ensure protection of the natural environment whilst enabling benefits from natural resources (NPC, 2012). Being a key national policy, the NDP has a target timeframe period similar to that of the Sustainable Development Goals (SDG’s), which is 2030.

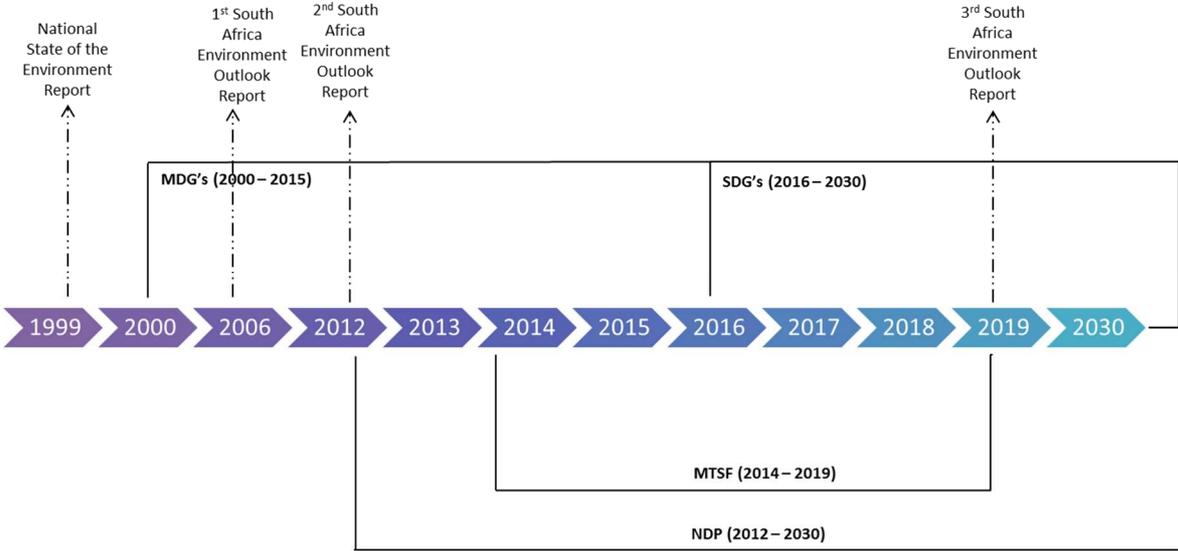


Figure 1: Evolution for environmental reporting in South Africa

In addition to the NDP, the South African Government has decided on 14 Outcomes, based on the Medium Term Strategic Framework (MTSF), as focus policy priority areas. The environment is interconnected to the livelihoods of communities and entrenched in our economy; therefore, the 3rd SAEO will cover various aspects related to the 14 Outcomes discussed in the MTSF. Of particular

interest to the context of the 3rd SAEO is Outcome 10, which talks about: *“Environmental assets and natural resources that are well protected and continually enhanced.”* Outcome 10 makes specific reference to the obligation placed on government in respect of realising the environmental right in the Constitution. The Constitution has environmental governance strongly entrenched in Section 24, which states that *“Everyone has the right to an environment that is not harmful to their health or wellbeing and to have the environment protected through reasonable legislative measures”*. Five sub-outcomes have been identified in Outcome 10 (Republic of South Africa, 2014); all of which are relevant to this report:

- Sub-outcome 1: Ecosystems are sustained and natural resource are used efficiently; ;
- Sub-outcome 2: An effective climate change mitigation and adaptation response;
- Sub-outcome 3: An environmentally sustainable, low-carbon economy resulting from a well-managed just transition;
- Sub-outcome 4: Enhanced governance systems and capacity; and
- Sub-outcome 5: Sustainable human communities.

In light of the discussion on the MTSF and values entrenched in our Constitution, South Africa has international obligations and agreements that it has to abide by. Between 2000 and 2015, the Millennium Development Goals (MDGs) were used as a framework for developing countries in trying to alleviate poverty. However, by the end of 2015, at least four goals, namely reducing hunger, reducing child mortality, combating diseases and ensuring environmental sustainability, of the eight MDGs were not met in the Southern African region (DEADP, 2017). Continuing from the MDGs, an outcome of the RIO+20 summit held in Rio De Janeiro in 2012 was the establishment of the Sustainable Development Goals (SDGs) for the period 2015-2030. The new set of goals aims to end poverty and hunger by 2030; with one in eight people still living in extreme poverty and nearly 800 million people suffer from hunger across the globe (UN, 2016).

In 1987, the World Commission on Environment and Development defined sustainable development as *“development that meets the needs of the present without compromising the ability of future generations to meet their needs”*. In this regard, economic growth and development were linked to environmental protection (UNCTAD, 1993). As such, the United Nations Sustainable Development Summit was instrumental in developing the *“2030 Agenda for Sustainable Development”* which includes a set of 17 Sustainable Development Goals (SDGs) (Figure 2) to end poverty, fight inequality and injustice and tackle climate change by 2030 (UN General Assembly, 2015). Of interest to the 3rd SAEO are few goals (SDG 6, 7, 13, 14 and 15) that have direct interest to environmental concerns. Indirectly all SDG’s have, to a certain degree, an impact dependent on the need to address the goal. Environmental footprints may be significant if not accounted for in a sustainable manner.



Figure 2: Sustainable Development Goals (Image: <http://www.undp.org/content/undp/en/home/sdgoverview/post-2015-development-agenda.html>)

The importance of the SDG's translates into various departments efforts to tracking and monitoring indicators to achieving targets by 2030. South Africa is noted to be taking steps to translate the SDG's and integrate the SDG's into its own national vision and plans. The first step is alignment to the NDP. South Africa's NDP is broadly aligned to the SDG's however there are areas that require capacity-building (WITS, 2017). 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, 2017).

1.5 Compiling the 3rd SAEO Report

The report has been developed in accordance with UNEP's methodology of Integrated Environmental Assessment and Reporting based on the 'Drivers-Pressures-State- Impacts-Response' (DPSIR) Framework, as shown in Figure 3.

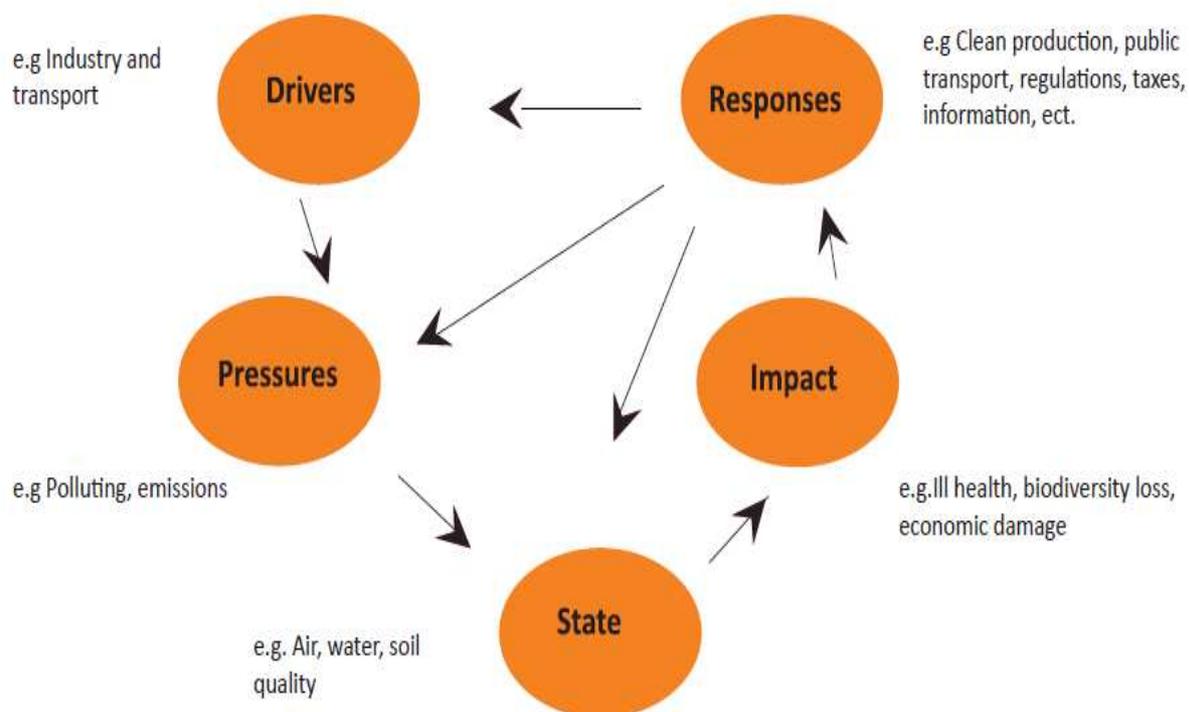


Figure 3: DPSIR framework (DEA, 2012)

The DPSIR Framework is a widely used integrated approach for reporting (Kirstensen, 2004), and has also been used in numerous State of Environment Reports (SoER) and Environment Outlook Reports nationally (including provincial) and internationally. The DPSIR Framework is the generally accepted standard practise for environmental reporting, with only a few organisations, such as the Organisation for Economic Co-operation and Development (OECD) and countries such as Australia and Scotland, opting for the use of the predecessor of the DPSIR Framework, namely the Pressure-State-Response (PSR) Model.

The specialist research and reporting for the 3rd SAEO Report entailed collecting and interpreting information on the current state of the environment in South Africa, as well as obtaining general consensus on changes in the state of representative indicators. This was done through research as well as liaising with key stakeholders to provide meaningful information. The compilation of the 3rd SAEO Report was undertaken with support from policy and framework development specialists.

1.5.1 Methodology for compilation of the 3rd SAEO Report

The process involved gathering of environmental information from participating bodies across the public sector and from government officials. Stakeholders were invited to participate in 3rd SAEO Reporting process through contributions in the form of supplying raw (primary/secondary) data, as reviewers of the different specialist chapters and contributions made into specialist chapters during planned focus group meetings. Additionally, stakeholder workshops were held for members operating at municipalities, provincial departments, national departments and non-governmental organisations. The workshops encouraged stakeholders to engage in meaningful discussions for each thematic chapter.

The assembly of stakeholders and reviewers from wide-ranging fields and organisations ensured that the 3rd SAEO maintains a high level of robust objectivity without bias towards particular viewpoints.

1.5.2 Understanding the application of the DPSIR Framework

The DPSIR framework was initially developed by the European Environmental Agency for the purpose of environmental reporting and is used to both identify and analyse the complex multi-dimensional causal chain relationships (i.e. cause and effect) between different aspects of the socio-ecological system (i.e. society and the environment). Essentially, the environmental reporting process is described as a feedback loop controlling a cycle consisting of 5 stages (Figure 3).

Driving forces (driver) are the underlying causes that result in environmental pressure. Drivers such as population dynamics, energy and demand for agricultural land are processes that lead to pressures on the environment. Often driving forces both directly and indirectly result in pressures on the environment, such as increased emissions and exploitation of resources. These pressures can cause significant changes to the state of the environment with associated impacts on both humans and ecosystems. Lastly, an effort by society from varying scales i.e. community action to international treaties, to solve the issues identified by the assessed impacts, takes place in the form of responses (Giupponi, 2002; UNEP, 2012).

1.5.3 Report Structure

The DPSIR Framework has been a fundamental element in the reporting process of the 2nd SAEO Report and is fundamental to the representation of the 3rd SAEO Report.

The 3rd SAEO Report comprises of eight chapters, containing two different parts. Part 1 contains the 'introduction' chapter, which provides the context to the 3rd SAEO Report and describes the methodology taken in its compilation.

- Part 1: Chapter 1: Introduction
- Part 2: Chapter 2: Drivers
- Chapter 3: Pressures
- Chapter 4: State
- Chapter 5: Impact
- Chapter 6: Response
- Part 3: Chapter 7: Outlook and challenges
- Chapter 8: Actions to be taken

Part 2 is a candid assessment of the environment and underlines the importance of the environmental perspective for developmental considerations. It analyses past environmental trends and assesses the present state. It highlights where good practices have been established and where policies are not implemented effectively or not working adequately, where anthropogenic activities are

overwhelming natural resources and where damaging practices remain a continuing threat to South Africa's natural resources.

Part 3 of the 3rd SAEO Report includes a chapter on the 'challenges and outlook'. The 'challenges and outlook' chapter will provide a summary of the major challenges facing South Africa and provide an outlook of what South Africa will look like should no action be taken. The report provides a series of actions for making progress towards a sustainable future in Chapter 8. These are being addressed and need to be resolved as an integral part in the pursuit of sustainable development.

1.6 Understanding the indicators

In order to attempt to report on the natural environment as comprehensively as possible, proxies for the state of the environment are used to track the "health" of the environment. These proxies are in the form of either quantitative or qualitative indicators. Indicators for the 3rd SAEO were carefully selected to provide a representative picture of the state of various environmental themes, as well as the changes over time to the drivers, pressures, impacts and responses related to themes. By tracking and/or monitoring the indicators, the 3rd SAEO can assess the effectiveness of responses to environmental challenges.

The reporting framework for the 3rd SAEO attempts to use similar indicators from previous SAEO Reports, to allow for consistency and for comparable evaluation of indicator trends. However, contextual changes and data availability often necessitates ongoing adjustment to the set of indicators being reported.

1.7 The importance of the 3rd SAEO and its challenges

The report aims at providing access to information on environmental conditions to different user groups including the public, government, industry, academics, community groups and Non-Governmental Organisations (NGOs). Unrestricted access to information will undoubtedly improve understanding of the environment, inculcate in people environmental and ethical awareness, values and attitudes that will ultimately cultivate a sense of personal environmental responsibility and greater motivation and commitment towards sustainable development.

The 3rd SAEO is not merely a tool for environmental education and awareness but is also an instrument for decision-makers for effective environmental management. At regional and global levels, the report provides a further contribution to processes for insights into the environment outlook for South Africa.

This report is aimed at providing an accessible, non-specialist and user-friendly overview of the state of environmental features and trends. This broad objective implies that the information and guidance that is provided by this report is produced in a simple manner that appeals to and is considered useful and accessible to a wide range of readers. As a consequence, the report should be seen as a summary of environmental information and expert knowledge of the relationships between components of the environmental system rather than an original detailed scientific research project (DEA, 2012).

Every effort has been made to present a report that is free from undue bias, technical jargon and information with limited relevance. The report's aim is to capacitate non-specialists and key decision-makers by allowing them to participate as well-informed contributors to environmental debates and decision-making processes that affect the environment. The report might, therefore, not answer an exhaustive list of questions from all audiences and in sufficiently for some, but will at least guide audiences in fostering a more inclusive debate in the environmental management field (DEA, 2012).

1.8 References

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