

Perspectives on the contribution of SIA to EIA decision making in South Africa

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ABSTRACT

The Republic of South Africa is a country facing numerous developmental challenges, hence the concept of Sustainable Development is held in high regard. This concept necessitates developmental practices that meet the needs of current generations without compromising or inhibiting future generations from meeting their own. The latter is achieved through an equitable assignment of environmental protection, social- and economic prosperity. Together, these terms are recognised as the pillars of sustainable development. With the aforementioned in mind, there is no doubt that social dimensions and impacts emanating from development are as vital as those imposed onto the biophysical and economic landscape. However, in reality, social impacts and the tool utilised to assess them within the context of Environmental Assessments are observed as subsidiary to the biophysical environment and the tools to assess them. This phenomenon persists both in international and local contexts. The tools referred to are called Social Impact Assessments (SIAs) and Environmental Impact Assessments (EIAs) respectively.

A Social Impact Assessment is a discipline which entails the processes of predicting and managing social impacts resulting from development. Intriguingly, the nature of development is encouraged and facilitated by social dynamics however the preceding status under the auspices of EA's prevails. The latter remains as- is despite triumphs by the SIA community in ascribing to good practice amid the various obstacles faced in practice. It is due to such concerns that the bulk of SIA research focuses on issues such as SIA effectiveness, independence and status or position. This study therefore probed perspectives of SIA practitioners and regulators, to determine SIA's distinct contribution to EIA decision making. The motivation being to deduce whether the discipline has been reduced to a mere rubber-stamping exercise or whether it is fit for purpose, thus delivering positive outcomes within the decision-making process.

The study employed a qualitative research approach to explore existing literature pertaining to SIA in a South African context, while drawing from international correlations, including inference from EIA. The empirical study generated data from a self-administered questionnaire disseminated to ten (10) practitioners and four (4) regulators. The questionnaire is comprised of three predetermined themes namely:

- Theme 1: Background and experience of participants;
- Theme 2: SIA effectiveness; and
- Theme 3: The influence of SIA in EIA decision making.

Research findings in line with Theme 1 demonstrated that all participants have adequate knowledge of SIA in theory while the majority have extensive experience, thus creating fertile

ground to examine the links between practice and theory. The feedback received with regards to Theme 2, portrays SIA as an ineffective Environmental Management (EM) tool due to the numerous inhibiting factors experienced in practice. The third and final theme stresses the unutilised potential of SIA and the fact that the EIA process continues to be dominated by biophysical aspects, hence swaying the decision making towards un-holistic, socially incognisant and somewhat biased final decisions. Recommendations on how to improve the “*ineffective*” status of SIA include the development and strengthening of statutory legislation, improved SIA standards and a provision of guidelines for those new in practice, so as to improve on the basis of social impacts enforcement and compliance. The latter can additionally be facilitated by a concurrent facilitation of regulatory personnel.

Keywords: Social Impact Assessment; Sustainable Development; Decision Making; Substantive Effectiveness; South Africa; Perspectives.

ABBREVIATIONS AND ACRONYMS

BA	Bachelor of Arts
BSc	Bachelor of Science
COVID-19	2019 novel coronavirus
CSR	Corporate Social Responsibility
DEAT	Department of Environmental Affairs and Tourism
DEDECT	Department of Economic Development, Environment, Conservation and Tourism
DFFE	Department of Forestry, Fisheries and the Environment
DMR	Department of Mineral Resources
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
ECA	Environmental Conservation Act 73 of 1989
EM	Environmental Management
EMP	Environmental Management Plan
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FPIC	Free Prior Informed Consent
GDP	Gross Domestic Product
IA	Impact Assessment
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
I&AP	Interested and Affected Parties
IAIA	International Association for Impact Assessment
IFC	International Finance Corporation

MA	Master of Arts
MPRDA	Mineral Petroleum Resources Development Act 28 of 2002
MSc	Master of Science
NEMA	National Environmental Management Act 107 of 1998
NEPA	National Environmental Policy Act of 1970
NGO	Non-Governmental Organisation
PAJA	Promotion of Administrative Justice Act 3 of 2000
POPIA	Protection of Personal Information Act of 2013
PP	Public Participation
PPPP	Plans, Programs, Policies and Projects
RDP	Reconstruction and Development Programme
RO	Research Objective
RSA	Republic of South Africa
SA	South Africa
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
SLO	Social License to Operate
SLP	Social Labour Plan
TBL	Triple Bottom Line
UNCED	United Nations Conference on Environment and Development
USA	United States of America
WCED	World Commission on Environment and Development

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CHAPTER 1 INTRODUCTION

1.1 Background

The advent of the industrial revolution in the 18th century irrevocably transformed human society and progress to become extensively woven with economic- and material advancement (Du Pisani, 2006:84). This illustrates a human perception of dominance over the natural order, manifesting into a gross footprint evident to an extent that it is carved in geological records, known as the 'Anthropocene epoch' (Du Pisani, 2006a:84; King *et al.*, 2018: xxxix). This provoked thoughtfulness regarding a much-needed healthy planet. Such deliberations thus fortified the global concept of 'sustainable development', which necessitates developmental practices with the intent to satisfy the needs of the present without compromising the future generation's ability to meet their own (Aucamp *et al.*, 2018:1177; WCED, 1987:8). The concept of sustainability was coined at the United Nations Conference on the Human Environment in 1972, however, it was later popularised in the publication titled "*Our Common Future*" at the World Commission on Environment and Development (WCED) (WCED, 1987:6). The former stands true, despite contributions by authors like Burdge and Vanclay (1996), Esteves *et al.* (2012), including Du Pisani (2006) who suggested that the ideology of the concept has long-standing historical roots preceding its formal adoption in the 20th century.

Nonetheless, following the WCED, the 1992 United Nations Conference on Environment and Development (UNCED) marked the transition towards a people centred sustainability complex, resonated in the document titled "*The future we want*" (UN, 1993:16; UN, 2012:1). At this conference, the UNCED endeavoured to dissolve the compartmentalisations of the triple bottom line, reaffirming that the concept of sustainable development rests on an equilibrium of all three pillars namely environmental protection, social-, and economic development (Aucamp, 2015:1; Hildebrandt, 2012:1). One of the major results emanating from the conference and in support of the aforementioned was the Rio Declaration and its twenty-seven principles (Kruger *et al.*, 2020:71; UN, 2012:4). Principles one and seventeen of the declaration cultivated the land for Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) to blossom by concurring with Devuyst's (2000:68) suggestion that one of the instruments to promote sustainable development is through the impact assessment system.

Impact assessment refers to the process of identifying possible consequences emanating from current or proposed actions (Du Pisani, 2006a:2). The most commonly recognised impact

assessment tool is Environmental Impact Assessment (EIA). The focus of this dissertation is however on Social Impact Assessment (SIA). Ironically SIA cannot be discussed without mention of EIA due to their interconnected nature, hence referring to the aforementioned triple bottom line (Vanclay, 2004:265). For this reason, the following sections will respectively introduce both EIA and SIA.

1.1.1 Origin and historical development of EIA

In the early 1970s, EIA emerged as a discipline to heed the call for a just means of development. The discipline materialised as a response to the promulgation of the United States of America's (USA) National Environmental Policy Act of 1969 (NEPA) (Du Pisani, 2006b:1). The NEPA aimed to "declare a national policy that will promote efforts which will eliminate damage to the environment and biosphere and stimulate the health and welfare of a man" (NEPA, 1969:6). As a result, many developed and developing countries across all parts of the world adopted this tool to adequately facilitate the human-environment interface (Slootweg *et al.*, 2001:19).

The objectives of EIA as stated by the International Association for Impact Assessment (IAIA,1999:2) aims to ensure and encourage explicit consideration of environmental concerns within the decision- making process through the combined efforts of anticipating-, avoiding-, minimising-, or offsetting significant adverse effects subjected to biophysical and socio-economic dynamics. This is to be facilitated by protecting the outputs and dimensions of natural systems including the ecological processes which maintain their functions, while ultimately promoting sustainable development through the optimisation of resource use and the management of possible opportunities.

EIA can therefore be contemplated as an "action compelling" mechanism designed to reform priorities and procedures in national plans, -policies and -programs due to their broader scope, as opposed to the project-level influence on major environmental implications (Caldwell, 1988:75; Devuyst, 2000:68). Sadler (1996) corroborates this by suggesting that EIA is indeed a tool for sustainable development, implemented to mitigate hazardous impacts of proposed interventions in the early planning stages. In addition to mitigation measures, EIA provides flexibility to exploring feasible alternative measures wherever mitigation is considered insufficient. Captivatingly, mankind is positioned at the centre of everything ranging from environmental degradation to policy development aimed to combat the problems experienced to date. This is illustrated by the aim of the National Environmental Policy Act (NEPA) through its consideration of men. This action led to the parallel development of SIA, which is discussed in the following section.

1.1.2 Origin and historical development of SIA

SIA developed in the early 1970s simultaneously to EIA, when the discipline ascended in response to the official requirements presented by the promulgation of the NEPA of 1969, which called for the integration of natural and social sciences (Esteves *et al.*, 2012:34; Kruger, 2020:18). This was encouraged by the evident display that alterations in the biophysical environment transcended to cultural and socio-economic changes (Burdge & Vanclay, 1996:62). In 1973, following the decision to build an Alaskan pipeline, an Inuit tribal chief commented on the “*changes in customs and ways of the people*”, therefore questioning the social impacts imposed on the natives of the land (Burdge & Vanclay, 1996:62). This incident bred discussions that encouraged the birth of SIA as a discipline in its own right, to be employed alongside EIA, with a specific focus on strengthening the social dimension of sustainable development, while trying to anticipate disruptive conflict (Burdge & Vanclay, 1996:62; Kruger, 2020:18).

EIA, however, pressed forth as the most popular discipline of the two, also encompassing social elements within its broad context. This action positioned SIA internationally as an integral component of EIA (Hildebrandt, 2012:1). Barrow (2010:295) argues that SIA highlights the potential and actual conflict affecting the accurate application of the sustainable development complex. However, a holistic appreciation of all impacts requires a comprehensive understanding of the biophysical and social aspects and impacts emanating from planned interventions. In cognisance of the interconnected nature of these aspects, this encourages linking the assessments, as opposed to separate application (Barrow, 1997:226; Barrow, 2010: 296; Slootweg *et al.*, 2001:19).

Barrow (2010:293) suggests that there is no universal definition of SIAs, however, the most simplified form provided by Vanclay (2003:6) defines the concept as a process of analysing, monitoring and managing the social consequences of development. Vanclay (2003:6) elaborates to include all intended and unintended consequences of planned interventions (plans, policies and programs) with any invoked variations to the quality of life, the sense of well-being and response to change within communities. The definition produced by Vanclay (2003:6) in his contribution to the International Association for Impact Assessments (IAIA) will therefore be the definition of choice for this study.

SIA therefore developed as a valuable instrument aimed to assist individuals, impacted communities, private institutions and government to better understand and anticipate possible social consequences which are brought forth on humans or communities by developmental or possible policy changes (Du Pisani & Sandham, 2006:708). Over the last decade or so, the most

significant change in SIA is noted as the prominence of human rights due to the increased international awareness and cognisance of the destabilisation of social aspects as a result of development (Vanclay, 2020:126). The Guiding Principles on Business and Human Rights (UNGP) endorsed by numerous organisations, established that all organisations have a responsibility to respect human rights and avoid any harm imposed on social environments and their surroundings as a result of development (Vanclay, 2020:126; Vanclay & Hanna, 2019:3). The latter cascaded into the mainstreaming of SIA within industries although this was not accepted by all (Vanclay & Hanna, 2019). South Africa is a country with a complex history, these disciplines therefore possess and currently display improvements in environmental attitude and behaviour. The following section unpacks both EIA and SIA in a South African context.

1.1.3 EIA and SIA in the South African context

South Africa preceding democracy experienced EIAs being conducted on a voluntary, input-driven non-mandatory basis, thus allowing leeway for projects posing major negative impacts on both the environment and marginalised communities (Du Pisani & Sandham, 2006:710). This was, however, firstly addressed by the Integrated Environmental Management (IEM) system which had its procedural document coincide with the promulgation of the Environmental Conservation Act 73 of 1989 (ECA). The promulgation of ECA provided a breeding ground to formalise EIA through legal requirements and EIA regulations promulgated in terms of the act.

The advent of democracy saw the country undergo an extensive reform process characterised by promoting social justice, by transforming and eradicating past transgressions and inequalities (Scott & Oelofse, 2005:445). Post-1994, the approach to environmental management assumed a positive stance endorsed by the South African Constitution, which is the supreme law of the land, as stipulated by Chapter 1 Section 2 of the Act (Du Pisani & Sandham, 2006:710; RSA, 1996:3). The Bill of Rights (Chapter 2 Section 24) enshrines an environmental right postulating that everyone within the boundaries of South Africa has a right –

to an environment that is not harmful to their health or well-being, and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation; promote conservation, and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development (RSA, 1996:9).

To give effect to this right, the first legally mandated era of EIA was birthed through the promulgation of EIA regulations in terms of the Environmental Conservation Act of 1989 (ECA) in

September 1997 (Du Pisani & Sandham, 2006:710; Kruger, 2020:3). Subsequently, the National Environmental Management Act 107 of 1998 (NEMA) was promulgated in November 1998, which provided more detailed provisions for EIAs, hence serving as the vessel that moulded and cultivated four EIA regimes in 2006, 2010, 2014, and 2017 (Du Pisani, 2006b:14; Du Pisani & Sandham, 2006:711; Kruger, 2020:4).

The NEMA, in line with the Constitution, portrays a spirit of a stronger social focus through its broad definition of the term 'environment', entrenching social elements as inherent to the environment. Various authors ascribe the evolution of SIA as an embedded and integral component of EIA, due to the broad definition of the environment as provided by NEMA (Aucamp, 2015:3; Hildebrandt & Sandham, 2014:21; Kruger, 2020:4). For this reason, SIAs are often undertaken as specialist studies or -reports that inform the EIA, thus asserting itself as an integral contributor to EIA as opposed to becoming fully-fledged assessments of their own right (Hildebrandt & Sandham, 2014:21; Kruger, 2020:4).

Ironically, in contrast to the socially inclined approach of environmental management, EIA is comprehensively slanted towards the biophysical environment which is endorsed by regulation, guidance and practice (Du Pisani & Sandham, 2006:711; Hildebrandt & Sandham, 2014:21). This leaves SIA somewhat misplaced, echoing the common perception of it being an orphaned discipline not fully adopted by the impact assessment system.

SIA has a long-standing history in line with EIA due to the discipline's simultaneous conception. In South Africa, SIA serves as a subset of the EIA, which is depicted as an integrated impact assessment approach driving sustainable development. Aucamp (2015:55) stresses that for as long as SIA is conducted as a once-off assessment or practiced as a specialised study under EIA, the discipline, including its independence, will forever remain an aspiration. Despite the strides conveyed by SIA over time, it is continuously observed as an orphan seeking solace as a discipline of its own right (Aucamp & Lombard, 2018:178). The former is indicative of an array of concerns burdening SIA. The following section embarks on highlighting specific gaps for the purpose of this study.

1.2 Problem statement and rationale for the study

The lineage of global initiatives and international law have set a precedent that rippled over to the South African context post-acquisition of the democratic era (Aucamp, 2015:3; Aucamp *et al.*, 2018:1191; Kruger & Sandham, 2018:395). The environmental consciousness and sustainable development mandates are clearly entrenched within the Constitution of the Republic of South Africa as depicted by Section 24 in the Bill of Rights (Aucamp, 2009:110; Strydom, 2018).

However, the norm linked to emerging economies such as South Africa, which seeks to rid itself of the legacy of Apartheid, portrays economic development preceding social developments and welfare (Aucamp & Lombard, 2018:173). Remarkably, the latter persists despite the historical existence of SIA and the prevalence of social dimensions encapsulated in the nature of development. To this day, SIA is not conducted as a standalone assessment under the context of EIA and the Environmental Authorisation sought after prior to developmental commencement. Moreover, the integration of the discipline into EIA has not been easy (Du Pisani & Sandham, 2006:710; Hildebrandt & Sandham, 2014:21). This poor integration can be observed as the main driver for the lack of explicit requirements for SIA in NEMA (Aucamp, 2009:110; Du Pisani & Sandham, 2006:710; Hildebrandt & Sandham, 2014:21).

Du Pisani and Sandham (2006) suggest that SIAs possess hybridised qualities linked to scientific research, policymaking and the decision-making process. However, the array of research into SIA mainly focuses on the position or independence, value and effectiveness of SIA within the Environmental Assessment (EA) community. Studies by Burdge (2002), Esteves *et al.* (2012), Hildebrandt and Sandham (2014), and Kruger and Sandham (2018) have scrutinised and highlighted that the global trend perceiving SIA as peripheral to EIA also persists within a South African context, despite the valiant attempts to uphold best practice in the midst of minimal regulatory support, guidelines and various other inhibiting factors. Furthermore, Hildebrandt and Sandham (2014) examined the state of SIA report quality in South Africa for both the ECA and NEMA legislative regimes, which depicted a slight improvement in the quality of reports. It is nonetheless evident that such triumphs bear minimal weight as not much has changed with regards to the status of SIA. Report quality reviews together with practitioner perspectives unto the effectiveness of SIA cited a myriad of hurdles experienced in practice (Hildebrandt & Sandham, 2014:23; Kruger & Sandham, 2018:404). Intriguingly, some are synonymous with those experienced by EIA. This created a gap in research, as the extent of influence that SIA imparts into the final decision-making processes of EIA is not clearly understood. This paper seeks to investigate the distinct contribution of SIA to EIA decision making.

1.3 Research aim and objectives

The aim of this study is to investigate the perspectives of the SIA community on the contributions of SIAs to EIA decision-making in South Africa.

The research objectives to achieve this task include:

- Research Objective 1 - To investigate the perspectives on the position/ role of SIA to EIA decision making; and

- Research Objective 2 -To investigate the perspectives on the extent to which SIA influences EIA decision making.

1.4 Overview of research methodology

According to Creswell and Creswell (2018:4) there are three methodological approaches to research, namely the qualitative-, quantitative- and mixed method approach. This study applied the qualitative research approach as the methodological approach of choice. By its nature, this approach seeks to derive understanding and insight from the experiences of others, which is in line with the goal of this study (Creswell, 2009:4). However, in order to give life to the first objective of this study as stipulated in section 1.3 above, a comprehensive literature review was conducted first. This led to the acquisition of secondary data articulated in the second chapter. In order to accomplish the second research objective, a link to a self-administered questionnaire on the electronic platform named Google forms was disseminated through emails. The email provided an opportunity for face-to-face interviews, Skype and even telephonic interviews all as per the preference of the potential interviewee.

The structured questionnaire consisted of fourteen closed- and open-ended questions (see Annexure A) to facilitate some flexibility with the answers provided. A total of fourteen respondents participated in the study and the primary data acquired was deliberated in the fourth chapter. For the latter, a general inductive approach was utilised to provide a thematic analysis in which data sets and a pattern analysis was predetermined, leading to the manual recording of codes or phrases (Ayre & McCaffery, 2022:78). A detailed discussion of the methodology will be presented later in Chapter 3.

1.5 Assumptions and limitations

This study was conducted with the assumption that the acquisition of primary data would be voluminous as expectations were that the SIA community would take ownership and have their points conveyed. Unfortunately, that was not the case, as a large number of the experts were either unavailable or withdrew from participating. This therefore prompted the inclusion of regulators into the study so as to acquire a feasible sample size. The availability of secondary data in line with the research goal and objective was difficult to source, which led to some inference drawn from EIA research.

1.6 Structure and outline of the dissertation

This dissertation comprises five (5) chapters with chapter divisions as follows:

Chapter 1 is the introductory chapter, providing a general overview of the study. It strives to contextualise the research problem through discussing the origin of both EIA and SIA in international- and South African contexts, followed by the rationale of the study. The chapter additionally articulates the research objectives, an overview of the methodology applied, and the assumptions and limitations encountered when undertaking the study.

Chapter 2 provides the theoretical setting. This chapter referred to as the literature review, delivers relevant existing literature through the use of reputable databases. The chapter highlights the purpose and value of SIA followed-up by a discussion into the use of the guiding mechanisms of the discipline. The legal mandate of the discipline is unpacked and opens the way for the discussion into SIA effectiveness, the role of SIA in South Africa (SA) and lastly the influence or contribution of SIA to EIA decision making in SA.

Chapter 3 is the research methodology chapter. This chapter stipulates the research approach and -design of choice for the acquisition of primary data substantiated by reasons for the choices made. This chapter therefore unpacks the data collection process in its entirety including the sample group, and provides the techniques of data analysis.

Chapter 4: Results and data analysis. This chapter provides the means to answer and satisfy the goal or research question and the objectives with special emphasis on the second research objective. This chapter demonstrates a collation and scrutinisation of research findings to determine the meaning or message conveyed by the data in comparison to existing literature.

Chapter 5: Conclusion and recommendations. This chapter sums up the study and provides recommendations and insight from the survey. The chapter additionally provides recommendations for future research in accordance with the conclusion drawn from this study.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

The previous chapter (Chapter 1) provided an overview of the origin of two disciplines within the Environmental Assessment (EA) spectrum, namely Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA). It further highlighted that the application of these disciplines is commonly integrated to a point that, in South Africa, SIA is often conducted as a specialist study and regarded as an integral component of the broader EIA process. In a bid to contextualise the study objectives, Chapter 2 will review existing literature with the aim of determining the value, position and influence of SIA in EIA decision making. The latter is therefore an explicit attempt to investigate and address the first research objective (RO1) as outlined earlier in Chapter 1, i.e. to investigate the perspectives unto the position and the role played by SIA in EIA decision making. This chapter endeavours to articulate these perspectives in four sectional discussions detailing firstly the purpose and the value of SIA, secondly, the legal mandates of SIA in South Africa, thirdly the effectiveness of the discipline and the role of SIA in South Africa, and lastly the role of SIA in EIA decision making.

2.2 Purpose and value of SIA

Amid the context of development, the term 'social' becomes a complex expression to be defined due to the vast array of connotations it provides (Du Pisani & Sandham, 2006:707; Du Pisani, 2006a:21). Du Pisani and Sandham (2006:708) argue that development is by its nature socially inclined because, "its means are social processes and institutions, its ends embody social values, and its costs and benefits are distributed across communities, social groups and organizations". Although this is the case, biophysical studies or assessments continue to overshadow SIA, preserving trends of past mentalities towards environmental management and emphasising EIA as an all-inclusive framework for developments (Hildebrandt & Sandham, 2014:24).

According to Aucamp (2009:110) and Burdge (2004:40), SIA is a tool designed to aid in both the planning- and decision-making processes of impact assessments (IA). The SIA discipline aims to establish an understanding of the current socio-environmental state of affairs, assess probable impacts borne of proposed interventions, facilitate and coordinate the participation of stakeholders, and recommend feasible and reasonably practicable mitigation measures accompanied by possible alternatives (Aucamp, 2009:110; Vanclay, 2003:8). Burdge and Vanclay (1996:60) suggest that the greatest social impact of plans, programs, policies and

projects (PPPP) is the emerging stresses related to the uncertainty of possible outcomes. This uncertainty rattles the cages of the receiving population, causing discomfort, distrust and possibly conflict between developers and the community and even among individual community members. Overcoming such concerns therefore calls for the inclusion of all interested- and affected parties (I&APs) and various other stakeholders.

The inclusion of such individuals or organisations not only reduces uncertainty, but in turn legitimises SIA by enhancing the accuracy of possible impacts and maximising the capacity to identify possible and practicable mitigation measures (Burdge & Vanclay, 1996:60). The latter is manifested in the ideology of learning from the experiences and knowledge of native communities. The indigenous people referred to have strong ties to the land and possess the potential to gather, analyse and interpret their own data, hence actively integrating local knowledge, values, resources and priorities for democratic and sustainable decision making (Sandham *et al.*, 2019:3). In addition, the inclusion of natives or affected communities in SIA processes breeds a social license to operate, therefore minimising the possibility of hostility and disruptions towards activities, while avoiding major planning disasters and associated costs whether direct or indirect (Burdge & Vanclay, 1996:61).

In line with the aforementioned, the SIA community emphasises that the discipline serves as the voice of the people, a haven for social and environmental progression in cognisance of impact by- and on the people, and lastly assists in superior decision-making for more sustainable outcomes (IAIA, 2003:5; Kruger, 2020:16). In order to adequately fathom the true value of SIAs, the underpinning core values suggested by the International Association for Impact Assessment (IAIA) must be considered first (see Table 2-1 below).

Table 2-1: Core values of SIA (IAIA, 2003:5).

Core values underpinning the SIA community	1.	Human rights should be shared equally across all cultures and gender identifications.
	2.	Protect, by the rule of law, all human rights while applying the principles of availability, equality and fairness in justice for all.
	3.	Empower human- and social development without compromising the rights to a clean and safe environment, which in turn promotes good health and good quality of life.
	4.	Nest and protect aspects of environmental and social dimensions to ascertain good health and quality of life for all.
	5.	Endorse the human right to inclusion in decision making processes of planned interventions with variable effects on people's lives
	6.	Local knowledge and experience are of great value and possess the potential to enhance planned interventions

These six values are the holy grail and the heart pumping life into the veins of the SIA discipline. They aim to guide and motivate the SIA community in improving the state of SIA, ensuring that communities are safeguarded while employing with apprehension a rather neo-populistic approach to development, hence placing communities as primary agents of change (Sandham *et al.*, 2019:3). The future of SIA practice thus rests upon threading these values into the procedures and processes undertaken within SIA, while being guided by sets of principles and guidelines. Therefore, the following sub-section provides further insight into the principles and guidelines of SIA as guiding tools for the adequate application of SIA.

2.2.1 Directive mechanisms for SIA

One of the most impactful motivational quotes by Greg Reid reads that “a dream jotted and assigned a date becomes a goal, a goal stripped down to individual steps becomes a plan, and lastly a plan backed by action realizes the dream” (Miyamoto, 2019). Vanclay (2003:6) supported this methodology when addressing the development of international guidelines and principles. Vanclay (2003:6) emphasises that guidelines are to be deduced from principles, the principles themselves being deduced from core values, therefore closing the loop to the actual realisation of the dream of the discipline i.e. what it is sought out to achieve.

In order to stay true to the values of SIA illustrated in Table 2-1 above, the pioneers in SIA established sets of principles and guidelines. Principles provide the “how” factor i.e. statements providing a general guide of either a common understanding or an indication pertaining to the course of action regarding what ought to be done (Vanclay, 2003:8). Contrary to the principles, guidelines provide the “what”, which entails advisory statements or instructions aimed at planning a specific course of action, that are indicative of clarity on what and/or how things should be done (Vanclay, 2003:8). Therefore, practitioners depend on these international broader level guiding tools as templates to adequately position themselves and their activities to attain the prestige of internationally acclaimed best practice. Table 2-2 below provides an overview of both the fundamental principles and guidelines for SIA.

Table 2-2: Fundamental principles and guidelines of SIA (IAIA, 2003:6-8).

Fundamental Principles	Guidelines
1. All actions should be fortified by explicit consideration and respect for human rights.	SIA should provide progressive deliverables in line with the sustainable development mandate.
	Intimidation, harassment and violence should be avoided at all times.
2. Planned interventions ought to be underpinned by principles of equity and democratisation, promoting cognisance of impacts prone to worst-off members of society.	Local community's democratic outlook requires reinforcements of social and human capital.
	Equity should be the fundamental element in development planning and in impact assessment.
3. Promote value, respect and recognition of diversity within and across all cultures, including the varied needs and expectations of varied stakeholders.	Developmental procedures that violate human rights should not be accepted.
4. Uphold administrative accountability in decision making to ensure just, impartial and transparent administrative procedures.	Endorse the employment of viable and feasible alternative- and mitigation measures of possible and predicted environmental and social impacts.
	Conformance to administrative justice should not be underplayed.
5. Perspectives presented by communities should be deliberated and included in decision making.	Public engagements are crucial, as developments are social by nature.
6. Decisions should not be based solely on the contributions of experts.	The knowledge and life experiences of natives or locals need to be incorporated into the assessments for decision making.
7. The primary objectives of developments should be to yield positive outcomes.	Proposed developments can be modified to enhance positive impacts and reduce negative impacts.
8. Social and human dimension should form integral constituents of the definition of the term "environment".	Social dimensions require adequate attention as one of the pillars of sustainable development.

These principles and guidelines set forth the means and framework to understanding, undertaking and commissioning SIAs for planned interventions. However, time presents opportunities for growth and evolution. This statement emanates from the SIA discourse with regards to the manner in which the discipline is to be applied. The discourse itself stems from and is encouraged by the growing pool of SIA practitioners over time hence, presenting a myriad of views on the subject matter (Vanclay *et al.*, 2015:4). The latter can be ascribed to the multitude of cultures, religions, social and economic priorities and heightened sense of awareness by communities, including regulatory contexts, that vary per country or region (Vanclay, 2003:5). Vanclay *et al.* (2015:4) suggests that the initial principles and guidelines should not be carved in stone, but rather evolve the initial philosophy of SIA in practice to incorporate the discipline's broadened reach and influence. However, the lack of clear guidelines in a South African context has led to a

dependence on international principles and guidelines, together with international social performance standards and funder requirements (Aucamp, 2015:55). Results from the study by Hildebrandt and Sandham (2014:24) suggest that SIA in South Africa follows the route of good practice due to this phenomenon. Aucamp *et al.* (2011:48) concurs by stating that SIA aligned solely to regulatory processes is not a tool for sustainable development, but a response to a variety of triggers. It is therefore this flexibility that propelled continual improvement in SIA practice internationally (Hildebrandt & Sandham, 2014:24).

Vanclay *et al.* (2015:70) suggests that guidelines and subsequent standards, tasks or SIA variables on good practice should serve as guidance used not only by practitioners but also by the regulatory staff, Non-Governmental Organisations (NGOs) and representatives of the affected communities. Vanclay *et al.* (2015:70) further recommends that although it is progressive to have a set of measures guiding one's application of duties in SIA processes, these are to align with specific jurisdictional mandates. The following section therefore provides an understanding of the legal frameworks mandating and/or endorsing the solicitation of SIA in South Africa.

2.3 Legal mandate of SIA in South Africa

Environmental Assessments (EAs) in South Africa chart a similar trajectory to that portrayed in an international context in that the historical development of both EIA and SIA dates back to the mid-1970s when these two disciplines were embarked upon under a non-mandatory or voluntary basis (Du Pisani & Sandham, 2006: 709; Kidd *et al.*, 2018:1215; Kruger, 2020:20). According to Aucamp (2015:3) the evolution of EA in South Africa is well recorded. Aucamp (2015:3) further certifies and elaborates by stating that South African Environmental law is reported and recognised in the midst of the best in the world. Chapter 1 provided an overview of the South African environmental legislative reform, whereas this section now portrays a synopsis of relevant legislation and statutory provisions underpinning the social dimension's influence on environmental management and decision-making, transcending to the effectiveness of the SIA discipline in South Africa.

In order to determine the effectiveness of SIA in South Africa, reference to the nested egg model of sustainable development is important to indicate that legislative provisions strengthen environmental management tools such as EIA and SIA (NFSD, 2008:14). The nested egg model conveys a systems approach to sustainable development, highlighting that ecological-, social- and economic factors are embedded into one another while underpinned and integrated through statutory governance systems (see Figure 2-1 below) (NFSD, 2008:14). This model echoes the importance of governance systems as the foundation that balances out the triple bottom line (TBL)

of sustainable development, which entails the environmental-, social- and economic pillars. This is synonymous to an egg safely carried in an egg carton, whereby the egg carton represents legislative provisions, the egg yolk economic factors, the egg white the social dynamics, while the egg's membrane and shell represent environmental services.

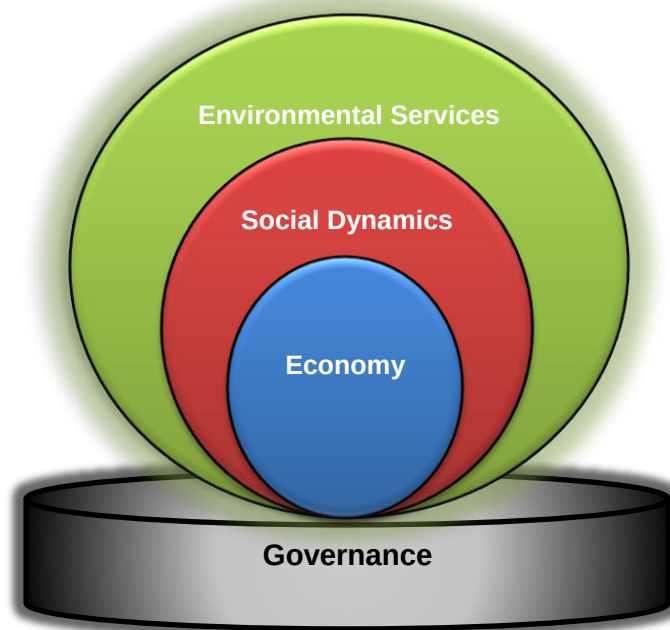


Figure 2-1: Nested egg model for sustainable development (NFSD, 2008:14).

Nonetheless, acts of governing require regulatory decision-making in order to adequately implement concepts and provide oversight of activities (NFSD, 2008:15). The following subsections detail some of South Africa's legislation with endorsing social inclusion and consideration with regards to application and decision making.

2.3.1 The Constitution of the Republic of South Africa

Prior to the year 1994, environmental affairs in South Africa were not regarded as a top priority, and as a result the social dimensions and environmental considerations portrayed by EAs stem from a human-rights approach (Aucamp *et al.*, 2018:1190; Du Pisani & Sandham, 2006:709). This is due to the fact that developments possess the potential to infringe on human rights and alter social relations as observed before 1994 (Aucamp *et al.*, 2018: 1190). Du Pisani and Sandham (2006:709) highlighted claims published by the then Department of Environmental Affairs and Tourism (DEAT) stating that post-1994, environmental management experienced a shift from “narrow conservation to sustainable development” with an intense burning enthusiasm to redress and achieve social justice, democracy and sustainable development (DEAT, 1997:2).

The statement made by the DEAT therefore emphasises that human rights played a pivotal role in addressing past transgressions and endorsing equitable societies (Scott & Oelofse, 2005:446). Chapter 2 in the Bill of Rights outlines all the rights of the citizens of the country, where Section 24 explicitly addresses the protection of the biophysical environment, inspires social development, economic prosperity, and illuminates transgenerational equity (RSA, 1996:9). Notably, Section 24 (b) explicitly states that the mandate of Section 24 will be achieved “through reasonable legislative and other measures” (RSA, 1996:9). The aforementioned statement hence ensures that legislation is enacted, while ‘other measures’ alludes to decisions being made for feasible and practicable solutions. Chapter 1, Section 2 of the Constitution highpoints its supremacy by stating that “any law inconsistent with it is invalid and that the obligations imposed by it must be fulfilled”, and realises that decisions made that are not in line with it will be deemed unconstitutional (RSA, 1996:3).

The nested egg model is therefore endorsed by the Constitution. Section 24 illustrates the narrative that all three aspects of the environment are embedded within one another and balanced and given effect by laws like the National Environmental Management Act 107 of 1998 (NEMA), the Mineral and Petroleum Resource Development Act 28 of 2000 (MPRDA) and the Promotion of Administrative Justice Act 3 of 2000 (PAJA). These legislations were purposefully chosen due to their explicit connotation on EIA decision making cognisant of SIAs influence thereof. These governing instruments are all articulated in more detail within the following sections (RSA, 1996:9).

2.3.1.1 The National Environmental Management Act

It is important to note that the NEMA supersedes the Environmental Conservation Act 73 of 1989 (ECA) which provisioned the first mandated EA era in 1997. The NEMA regulations have since undergone various reforms over the years i.e. 2006, 2010, 2014 and in 2017 (Du Pisani & Sandham 2006:711; Hildebrandt & Sandham, 2014:21; Kidd *et al.*, 2018:1215; Kruger, 2020:42). The extensive reform was commissioned to improve the state of EIAs’ efficiency and effectiveness (Kruger, 2020:42). Nonetheless, the preamble of the NEMA makes reference to the human rights stipulated in Section 24, Chapter 2 of the Constitution of South Africa, which emphasises the supremacy of the Constitution as stipulated by Section 2 of Chapter 1 (Kruger, 2020:43; RSA 1998: Preamble; RSA 1996). The NEMA hence states that “the state must respect, protect, promote and fulfil social, economic and environmental rights of everyone and strive to meet the basic needs of previously disadvantaged communities” (RSA, 1998: Preamble).

The law realises that human beings are at the centre of development, as the preamble continues to stress that inequality in the distribution of wealth, resources and poverty are serious contributing factors to environmentally harmful practices (RSA, 1998:Preamble). Chapter 1 of the NEMA stipulates a list of principles advocating for environmental management to prioritise people and their needs, serving their social-, cultural-, physical-, psychological- and developmental interests (Aucamp *et al.*, 2018:1191; Kruger, 2020:43; RSA, 1998:12). It further stipulates that this is to be achieved through ensuring a “risk-averse and cautious approach”, which entails that adverse impacts posed on the environment and people should be anticipated in order to prevent, minimise and/or mitigate their occurrence (Aucamp *et al.*, 2018:1191; RSA, 1998:17).

In addition, Chapter 1, Section 4 (f) of the NEMA promotes the consideration- and involvement of the social dimension through empowering people to participate in environmental governance. Chapter 5 further calls for integrated environmental management, wherein Section 23 (2) (a-b) stresses the integration of the principles outlined by Section 2 of the Act into all decision-making processes related to activities with potentially significant effects on the environment (RSA, 1998a:31). Section 23 (2)(b) and Section 24 (1) (a-f) thrust the TBL of sustainable development as key considerations for decision making, hence echoing integration as advocated for. Section 24 (1)(f) also sites undertaking specialist studies whenever applicable for environmental authorisation, which explicitly links to SIA due to its acknowledgement within the South African context as a specialised study (RSA, 1998:33). This is validated again by Section 24 (l) which calls for external specialists’ reviews to provide technical knowledge and expertise with pronounced objectivity where such is not apparent within the final assessment submitted for decision making purposes (RSA, 1998:51). This clearly illustrates the potential SIA possesses within the EIA decision making process.

Supplementary to the NEMA are the Specific Environmental Management Acts (SEMA) falling under the auspices of the overarching NEMA as the “mother act”. These include amongst others:

- The National Environmental Management: Waste Act 59 of 2008;
- The National Environmental Management: Air Quality Act 39 of 2004; and
- The National Water Act 36 of 1998.

These acts align extensively to Chapter 1, Section 2’s principles depicted in the NEMA, including their requirement for public participation as articulated in Chapter 6. These acts all provide additional specifications to what is outlined in the NEMA and thereby indicate that the social dimensions in these provisions are both, implicit and explicit (Kruger, 2020:46).

2.3.1.2 The Mineral and Petroleum Resources Development Act

The Mineral and Petroleum Resources Development Act 28 of 2000 (MPRDA) is the one environmental management act that explicitly requires social development, as observed by the endorsement of Social Labour Plans (SLPs) (Aucamp *et al.*, 2018:1192). The SLP serves as a regulatory prerequisite to granting mining and production rights by the relevant authority in cognisance of the submitted EIA report (Franks & Vanclay, 2013:43). Through the SLP, the MPRDA promotes rural development and social upliftment of communities affected by mining activities (Franks & Vanclay, 2013:43). Furthermore, it acknowledges that the resources of the land belong to the nation and forms part of the heritage of the people, the state acts as the custodian thereof ensuring an equitable transgenerational distribution of beneficiation (Franks & Vanclay, 2013:43; RSA, 2000a: Preamble).

Chapter 2, Section 2 of the MPRDA portrays the objectives of the Act stating, amongst others that the objectives aim to (RSA, 2000a:18):

- Substantially increase the availability of meaningful opportunities aimed at alleviating historically disadvantaged persons, with emphasis on women striving to percolate into the mineral and petroleum industries with the sole mandate of having the nations mineral and petroleum resources benefit all.
- To encourage economic expansion through mineral and petroleum resource development within the Republic.
- Promote and increase employment opportunities to advance social and economic welfare for all.
- Give effect to Section 24 of the Supreme law of the land by certifying that the republic's mineral and petroleum resources are explored and utilised logically and sustainably while encouraging ecological protection and the promotion of social and economic development in a just manner.
- Guarantee that holders of mining and production rights facilitate the process of contributing towards the socio-economic development of areas in which their activities take place.

Additionally, Section 39 (3) (b)(i-ii) of the MPDRA validates the requirement for both an EIA and SIA by stating that an applicant must “investigate, assess and evaluate the impact of his or her proposed prospecting or mining operations on (i) the environment; (ii) the socio-economic conditions of any person who might be directly affected by the prospecting or mining operation” (RSA 2000a:44).

2.3.1.3. The Promotion of Administrative Justice

The Bill of Rights serves as the cornerstone of South Africa's democracy, which applies to all forms of law and binds all organs of state, including higher level functions rendered by the legislature, the executive and the judiciary (RSA, 1996:5). It further states that everyone is equal before the law and therefore entitled to administrative action that is legally recognised, reasonable and procedurally fair (Aucamp *et al.*, 2018:1194; RSA, 1996:6; RSA, 2000b: Preamble). The Promotion of Administrative Justice Act (PAJA), No 3 of 2000 thus gives effect to this right. The PAJA prescribes the procedures that ought to be followed to adequately inform the decision-making process, and strives to hold decision makers accountable and liable for decisions being made (Aucamp *et al.*, 2018:1194). The Act further ensures that the voices of the people are considered by awarding them an opportunity to comment prior to final decisions being made. In turn, this action minimises and/or eradicates the potential for implementation of decisions with adverse effects subjected to communities (Aucamp *et al.*, 2018:1194; RSA, 2000b:5).

In light of the above-mentioned, it is crucial to remember that both EIA and SIA were in essence developed to assist and facilitate the protection of the biophysical environment and socio-economic aspects against consequences of reckless and ill-informed policies and decisions (Alberts *et al.*, 2022:1914). The implicit- and explicit requirements of these disciplines (EIA and SIA) therefore reinforce administrative accountability, and thereby create a network of connections between the EIA process and administrative action (Alberts *et al.*, 2022:1914).

It is worth noting that the legal frameworks discussed all pay attention to social dynamics in line with SIAs and in turn provide legal connotations for their application. Whether the SIA is fit for purpose under the auspice of legal frameworks is a question to be answered by the following section which takes a deep dive into SIA effectiveness.

2.4 SIA effectiveness

The topic of effectiveness is one that has been a subject of discourse over the years of impact assessment implementation, with varying perspectives which have in turn undergone extensive scrutiny (Chanchitpricha & Bond, 2013:65; Getty & Morrison-Saunders, 2020:2). Therefore, the discourse fashioned a variety of definitions for the term "effectiveness". However, Sadler (1996:37) defined effectiveness for EA as the means by which to determine how well something works, whether it works as intended, and whether it is fit for the purpose for which it is designed. As a result, effectiveness in impact assessment can thus be viewed as the extent to which decision-making processes align to the global goal of sustainable development (Chanchitpricha & Bond, 2013:66).

In order to deduce the extent alluded to above, Sadler (1996:39) emphasises three criteria, which were later augmented by Baker and MacLelland (2003) with a fourth criterion for measuring effectiveness (Bond & Morrison-Saunders, 2013:45). These criteria are:

- procedural,
- substantive,
- transactive, and
- normative effectiveness.

Procedural effectiveness is concerned with the extent to which EIA procedures and processes conform to established principles and guidelines in producing the Environmental Impact Statements (EIS) for regulatory assistance (Chanchitpricha & Bond, 2013:66). *Substantive effectiveness* refers to whether EIA conforms to the goals and/or objectives of the assessment ensuring support and facilitation of the decision-making process with careful consideration of the TBL. *Transactive effectiveness* is a measure of efficiency, emphasising the minimisation of monetary cost and time, whereas *normative effectiveness* refers to the degree to which standardised goals, which are derived from both social and individual standards of stakeholders involved in the process, are achieved (Chanchitpricha & Bond, 2013:67).

For this dissertation, substantive effectiveness is the area of interest. Since both EIA and SIA are practiced as policy implementation tools supporting the decision-making processes for planned interventions with the aim of ensuring sustainable development. The description of substantive effectiveness aligns to the mandate assigned to these disciplines (Chanchitpricha & Bond, 2013:68; Davidson, 2011:11; Esteves *et al.*, 2012:35). Chanchitpricha and Bond (2013:68) highlight that findings in literature suggest that triumphs in substantive effectiveness can be dependent on various factors which include: “regulatory framework for implementing impact assessment within the decision-making process, mechanisms in decision making context, public participation and the quality of impact assessment reports”. These factors were investigated with specific reference to SIA with some inference drawn from EIA and are discussed in the sub-section below.

2.4.1 Substantive effectiveness of SIA in South Africa

SIA in South Africa is fully incorporated into EIA as a component (specialist study) of the Environmental Impact Report (EIR), and thus lacks explicit legislation and regulation regarding the implementation of the discipline within the decision-making process (Du Pisani & Sandham, 2006:712; Kruger & Sandham, 2018:400). In addition, Kruger and Sandham (2018:400) highlighted that practitioners believe that regulations regarding SIA need to be more refined as

their lack of fine-tuning could result in incompetence in the field of practice. These findings may trickle down to misinformed decision making by regulators, seizing of works leading to incurring additional costs and/or refusal of anticipated projects.

Stakeholder engagement and public participation (PP) are essential components of SIA, which ensure that the people have a voice by considering and including public inputs in the assessment process (Chanchitpricha & Bond, 2013:68; Sandham *et al.*, 2019:150; Vanclay *et al.*, 2015:20). As a result, public involvement is often regarded as the strength of SIA, which translates to decision-making that is socially responsible whilst promoting accountability, transparency, efficiency, equity and empowerment (Du Pisani & Sandham, 2006:718). Nonetheless, studies by Hildebrandt and Sandham (2014) confirm that PP portrays good performance in SIA which can be ascribed to the extensive requirements in South African EIA. However, Kruger and Sandham (2018:399) cautions about the growing concerns pertaining to the confusion of SIA and PP within the EA community. Contrary to the former, PP in EIA does not perform as well as in SIA. Kidd *et al.* (2018:1269) and Sandham *et al.* (2020:7) credit this to the lack of inclusion and consultative efforts from the scoping phase of the assessment.

The study by Hildebrandt and Sandham (2014:23) depict a modest improvement in SIA report quality from the ECA to the NEMA regime. The study, corroborated by that of Alberts *et al.* (2022:6), flagging concerns with regards to the identification and evaluation of key impacts trailed by the provision of alternatives and mitigation measures. These two areas illustrated the poorest performance within the sample of SIA reports reviewed by the authors. The causes of these issues can be ascribed to a lack of skill in conducting and reviewing SIA, a lack of binding requirements, the dominance of EIA by practitioners with a Natural Sciences background and a lack of professional registrations with a relevant scientific and/or professional body (Du Pisani & Sandham, 2006:720; Hildebrandt & Sandham, 2014:24; Matlakala, 2020:44). Findings by Kruger and Sandham (2018:407) and Matlakala (2020:45) contribute by suggesting that time and budgetary constraints have reduced SIA practice to a mere box-ticking exercise. These concerns now paint a distorted picture regarding the quality of SIA reports being submitted for decision making purposes.

Mechanisms in the context of decision-making refer to the standards used to determine whether impacts are positive or negative (Du Pisani & Sandham, 2006:717). Alberts *et al.* (2022:1) took it a step further, considering these mechanisms as the link between substance (synonymous to report quality) of EIA reports and administratively just decisions. Findings by the authors illustrate that we may be achieving administratively just decisions based on poor substance. This emphasises that the administrative application of EIA may be functioning adequately, yet yielding

weakened outcomes, and therefore drifting away from delivering informed and environmentally sustainable decisions (Alberts *et al.*, 2022:7). As a result, the authors stress a hybridised approach to improvement i.e. both substance and administrative functions to ensure effective functioning of EIA systems which includes SIA (Alberts *et al.*, 2022:7).

It is clear that the factors of substantive effectiveness are extensively intertwined and influence the triumphs of one another. As such, a holistic approach is necessitated for effective SIA and ultimately effective EIA decision making. The following section, with consideration of this and previous discussions, provides an overview of the role played, and ultimately the position in which SIA has affirmed itself coupled by the position it is perceived to be occupying.

2.5 Role of SIA in South Africa

Drawing from the information in a previous section (Section 2.2 the purpose and value of SIA) and the supreme law of the country, it is evident that South African legislation has assumed an extensively human-centred approach. This can be ascribed to the attempts aimed at redressing past transgressions on disadvantaged communities and environmentally poor practices. Clearly, legislative provisions have prepared the soil, but in what position has SIA affirmed itself? This is the question to be answered here.

According to the publications of various authors (Aucamp 2009:110; Aucamp *et al.*, 2011:48; Du Pisani & Sandham, 2006:710; Hildebrandt & Sandham, 2014:21), SIA in South Africa has evolved to become an integral component of the EIA and not as a discipline in its own right, in spite of their simultaneous conception. The dominance of EIA both locally and internationally has somewhat burdened SIA with the view that resonates and exudes the expression of a “lesser sibling” or “orphan” of the environmental assessment process (Burdge, 2002:3; Kruger & Sandham, 2018:395). In light of the legislative frameworks mandating social inclusion, no explicit reference is made to SIA, except in the MPRDA through SLPs, and in the NEMA through the appointment of specialists and the definition of the ‘environment’, which grants equal status to social components (Aucamp & Lombard, 2018:175; Kruger, 2020:53). This lack of clear inclusion ripples to a lack of formal and distinct guidelines and regulations guiding the SIA community in South Africa. The latter thus makes the practice difficult in the midst of the country’s socio-political change and an increasingly aware and actively attentive formally disadvantaged people.

One factor of SIA effectiveness is the influence it adds to the decision-making process. Research into SIA effectiveness conducted by Hildebrandt & Sandham (2014:22) reveals that SIA report quality is relatively poor but presents a positive trajectory with moderate improvements from the ECA to the NEMA regime. The authors, however, argue that this cannot be entirely ascribed to

the lack of methodological and regulative guidance, although these issues exacerbate the problem. As a result, the positive improvements are still overshadowed by the shortcomings and prevalence of the biophysical aspects in EIA, thus solidifying the status of an orphaned discipline.

However, all is not lost, as the web of adversities affecting SIA has propelled the discipline's evolution towards a direction that is more optimistic, proactive, on-going and sustainable (Esteves *et al.*, 2012:35; Pope *et al.*, 2013:2). This depicts a deviation from traditional quasi-EIA; once off, point-in-time; impact prediction and mitigation mechanisms to the inclusion of long-term management and monitoring of socio-economic dynamics with the objective of enhanced social development (Aucamp & Lombard, 2018:180; Pope *et al.*, 2013:3). This deviation has, however, not completely eroded the traditional application of the discipline and its decision aiding properties in the regulatory process (Vanclay *et al.*, 2015: iv). Nonetheless, this emerging and somewhat strengthened trajectory of SIA is demonstrated by an increasing acknowledgement of the prominence of social dynamics coupled with an amplified proliferation of well-versed social science specialists in various sectors such as finance, government and engineering consultancy (Aucamp & Lombard, 2018:174; Esteves *et al.*, 2012:36). This is exemplified by SIA being conducted as a requirement for bilateral lending and aid, particularly with projects funded by international investors (Aucamp & Lombard, 2018:174).

The aforementioned example illustrates strong ties to the external influence imposed by international codes and standards for project financing such as the Equator Principles. These principles are actually performance standards developed by the International Finance Corporation (IFC) requiring the preparation of environmental and social action plans (Aucamp & Lombard, 2018:174). These performance standards are but one of many influences as the proliferation previously stated resulted in a myriad of external factors endorsing the evolution of SIA practice henceforth providing a clear yet broader and slightly divergent mandate from that of EIA (Pope *et al.*, 2013:2; Vanclay *et al.*, 2015:iv). These external influences have therefore fashioned and facilitated the adoption of new concepts such as the ones discussed below:

- Free Prior Informed Consent (FPIC): This is a mechanism that ensures the protection of the human rights of indigenous people. This means that the indigenous people are awarded opportunities to decide whether to allow projects to commence on their land or with the resources provided by such land (Vanclay *et al.*, 2015:v). FPIC is a philosophy to which SIA can serve as a contributor or facilitator (Esteves *et al.*, 2012:38). It recognises the failure of many states in protecting the rights of marginalised people amid developmental projects and strives to liberate SIA from its statutory application as second-fiddle to EIA (Aucamp, 2015:71; Esteves *et al.*, 2012:37). The concept prides itself on the four pillars it rests upon as illustrated

by the name, with each word giving meaning to the term (Aucamp, 2015:72). The “Free” stresses that the process must be free of coercion, intimidation, harassment or influence from any interested parties. “Prior” means that consent should be pursued and awarded before any activities may commence (Vanclay *et al.*, 2015:v). “Informed” refers to indigenous people being adequately capacitated about the project and its possible impacts, either intended or unintended, i.e. full disclosure. “Consent” refers to the communities’ decision on whether or not to accept the project (Vanclay *et al.*, 2015:v). This concept conceives great potential and has displayed impressive strides internationally. However, much like SIA in a South African context, it is plagued with a number of adversities (Aucamp, 2015:71).

South Africa, also referred to as the Rainbow Nation, prides itself on its diverse racial and cultural outlook. This heterogeneous dispersion, however, presents a multitude of pluralistic views and values amongst its people (Aucamp, 2015:76; Murombo, 2013:43). Pluralism has the potential to breed conflict within the receiving community itself, the receiving community and the proponent, and the competent authority, while additionally opening the flood gates to possible exploitation (Murombo, 2013:45). In addition, South African environmental legislation does not provide any clear mandate referencing the application of FPIC, which in turn leaves this concept in a vulnerable state, exposed to the possibility of varying interpretations and application (Aucamp, 2015:74). Interestingly, this concept aligns perfectly with the Constitution and subsidiary environmental legislation in their mission to redress past transgressions. Nonetheless, the dynamics of land distribution, demarcation, use, management and ownership all pose possible conflict, as observed by government owning most of the land utilised by its communities, whilst local government and tribal authorities join hands as custodians of such land (Murombo, 2013:40). This illustrates the level of power bestowed upon the South African government and its officials, who in turn serve as the competent authority (decision makers). Similar to EIA decision making, the process is not democratic, hence decision makers can prioritise and approve projects pronounced as national interest, which overrides the natives claim and rights to land use (Murombo, 2013:45). As a result of the aforementioned and many more complex and impeding factors, FPIC has not reached its full potential in South Africa and will continue to struggle due to the shackles of EIA on SIA (Matlakala, 2020:11).

- Social License to Operate (SLO): This refers to acceptance or rejection of projects to operate. This power rests on the shoulders of all I&APs with special emphasis on the affected community (Vanclay *et al.*, 2015:v). The concept suggests that I&APs possess as much authority as regulators in granting the said ‘license’ (Boutilier, 2014:263). This concept

emerged from the mining sector and later spread to other disciplines and sectors but is however not regulated within the South African context (Matebesi & Marais, 2018: 373). Nonetheless, it is perceived as a pivotal aspect to operations, as it is underpinned by a cumulative hierarchy of social dimensions ranging from acceptance (legitimacy of the organisation) to trust (credibility of the organisation) (Boutilier, 2014:263). The SLO thus encourages institutions to go beyond the bare minimum of compliance requirements regarding legal licensing, and ascertain the community's buy-in, and in turn mitigating the possibility of riots, standoffs and reputational assassination while aligning to the tenets of sustainable development (Matebesi & Marais, 2018:372).

- Social Impact Management Plan (SIMP): This is a plan borne of the practical application pertaining to management and monitoring aspects of SIAs (Vanclay *et al.*, 2015:1; Esteves *et al.*, 2012:35). It is a tool utilised to address social impacts during the implementation of planned interventions, while promoting shared values and providing positive outcomes. SIMPs therefore put into operation all the findings of predictive assessments illustrated within the various project phases (planning, construction, operation and closure) of development including all benefits, mitigation measures, resources, strategies, governance arrangements and outlined priorities (Franks & Vanclay, 2013:41; Vanclay *et al.*, 2015:1). It furthermore establishes the roles and responsibilities of all stakeholders involved in the project life cycle (Aucamp, 2015:81). In line with its counterpart, the Environmental Management Plan (EMP), the SIMP is a living document that should be reviewed and updated regularly to ensure its relevance and proactive response to change throughout the process of development whilst aligning local and regional plans (Aucamp, 2009:9; Vanclay *et al.*, 2015:1). However, SIMPs are not sanctioned in South Africa hence common practice incorporate social concern into the EMP which intensely resonates with the position assumed by SIA within the EIA processes, decision making and ultimately the EA spectrum (Aucamp, 2015:81). To substantiate the latter, Aucamp (2015:82) concurs with Franks and Vanclay (2013:41) by stating that SIA in the South African context underrates the monitoring and management aspects of the discipline while continuing to apply the discipline as on a once off basis. Aucamp (2015:81) however, suggests that funding institutions, corporate and mining houses are steering towards changing traditional applications by requesting social action plans also referred to as SIMPs.

Esteves *et al.* (2012:38) emphasises that good SIA has been observed when undertaken on a voluntary basis by private organisations. Franks and Vanclay (2013:41) validate this by suggesting that SIA, through SIMPs, can bridge the gap to corporate social responsibility (CSR). The challenge that arises as proposed by Aucamp (2015:82), is the fact that CSRs

are conducted in-house, while SIA is undertaken by external independent practitioners. Nonetheless, these documents endorse preparedness by developmental proponents to adequately address anticipated impacts emanating from development. In addition, regulators indulge in the benefit of use as a lever of project approval influencing consequential social outcomes (Franks & Vanclay, 2013:41). The project approval step is however facilitated and amplified by the level of detail (monitoring and reporting requirements) illustrated by the document, community engagement approaches emphasising inclusion of impacted parties and lastly, the documents ability to be integrated with other environmental and socially inclined strategic documents or plans (Franks & Vanclay, 2013:41).

Hildebrandt and Sandham (2014:24) endorse these concepts as some of the elements providing the means for future SIA good practice in South Africa with the foresight of sustainable development. Be that as it may, one cannot shy away from the fact that despite all the theoretical advancements and lofty aspirations, the reality remains relatively grim (Aucamp, 2015:83). In light of this gloomy reality, how SIA fares with regard to its role in EIA decision making is outlined in the following section.

2.6 Role of SIA in EIA decision making

EIA is largely recognised as a crucial policy implementation and decision-making support tool, to aid regulators in considering environmental consequences prior to decision making in an administratively just manner (Cilliers *et al.*, 2020:358; Retief *et al.*, 2019:151). It is important to remember that, as highlighted earlier in Section 2.3 i.e. the legal mandates for SIA in SA, the term 'environment' in South African environmental law explicitly incorporates the TBL, thus endorsing the sustainable development mandate.

The decision-making process is highly sensitive, hence requiring regulators to employ principles of administrative justice augmented by the following objectives:

- conflict resolution to reduce and avoid stalemate situations and the sprouting of appeals;
- streamlining of the implementation process to minimise cost;
- contributing to professional knowledge and encouraging the submission of additional information and knowledge (Cilliers *et al.*, 2020:359).

To accomplish the latter, the public participation process (PPP) is regarded as an integral attribute to EIA, mandated by law, to encourage stakeholders to participate and contribute to the decision-making process in a free and just manner.

Unfortunately, due to the disproportionate growth of SIA in comparison to EIA, the SIA discipline has become reduced and often confused with the PPP (Burdge & Robertson, 1990:82; Kruger & Sandham, 2018:399). This arises as a result of the public participation serving as a catalyst for on-going data gathering of social impact variables, which possesses the potential to influence or alter decisions being taken in relation to proposed interventions (Burdge & Robertson, 1990:84; Vanclay, 2004:281). However, instead of providing all the necessary checks and balances, the PPP is susceptible to manipulation, in that deprived communities are keen to accept any intervention if it alleviates their situation, thus neglecting factual evidence of all possible social impacts whether negative or positive (Du Pisani & Sandham, 2006:717).

SIA is therefore regarded as the moral compass and obligation of regulators, urging them to heedfully consider future consequences of current or proposed interventions (Du Pisani & Sandham, 2006:717). This endorses the principle of procedural fairness by ensuring that all I&APs invoke their right to be heard and that decisions passed are impartial and considerate of concerns raised (Retief, 2019:153). In South Africa, SIA is often undertaken as a specialised study. These kinds of studies are nonetheless undertaken to factually augment the wealth of knowledge provided through the aid of specialised skills and equipment, while addressing issues unearthed during the screening and scoping phases (Aucamp, 2009:86; DEAT, 2002:5). This is an element of the principle of reasonableness (rationality and proportionality) as, in practice, administrators need to acquire all relevant inputs and evidence from all interested and affected stakeholders prior to decision making (Retief, 2019:153). In addition, the EA system is one governed by law, this entails that SIA is not merely a regulatory approval mechanism, but a means to enact, enforce and ensure the effective application and consideration of both environmental and human rights (Vanclay *et al.*, 2015:4). Contrary to the aforementioned, attempts to improve the impact assessment (IA) system through streamlining initiatives resulting in strict timeframes within the EIA process have unfortunately eroded the benefits of robustness and quality SIA reporting used for decision making (Aucamp, 2015:56). This then conflicts with SIAs' philosophy of democratic development as SIA processes are lengthy and therefore require ample time to ensure inclusivity and constant consultations (Aucamp, 2015:56).

Highlighted in the second paragraph of this section is the sensitivity of the decision-making process. This is exacerbated by the recognition that the complexity of the decision-making process lies in trade-offs (Morrison-Saunders & Pope, 2013: 54). Trade-offs are processes whereby benefits in one area of the assessment are accepted at the expense of losses in another (Morrison-Saunders & Pope, 2013: 54). Here it is important to remind the reader of this sections opening statement i.e. "EIA is largely recognised as a crucial policy implementation and decision support tool", which emphasises that, although EIA was conceived by the ambition of

environmentally sustainable decision making, it is not compelling action, and allows leeway for decision makers discretion (Retief *et al.*, 2019:151). With that said, Gibson (2013:2) suggests that trade-offs have their footprint everywhere within the EA process with, special emphasis on procedural and substantive trade-offs. *Process trade-offs* are inherent in the way the assessment process is designed throughout all key stages of the process, whereas *substantive trade-offs* ascend whenever positives and negatives are to be weighed against one another for selection amongst competing interests, views and values (Morrison-Saunders & Pope, 2013:54). In this case, the consultative nature of SIA offers the opportunity for accountability, transparency and feedback through its on-going processes. Here arises an opportunity to ensure all I&APs are awarded an opportunity to understand the reasoning behind the decisions passed, which in turn heightens the principle of reasonableness which happens to be the most controversial principle of all (Retief, 2019:153).

SIA in South Africa unfortunately continues to be undertaken ‘as and when required’ through specialised studies, which solidifies its position in traditional quasi-EIA once-off policy implementation and decision supporting (Aucamp, 2015:55; Aucamp & Lombard, 2018:180). The closest SIA has come to its envisaged goal of monitoring and managing impacts as opposed to the current focus on solely impact prediction, is through the employment of Social Labour Plans (SLPs) In order to achieve advanced socio-economic welfare, SLPs require a collaborative effort amongst mines, local government and communities although communities have limited input on the plans and subsequent outcomes (Aucamp, 2015:80; Van de Watt & Marais, 2021:2). This can however be ascribed to the time-intensiveness of SIA or consultative sessions. Nonetheless, the precondition to align to local strategic plans such as the Integrated Development Plan (IDP) are visualised as a means of a streamlined rectification (DMR, 2010:18; Van de Watt & Marais, 2021:3). IDPs employ a grass root level approach encouraging local communities to participate in the planning initiatives while vividly articulating the situational and needs analysis (Aucamp, 2015:80). The use of IDPs which are reviewed every five (5) years provides the means that socio-economic dynamics are investigated prior to approval, to augment the study conducted for mining rights while the review provides the monitoring and management aspects.

The discussions above clearly articulate that SIA endorses consideration of just administrative action by decision makers, it additionally provides a wealth of substance into the assessments being conducted as native knowledge sometimes comes in handy where science lacks. SIA is therefore a vanguard and propeller of human rights consideration and a tool for conflict resolution. Studies by Hildebrandt (2012), including Kruger and Sandham (2018:407) stress that SIA makes a vital contribution to the decision-making process as its objectives overlap with those required by regulators.

2.7 Chapter summary

This chapter sought to determine the position or role, including the extent of influence applied by SIA within EIA decision making processes. The chapter endeavours to shed light on the studies' objectives. The chapter therefore provided some theoretical background into SIA evolution and practice, hence observing the advancement in South African SIA as an integral constituent of the EIA system since its mandatory inception in 1997 first facilitated by the ECA and later by the NEMA i.e. from 2006. Following the rich history and positive trajectory charted by SIA, positive nuances emerged as the discipline depicts a rather enthusiastic approach to evolution by staying true to the underpinning core values while embracing change. The alluded change, however, stems from the definition of SIA itself. The most simplistic framework-like definition provided by Vanclay (2003:6) defines the concept as a process of identifying, analysing, monitoring, and managing the social consequences of development. Traditional SIA focussed on the first two components, whereas the transition now embraces the last two i.e. monitoring and managing. Discussions into these changes were supported by an overview of the legal framework that mandates and encourages SIA so as to contextualise the disciplines position under the EA system in Southern Africa.

The next chapter will look at the research methodology that was used in data collection and data analysis of the empirical investigation of this study.

CHAPTER 3 METHODOLOGY

3.1 Introduction

The previous chapter (Chapter 2) investigated and provided an overview of the value or purpose and the position of SIAs within a South African setting, which includes the role the discipline assumes with regards to decision making. The contents investigated in the previous chapter identified within current literature the undulating dynamics SIA is faced with. Chapter 3 now aims to inform the reader of the resources employed to complete this study, through the provision of a detailed overview of the research methodology, highlighting the methodology of choice and the distinct processes followed. This chapter will therefore deliver an overview on the means for data collection, analysis and limitations experienced.

3.2 Research Approach

Knowledge is a concept defined by the Oxford dictionary as awareness or familiarity gained through the experience of facts or situations, further contributing to the acquisition of information and skills (Oxford, 2002:500). Leedy and Ormrod (2010:1) suggest that virtually each subject area is plagued with incomplete knowledge and problems waiting to be solved. The gaps in knowledge can hence be addressed by asking relevant questions and seeking answers through systematic research (Merriam & Tisdell, 2016:3). Research can therefore be described as an inquiry or investigation into something in a systematic manner and thus requires a definitive approach to unravel broad assumptions and focus through the aid of specific steps (Merriam & Tisdell, 2016:3).

Creswell and Creswell (2018:3) submit that what informs the approaches selected for a particular study is “the philosophical assumptions the researcher brings to the study; procedures of inquiry alternatively called research designs; and specific research methods of data collection, analysis, and interpretation”. However, the nature of the research questions carries weight in influencing the approach utilised for the study. Creswell and Creswell (2018:4) further advocate that there are mainly three methodological approaches to research, namely:

- i. Qualitative Research Approach (use of words): a meticulous approach to exploring and understanding data through experience and observation based on extensive fieldwork.

- ii. Quantitative Research Approach (numerical form): an approach for testing theories through examining the relations between variables hence having the variables measured on instruments to produce numbered data for analysis and statistical procedures.
- iii. Mixed Methods Research Approach: involves the collection and integration of both qualitative and quantitative data.

Based on the context of this study, the methodological approach of choice will be the qualitative research approach. The following section will define this approach in more detail and provide the basis for its selection.

3.2.1 Qualitative Research Approach

Merriam and Tisdell (2016:15) stress that the concept of qualitative research is broad and incorporates multiple realities. As a result of the broadness, numerous submissions have been tendered in attempts to define it. Various authors echo that no one definition can truly encapsulate the holistic essence of the term (Merriam & Tisdell, 2016:15; Rahman, 2016: 103). Despite the aforementioned, commonalities appear in definitions submitted. These highlight the qualitative research approach as an umbrella term for non-numerical or statistical processes, thus conveying that the approach employs an assortment of epistemological viewpoints and interpretive techniques (Creswell & Creswell, 2018:4; Merriam & Tisdell, 2016:15; Rahman, 2016: 103).

The nature of qualitative research is therefore to understand and draw insight from the experiences of people, taking into account the complexities of social and situational settings of various phenomena (Creswell, 2009:4). This study seeks to draw deeper insight from the perspectives of professionals in the field of SIA through active participation. This entails that the data to be collated is non-numerical and requires deciphering in order to contribute to the existing body of knowledge. The context of this study therefore renders a qualitative research approach the most applicable and appropriate to address the research objectives as set out earlier in Chapter 1. To further investigate and unravel the subject matter, an applicable research design cognisant of the study objectives stems from the selected approach. This research design provides the steps to be followed and is described in more detail in the following section.

3.2.2 Participatory Action Research design

Research approaches serve as steppingstones that guide the trajectory of the study being undertaken. These are, however, augmented and broken down into specific methods of inquiry to solve theoretical and practical problems (Creswell, 2009:3; Creswell & Creswell, 2018:11).

These methods of inquiry are commonly referred to as research designs. Within the umbrella of qualitative research, varieties of designs exist and continue to evolve. Creswell and Poth (2018:75) highlight five qualitative research designs which include:

- narrative theory,
- phenomenology,
- ethnography,
- grounded theory and
- case studies.

Cresswell and Cresswell (2018:9) concur with Rahman (2016:102) with the augmentation of these designs assuming a rather transformative worldview line of thought; these include critical research, discourse analysis, participatory action research and others.

This study adopts the “participatory action research design” to investigate the perspectives of the contribution of SIA to EIA decision making processes, by involving and extrapolating data from relevant stakeholders (Lune & Berg, 2017:34). This design aids in addressing specific concerns in a practice-based setting, encouraging consensual and participatory techniques that urge individuals and communities to be reflective in their interventions (Berg, 2001:181; Lune & Berg, 2017:138). In essence, the action research method of inquiry embraces a rigorous yet interpretive and reflective mentality, thus encouraging the principle of learning from experience within the bounds of a sustainability complex (Lune & Berg, 2017:137).

The most basic approach to participatory action research constitutes four stages, namely:

- identification of a research topic,
- data gathering,
- data analysis and interpretation, and
- sharing results (see Figure 3-1 below).

In participatory action research, although perceived as a means of traditional techniques, it does not follow a linear sequence, but a spiraling progression (Berg, 2001:181). The spirals illustrate a rotation between action and critical reflection. Simply put, for every step or two forward, the author takes a step or two backwards, this is indicative of continuous reflection and fine-tuning of the study prior to progression and completion which makes this approach best suited for this study (Lune & Berg, 2017:25).

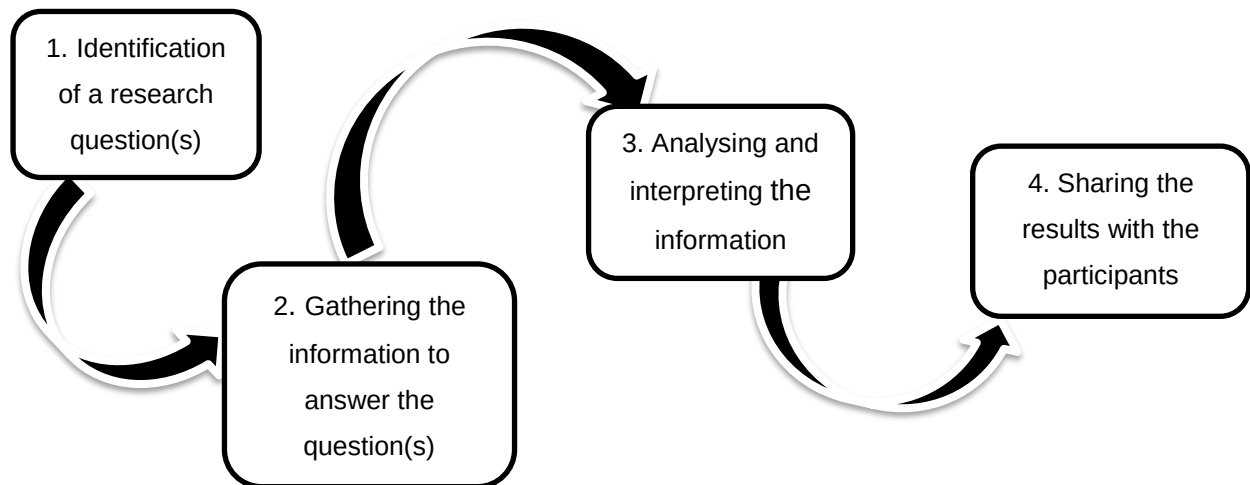


Figure 3-1: Participatory Action Research spiral (Berg, 2001:181).

The breakdown of the steps illustrated by the participatory action research spiral will not be discussed separately as an explicit section, but will rather appear threaded throughout the processes undertaken within the study, so as to adequately articulate the relevance of this particular technique. The following section continues to provide detail pertaining to the data collection methods utilised by the researcher for the purpose of this study.

3.3 Data collection

To give life to the research question and title, data provides the means to extract solutions to the research objectives of this study as set out in Chapter 1. As such, the focus of this section is on the methods utilised to acquire relevant data to answer the questions presented. For this study, an extensive literature review was conducted first, followed by an empirical investigation through the use of a structured questionnaire in a bid to answer both Research Objectives 1 and 2.

3.3.1 Literature review

A literature review was conducted for this study in order to adequately draft and articulate in Chapter 2 of the dissertation. The literature review is pivotal, in that it helps identify areas with data gaps and insufficient research outputs, while in turn providing an assortment of background data in line with the research objectives of different studies such as this one (Lune & Berg, 2017:161). In line with the first step of the participatory action research spiral (see Figure 3-1) i.e. “identifying the research question”, a literature review not only assists with detecting data gaps but additionally refines, clarifies, moulds and alters the title together with the questions or objectives of the study (Lune & Berg, 2017:161).

As the first step for this study, a keyword electronic search for literature was conducted. The keywords were derived from the title and research objectives guiding the study, that included: Social Impact Assessment (SIA), contribution, perspectives or perceptions, decision making or EIA decision making and South Africa. The keyword 'SIA' was first used individually as a means to gather broader knowledge, including international perspectives, before funnelling down the literature through the use of a multi-keyword search referred to as the Boolean search method. This method aims to provide highly efficient multi-keyword funnelling of high-level searches (Lowe *et al.*, 2020; Xu *et al.*, 2021). The earmarked literature was, however, subjected to an eligibility criterion established by its potential to address the objectives of this study. The literature review focuses on credible peer-reviewed publications to facilitate factual and fruitful contributions to the current body of knowledge. The acquisition of data was through rigorous explorations of a variety of databases that included legislation and policy provisions, Google Scholar, the North-West University library, Scopus, Book chapters, previous dissertations and thesis.

3.3.2 Structured questionnaire

Step two of the participatory action research spiral can be observed in two phases, i.e.

- Phase 1: refers to the acquisition of secondary data which was highly beneficial towards the first step of the spiral process paving the way for the second phase.
- Phase 2 relates to the acquisition of primary data which is the data to be used to extrapolate the purpose of the study (see Figure 3-1).

Primary data refers to sources that provide oral or written testimonies. These are original and authentic responses emanating from the experience of the study's respondents or participants (Berg, 2001: 193). In this study, a structured questionnaire was used as the means to acquire the primary data relevant for questions probed by the study. The disseminated questionnaire consisted of fourteen open- and close -ended questions, divided among three sections. A summary of the questionnaire is illustrated in Table 3-1 below. As illustrated in Table 3-1, Section A of the questionnaire comprised of questions that sought to determine the participant's academic and professional background (A1 - A3). This was done to illustrate eligibility of the participants. Section B (B1 - B6) contrasts theoretical and practical knowledge on the effectiveness of SIA practice in South Africa. The third and last section, Section C (C1 - C5) sets out to determine the perspectives of the SIA community regarding the disciplines' actual influence and contribution to EIA decision making. The full version of the authentic cover page and questionnaire is included as Annexure A, offering more substance unto the design of the questionnaire including the manner of approach and dissemination.

Table 3-1: Abbreviated version of the questionnaire (Own contribution).

Sections	Questions		Research objectives
Section A: Background of the participants	A.1.	What is your highest level of qualification? <i>A. Diploma; B. BSc/ BA; C. MSc/ MA; D. PhD; E. Other</i> Kindly elaborate on your qualification details (field of study), and if your answer is “E. Other”, kindly include your qualification level.	N/A
	A.2.	In which sector/s did you gain your experience with Social Impact Assessments (SIA)? More than one answer is acceptable. <i>A. Government; B. Private consultancy; C. Academia; D. Private Institutions; E. Other.</i> Kindly elaborate if your answer is “E. Other”.	
	A.3.	How many years of working experience do you have in the field of SIA? <i>A. 1-5 years; B. 6-10 years; C. 11-15 years; D. 16 – 20 Years; E. More than 20 years.</i> Kindly elaborate on your years of experience working with SIA.	
Section B: SIA effectiveness	B.1.	In your professional opinion, kindly elaborate on how SIA in theory differs from how SIA is being practiced.	RO 1
	B.2.	In light of your previous answer, to what extent do you perceive SIA as an important environmental management tool? <i>A. Very important; B. Moderately important; C. Neutral; D. Slightly important; E. Not important.</i> Kindly elaborate on the reasoning for your answer provided.	
	B.3.	As a professional in the field, what is your perspective on the effectiveness of SIA practice in South Africa?	
	B.4.	Bond and Morrison-Saunders (2013:7) define substantive effectiveness as “the extent to which the goals, or objectives, of the assessment process have been met (this might mean a more sustainable outcome)”. With this definition in mind,	

		how does the component of need and desirability within the EIA procedure affect the substantive effectiveness of SIA?	
	B.5.	In your professional opinion, to what extent do effective SIAs influence and/or contribute to EIA decision-making? A. Exceptional contribution; B. Adequate contribution; C. Neutral; D. Slight contribution; E. No contribution Please elaborate by detailing how SIA effectiveness currently influences or contributes to EIA decision-making.	
	B.6.	What are the common flaws or shortcomings encountered in SIA practice that hinder its effectiveness and SIA's actual contribution to the EIA decision-making process?	
Section C: Influence of SIA in EIA decision- making	C.1.	To what extent does SIA give effect to environmental rights within EIA decision-making? A. Strong effect; B. Moderate effect; C. Neutral; D. Slight effect; E. No effect Kindly elaborate on the reasoning for your answer provided.	RO 2
	C.2.	In your professional opinion, how has SIA positively contributed to ensuring that EIA decision-making endorses and facilitates the principle of sustainable development?	
	C.3.	To what extent does SIA contribute to inclusivity, transparency, and accountability in decision-making? A. Exceptional contribution; B. Adequate contribution; C. Neutral; D. Slight contribution; E. No contribution. Kindly elaborate by detailing how it contributes in practice as opposed to in theory.	
	C.4.	To what extent does SIA encourage and reinforce the implementation of administrative justice and/or accountability? A. Exceptional contribution; B. Adequate contribution; C. Neutral, D. Slight contribution; E. No contribution Kindly elaborate by detailing how it contributes in practice as opposed to in theory.	

	C.5.	To what extent do you agree that there is room for improvement with regards to SIA's effectiveness and consideration towards EIA decision-making? A. <i>Strongly agree</i> ; B. <i>Slightly agree</i> ; C. <i>Neutral</i> ; D. <i>Slightly disagree</i> ; E. <i>Strongly disagree</i> Kindly expand on the option chosen above.	
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The questionnaire was circulated to two colleagues within the regulatory space in the bid to pilot the questionnaire. This was a crucial step in ensuring that the draft does not contain any errors, leading or confusing statements, hence awarding the researcher opportunity to review and redraft the questionnaire (Marshall, 2005:132). This step coupled and the methodological approach to the study endorses the reliability and validity of the questionnaire and the study (Rose & Johnson, 2020:4). The questionnaire was self-administered and disseminated through an electronic platform i.e. Google forms. This was due to the COVID-19 pandemic, coupled with the availability of the practitioners. Although self-administered questionnaires are plagued with the challenge of ensuring quality responses in the absence of guidance from the researcher or interviewer, they are advantageous in that they facilitate convenient and inexpensive data collection from a large, diverse and widely distributed sample of respondents (Saunders & Kulchitsky, 2021:716). The question of quality now rests upon the shoulders of ethics and code of conducts amongst the group of respondents. Considering that the sample group is a group of professionals, the researcher is of the opinion that respondents conducted themselves professionally in their contribution to the study. Nonetheless, options for interactive interview sessions were offered to the respondents and the way forward was as per the preferences of the respondents.

Although structured questionnaires are ideal in providing comparable responses from identical stimulus (questions), it somewhat directs and limits the flow of multiple replies to a single stimulus by a single respondent (Lune & Berg, 2017:67). However, this is a tool used by researchers seeking to uncover solid or rather specific ideas about a phenomenon (Lune & Berg, 2017:67). In this case, probing follow-up questions were asked with some questions, so as to allow some flexibility with regards to the responses provided. The following section provides the method of approach regarding the sampling of the participants involved in the study.

3.3.3. Sampling

Sampling is a constituent of the second step within the participatory action research spiral approach (see Figure 3-1). This is due to its importance for planning within the data gathering

processes. Data collection is a tedious process, with various components involved and, as a result, there is a need to select a sample depending on the dynamics of the study (Taherdoost, 2016:18). Sampling therefore proves vital in assisting researchers with funnelling their approach to the study in order to render it plausible and feasible to complete within strict timeframes. This is achieved by drawing inferences concerning a larger population from a subset i.e. the sample (Berg, 2001:30; Taherdoost, 2016:18). In addition to the aforementioned, sampling should be as rigorous as possible so as to vastly reduce margins of error, possible bias and aid with managing a pool of limited resources (Berndt, 2020:224). Selecting the correct sampling method challenges researchers to carefully sift through a myriad of factors such as knowledge and access to the population of interest, the research objectives, research methodology and finances, to name a few (Berndt, 2020:224).

According to Taherdoost (2016:20), sampling methods can be divided into two main techniques, namely: probability and non-probability sampling. Berg (2001:31) describes the probability sampling techniques as “simple random sampling”, which typically provides all constituents of the population with equal opportunity and chance for being included in the sample. Non- probability sampling on the other hand tends to focus on smaller samples with intent to examine real-life phenomena as opposed to statistical inferences related to larger populations (Taherdoost, 2016:20). An interesting contribution by Berndt (2020:225) and Gill (2020:579) suggests that quantitative research enjoys the pleasure of utilising either one of the sampling techniques, while qualitative research is limited to only non-probability sampling.

Therefore, this study utilises non-probability sampling. More precisely, the purposive sampling technique was the most relevant within the auspices of non-probability sampling methods. Through purposive sampling researchers deliberately select participants who are knowledgeable about the phenomenon being investigated or studied (Berndt, 2020:226; Gill, 2020:580). This study aims to draw insight from the small community of SIA practitioners with experience operating within the boundaries of South Africa. Since this kind of research focuses on smaller sample groups, the target was to reach out to at least twenty (20) practitioners from a pool of practitioners that the researcher has access to. Unfortunately, responses were slow and limited so a total of seventy-five (75) practitioners were engaged and forwarded the invitation to the questionnaires so as to broaden the pool and expedite the process. During the course of communication, some professionals voluntarily withdrew from participating but some proceeded to recommend some of their colleagues to take part in the study. The former is hence synonymous with the snowballing technique - when current- or prospective participants proceed to recommend other prospective persons to participate (Gill, 2020:580). Even so, the final number of responses (N=10) coming in was below the envisaged sample size.

After the poor response rate following the first round of invitations to participate in the study, the researcher was prompted to send three follow-up invitations by email. The initial invite awarded thirty (30) days for completion while subsequent invites respectively awarded fifteen (15), seven (7) and seven (7) days. As a result, the researcher purposefully extended the invite to fifteen (15) regulators, of which respectively ten (10) potential respondents from the Department of Forestry, Fisheries and the Environment (DFFE), and five (5) from the North-West Provincial Department of Economic Development, Environment, Conservation and Tourism (DEDECT). The regulators engaged to participate in the study were purposefully selected due their work with EIAs of large-scale projects which often requires a SIA to be conducted, therefore these regulators are familiar with the SIA discipline being investigated. Unfortunately, the regulators were awarded a very tight window of five (5) days to respond, which resulted in a total of an additional four (4) responses. These four (4) responses, together with the initial ten (10) responses constituted a final sample size of fourteen respondents in total (N=14). Upon completion, the primary data derived from the respondents required interpretation and refinement for ease of communication. For this, data analysis is the key which unlocks the subsequent section.

3.4 Data analysis

Post data gathering is the third step within the participatory action research spiral (see Figure 3-1) which involves the analysis and interpretation of data. For this, the first step was to peruse all the feedback in order to determine whether all the questionnaires were successfully completed. Interestingly, the online survey or questionnaire provides the option of portraying data on an excel spreadsheet, which expedites the data interpretation process. A general inductive approach was then utilised to analyse the data, thus yielding thematic deliberations. Thomas (2006:238) defines the general inductive approach as a systematic procedure for analysing raw data to develop concepts, themes or models. A thematic analysis therefore provides a systematic element in the identification and organisation of data, hence sanctioning the researcher to apply an analysis of frequency which in turn yields patterns of meaning (themes) across datasets (Braun & Clarke, 2012:57; Alhojailan, 2012:40). Braun and Clarke (2012:57) further add that the themes identified and endorsed by this method of analysis are to be important in relation to the research question being explored. It is for this reason that, with regard to this study, the themes were not derived from the raw data, but was rather determined by keywords within the questions asked in the questionnaire. This resulted in the following predetermined themes: (1) Background of participants, (2) SIA effectiveness and (3) The influence of SIA in EIA decision making. The second and third themes form the core of this study and display comprehensive and overlapping responses which are articulated in detail in the following chapter (Chapter 4).

3.5 Ethical considerations

This study poses minimal ethical risk and this was certified by the processes followed for data collection. Firstly, the study based its foundation on secondary data in the form of a literature review, the sources used were credible peer reviewed publications. Secondly, the primary data for the study was gathered through the use of a structured questionnaire disseminated through email. In line with the regulations of the Protection of Personal Information Act (POPIA), the prospective participants were contacted individually so as to ascertain the protection of their private information. The questionnaire alluded to, and included as Annexure A, has a cover page which clearly details the contents and purpose of the study and assures confidentiality and anonymity, additionally depicted by the respondents' responses being coded as RN 1 to RN 14. To accomplish the latter, the questionnaire was disseminated as an electronic link to a Google forms platform, ensuring that the researcher also does not know who the respondents within the pool of professionals contacted are. Participation was voluntary and informed consent was sought prior to participation.

This study does not engage with any vulnerable populations and guarantees conformance to the research proposal submitted to the Faculty of Natural and Agricultural Sciences Research Ethics Committee (FNAS-REC) of the North-West University for ethical consideration and approval. The committee found that the study poses minimal risk, granted approval to commence with the study and assigned the researcher with the following ethics number: NWU-1219-22-A9 (see Annexure B).

3.6 Methodological assumptions and limitations

This study was guided by the assumption that, since its focus was to determine SIAs' contribution to EIA decision making, that SIA practitioners will avail themselves in numbers to ascertain their position, enlighten and empower the oblivious, while striving to be liberated from the shackles of EIA.

Contrary to the aforementioned, willingness or availability to participate in the study was the biggest challenge encountered by the researcher, which resulted in a smaller sample size than was envisaged. The reasons highlighted with regards to the latter varied, some practitioners were out of office undertaking studies, others had changed disciplines while others relocated and were operating outside the boundaries of South Africa. This challenge was, however, overcome by including regulators into the sample. Fascinatingly, elements of redundancy were picked up regardless of the practitioner-regulator interface. This indicated that saturation levels were met. In addition, the acquisition of secondary data in line with the study was limited, as the second

research objective is one that is not well researched in literature. This led the researcher to draw inference from other subjects of study which was quite challenging.

3.7 Chapter summary

The objective of this chapter was to provide an overview of the various research methods utilised to undertake this study. The chapter provided some background into various types of research methodologies and highlighted the best suited research methodological approach for this study i.e. qualitative research methodology. The research design followed was the Participatory Action Research Spiral which was discussed in detail and used to articulate the steps followed by the researcher of which included: (1) the identification of research questions, (2) data gathering, (3) data analysis and lastly, (4) the sharing of results. The data gathering step included an extensive literature review to gather secondary data which in turn presented a gap in literature with regards to the second research objective (see Section 1.5 of Chapter 1). This challenge was, however, resolved by acquisition of primary data and the use of inference. Data analysis was conducted through use of excel spreadsheets and a thematic analysis was followed. The following chapter (Chapter 4) provides illustrations of the data collected with expansions into the perspectives of the participants.

CHAPTER 4 RESULTS AND DISCUSSION

4.1 Introduction

Chapter 3 conferred the research methodology of choice, which was further substantiated by literature illustrating the reasoning behind the processes undertaken. Following the problem statement presented earlier in Chapter 1, a literature review was conducted for the subsequent Chapter 2, which illustrated a gap with regards to explicit contributions of SIA within the EIA decision making process. This gap is extensively interwoven with the second research objective of this study as illustrated by Section 1.5 of Chapter 1 i.e. “to investigate the perspectives on the extent to which SIA influences EIA decision making”. Chapter 4 therefore seeks to plug the gap previously mentioned through the provision of detailed discussions pertaining to the primary data collected from SIA practitioners and regulators within South Africa. The overview of this chapter illustrates two sections, one for research findings followed by discussions.

4.2 Research findings

As discussed earlier in Chapter 3, a self-administered questionnaire, provided in Annexure A, was disseminated to a sample of SIA practitioners and regulators within South Africa. The questionnaire was completed through an electronic platform named Google forms, yielding a total of fourteen (14) responses. A generic inductive approach was utilised to analyse the data acquired, through the use of predetermined themes observed as sectional titles on the questionnaire (in this case, sections are synonymous to themes). The themes alluded to are as follows:

- Theme 1: Background and experience of participants.
- Theme 2: SIA effectiveness.
- Theme 3: The influence of SIA in EIA decision making.

Discussions of the results will be in accordance with the three (3) themes provided above. In accordance with the ethical requirements, the responses are coded and therefore participants are referred to as RN 1 to RN 14.

4.2.1 Theme 1: Background and experience of participants

This theme articulates the professional and educational background of the respondents through Questions A1 to A3 of the questionnaire. The first question (Question A.1) in Section A of the

questionnaire investigated the educational level of the respondents (see Table 3-1 in Chapter 3). The responses demonstrated that four of the fourteen (4 of 14; 28,6%) respondents hold a BSc/BA degree, while an even split of five out of fourteen (5 of 14; 35,7%) is observed between those in possession of a MSc/MA degree and PhD degrees (see Figure 4-1 below). In their elaborations, two (2) of the BSc/BA respondents highlighted that their degrees are actually honours degrees, which is a post-graduate level not specified amongst the options (RN 7 and RN 13). Further elaborations into specific fields of studies undertaken by respondents revealed an emphasis in specialisation of the following disciplines: (1) Environmental Science and Management, (2) Geography and (3) Social studies. For specifics with social studies, these are broken down to: (1) Sociology, (2) Anthropology and lastly (3) Development studies. Interestingly, five of the fourteen (5 of 14; 35,7%) respondents have qualifications in both environmental and social studies. This caught the eye because the study sought out to determine SIA's influence (socially orientated studies) within the confines of EIA, which are extensively environmentally orientated in practice, as highlighted by earlier discussions in Chapter 2. A conflict between the two is evident, yet these participants are well versed in both fields of studies and hence both disciplines.

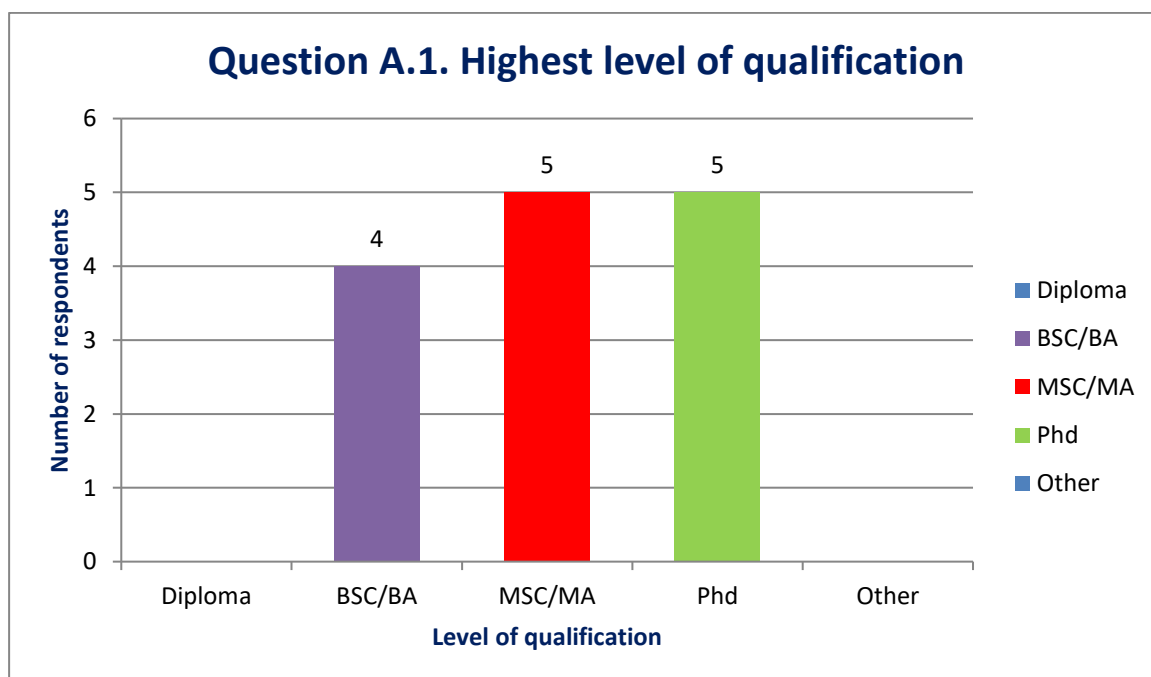


Figure 4-1: Respondents highest level of qualification (Question A.1).

The second question of the questionnaire (Question A.2), set out to determine the sectors in which the respondents gained their experience with SIA. The responses as observed in Figure 4-2 below reveal that seven of the fourteen (7 of 14; 50%) respondents gained their experience in

private consultancy, while two of the same sample have additional experience in academia. Four out of the fourteen (4 of 14; 28,57%) respondents gained experience working as regulators within governmental structures. Two of the respondents however indicated that they acquired experience only from academia. The remaining respondent chose the option “other” and further elaborated by stating that experience was attained from working within the mining, oil and gas sectors (RN 5).

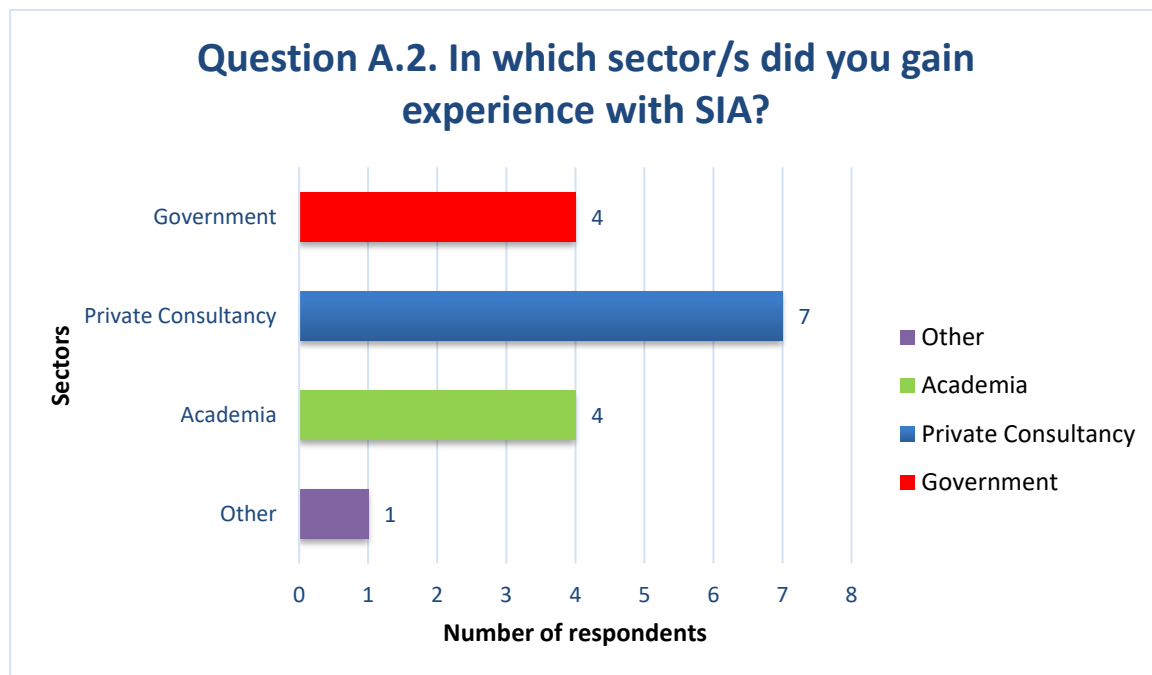


Figure 4-2: Sectors in which respondents gained experience with SIA (Question A.2).

The third and final question in this section was regarding the work experience of the respondents valued in the number of years (Question A.3). As portrayed in Figure 4-3 below, three (3 of 14; 21,43%) of the respondents have between zero (0) to five (5) years of experience and one (1 of 14; 7,14%) has experience between six (6) and 10 years. The majority of the respondents exceeded 10 years of experience with four (4 of 14; 28,57%) respondents ranging between 11 and 15 years and three (3 of 14; 21,43%) ranging between 16 and 20 years. Capping it off are three (3 of 14; 21,43%) respondents with more than 20 years of experience with SIA.

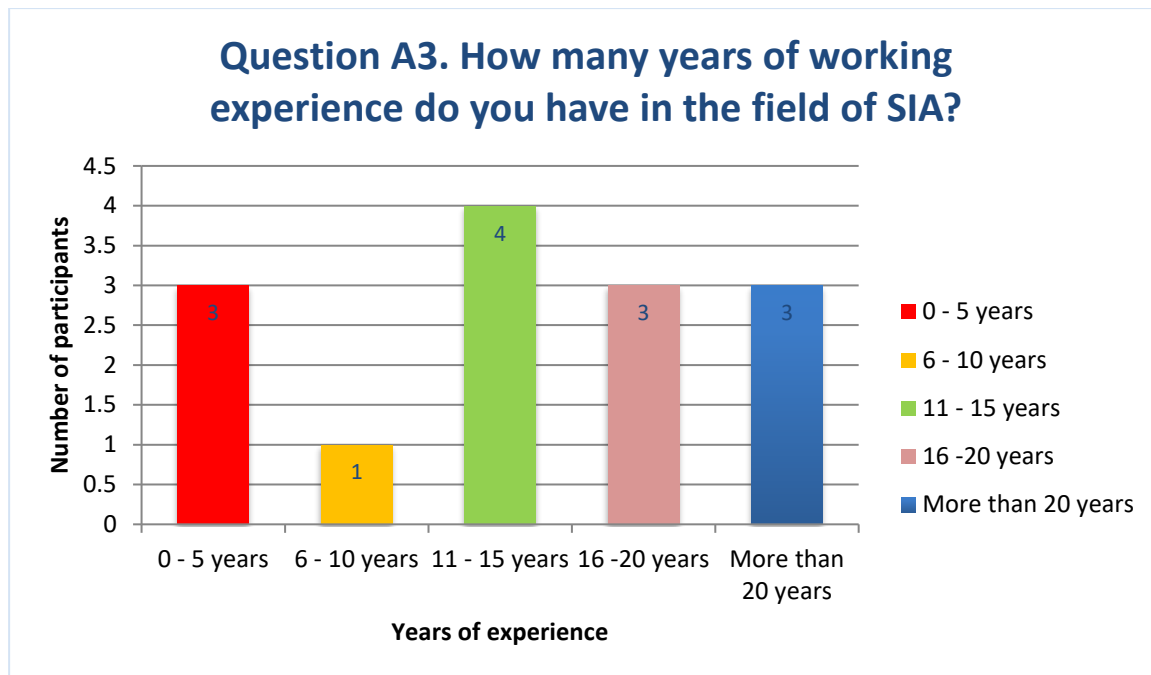


Figure 4-3: Respondents years of experience (Question A.3).

Now that this section has deliberated on the expertise of the respondents, the following section tackles some of the key points of the study i.e. the effectiveness of the SIA discipline with special reference to the respondent's experiences.

4.2.2 Theme 2: SIA effectiveness

In the second theme (Section B: SIA effectiveness), the researcher probed respondents to provide their professional opinion with regards to whether SIAs in South Africa are fit for purpose. This section constitutes of six (6) questions i.e. Questions B.1 to B.6. The section begins with Question B.1 which asked for the SIA professionals' opinions on how SIA in theory differs from SIA in practice within the South African context. In response, all respondents concur with the notion that SIA has vast potential, however, it is not being realised. One of the respondents (RN 3) is of the view that "SIA should have a bigger impact on decision making in comparison to current practice". In concurrence, all respondents stressed a myriad of obstacles inhibiting harmony between theory and practice. The common constraints highlighted in their responses included:

Reactiveness as opposed to proactivity in undertaking SIA (RN 1, RN 10 and RN 14), lack of understanding and consideration by biophysically oriented environmental consultants, project proponents and regulatory authority (RN 3, RN 4, RN 5 and RN 9), lack of impartiality exacerbated by bias of specialist due to the notion of not biting the hand that feeds them (RN 8, RN 9 and

RN12), “confusion between public participation and SIA” (RN 5), lack of clear regulatory guidance, timeframes and budget (RN 4, RN 6, RN 7, RN 8, RN 9 and RN 11).

In addition, eight out of fourteen (8 of 14; 57,14%) respondents argue that the element of efficiency has to some extent eroded quality within SIAs (RN 3, RN 4, RN 7, RN 9, RN 10, RN 11 and RN 13). RN 12 states that “in theory SIAs are people centred and people driven however, in practice it is has become an add-on or rather a window dressing exercise for corporate and government”. This perception was nonetheless supported by RN 8 who argues the lack of or rather minimal inclusion of, issues pertaining to social consequences and mitigation within the Environmental Management Plans (EMPs). RN 14 further contributes to this argument by stating examples of the Reconstruction and Development Programme (RDP) houses continuously built on flood prone areas and displacement of people due to mining projects.

Following from the first question, the second question (Question B.2) asked respondents to what extent they perceive SIA as an important environmental management tool in light of their previous answers. As depicted by Figure 4-4 below, twelve out of fourteen (12 of 14; 85,7%) respondents are of the view that SIA is a very important environmental management tool, while one respondent (1 of 14; 7,1%) identified it as moderately important, and lastly one (1 of 14; 7,1%) indicated that it is neutral.

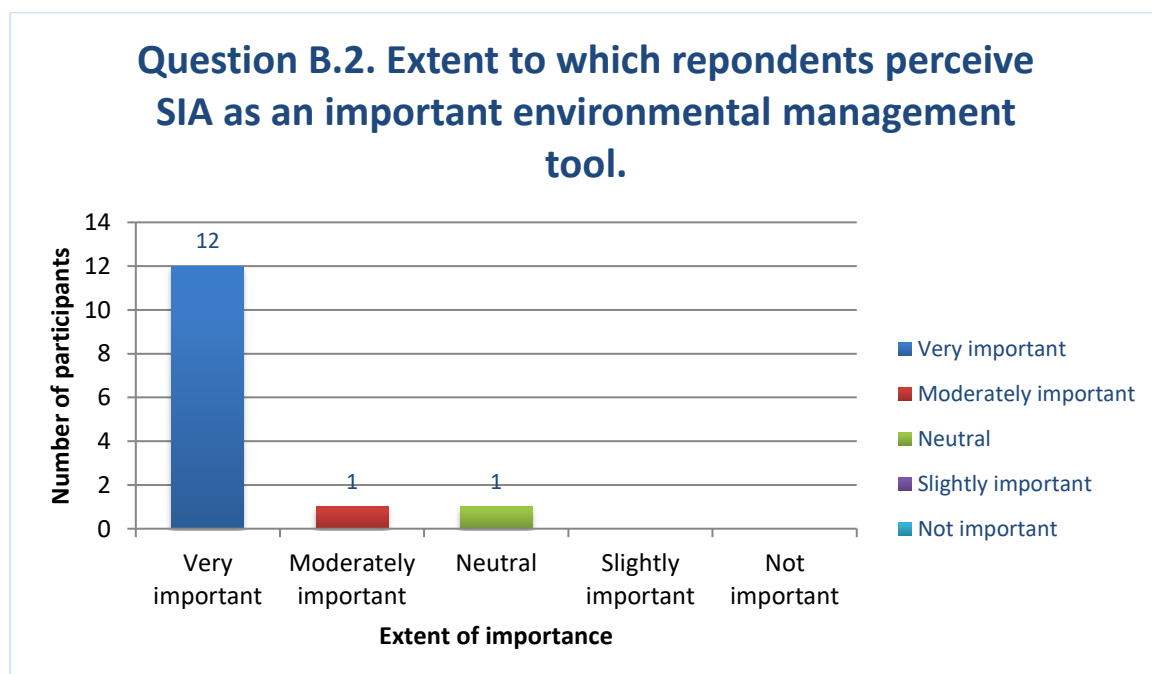


Figure 4-4: Extent to which respondents perceive SIA as an important EM tool (Question B.2).

In their expansion on the reasoning for answers provided, RN 10, who suggested SIA is neutral, argues that the importance of SIA as an important environmental management tool varies from one project to the next. The respondent further suggests that in the context of mining, where some legislative guidance exist through the use of documents such as Social Labour Plans (SLPs) and the Mining Charter, some support is rendered to SIA, thus enhancing its level of importance. The respondent however brings forth a contradicting statement which states that “developers and even some mining houses display a tendency of not agreeing with the findings of SIA and tend to sieve through the recommendations and mitigation measures only to retain those with less responsibility upon them”. RN 13, who suggested that SIA is of moderate importance elaborates by stating that it is important to know the extent of impact imposed by proposed developments, as opposed to focussing on job creation and services. This is said because the cumulative effects of developments subjected on communities are often ignored.

The majority of the respondents i.e. 12 of 14 (85,7%) (see Figure 4-4 above), nonetheless regarded SIA as an important environmental management tool. This group illustrated a common feeling towards SIAs and highlighted that, although the common and current perception within the industry is of the view that SIA is slightly important, this is changing. They went on to emphasise that SIAs are critical and it is vital to consume the term “environment” in its holistic nature as stipulated within the NEMA. RN 2 emphasised the interdependency of all key concepts within the definition of the term environment in South African legislation. The respondent does so by stating that “development, poverty and income generation are all elements of social dynamics but life itself is dependent natural resources from the biophysical environment henceforth humans impact the environment and those impacts affect people”. RN 5 adds to this notion by suggesting that “if one would do a proper (science-based) SIA and use the findings to improve environmental management, so that the social needs and biodiversity (which includes people) inform environmental management, I would say it is very important because the issues are intertwined. The reality on the ground in SA is that this seldom happens, and that is why communities are suffering so much due to environmental impacts from projects”. Further substantiation was provided to this line of thought by RN 4 in stating that “the social dimension of development impacts is easily and frequently overlooked or ignored. Yet the long- term social impacts on communities can be more severe and less easily mitigated than biophysical impacts. That is why SIA is regarded as very important in making decisions”. In addition, RN 6 contributes by stating that “an SIA will unearth issues and facets of the project that public participation cannot. When allied with diligence, an SIA is a particularly thorough and robust tool, not just during the ESIA stage, but also while the project is being implemented”.

Subsequent to the second question the third question of the questionnaire (Question B.3.) asked the respondents their professional perspective on the effectiveness of SIA practice in South Africa. Interestingly, all respondents are unanimous with the perception that SIAs are ineffective in practice. To substantiate the reasoning, RN 5 proposed that “currently, I don't think SIA is that effective, as it is often done as part of an EIA, but would likely not influence findings of EIAs and decisions made by authorities”. In addition, RN 3 suggests that “it is ineffective and problematic because it is not adequately regulated”. Contrary to the previous statement, RN11 contributes to the mutual perspective by stating that “there is a number of SIA specialists who are doing a sterling job without it being part of or guided by legislation in South Africa at present, however explicit contributions to decision making are negligible”. RN 10, however, supports this line of thought as the respondent states that “the fact that a SIA is a ‘good’ document or is effective bears no weight if it is not implemented and monitored”. The respondents however further ascribed their views to an array of issues detailed as follows:

- A lack of concise regulations and a regulatory body (RN 1, RN 2, RN 3 and RN 10). This will assist with eliminating the emerging habit or idea that SIAs can be conducted by non-specialists. In addition, RN 2 emphasised that “being registered would foster opportunity for continuous professional development as required by such statutes”. The lack of regulations moreover encourages the continuous undermining and shelving of the discipline. An example by RN 10 is that “unlike the EMP, minimal emphasis is placed on the roles and responsibilities on the SMP or social issues”.
- The discipline is regarded as “soft and irrelevant” and has been reduced to a box ticking exercise (RN 8 and RN 9).
- A tendency to focus on perceived positive impacts and sieve through detailed assessment, suppressing serious impacts while promoting those with minimal responsibility, seems to be a norm displayed by developers (RN 7, RN 8, RN 9, RN 10, RN 12 and RN 13).
- A lack of emphasis, consideration and understanding of SIA by regulators throughout the decision-making process (RN 4, RN 5 and RN 12).

The fourth question that formed part of this section (Question B.4) investigated how the component of need and desirability within EIA procedures affect the substantive effectiveness of SIA. In agreement, respondents suggested that the criteria of need and desirability depict social inclination (RN 3, RN 7, RN 9 and RN 13). RN 3 points out that, despite the latter, “EIA procedures and regulatory perspectives often drift towards a prioritisation of biophysical issues”. RN 13 states that “need and desirability often just focuses on the economic desirability of proposed development”. RN 9 on the other hand suggests that the “need and desirability criteria could be

used far more effectively to screen for less elaborate requirements for a subsequent SIA. It could even be used as a screening tool to determine whether a SIA is needed or not". On the contrary, RN 7 and RN 8 both agreed with the idea that SIA outcomes would in turn strengthen the criteria. Stating that "the need and desirability usually highlights various socio-economic impacts, but the SIA might indicate additional negative impacts that are not usually included in the needs and desirability. On the other hand, the SIA outcome can strengthen the need and desirability especially where numerous jobs can be created and if locals are involved to receive direct benefits" (RN 7). On the other hand, RN 8 substantiates by stating that "SIA can probably provide the best tool for determining need and desirability, but sadly it's not used for this at all".

The fifth question contributing to this theme (Question B.5) asked, to what extent effective SIAs influence and/or contributes to EIA decision making? Illustrated by Figure 4-5 below is an overview of the responses which depict that two of the fourteen (2 of 14; 14,29%) respondents perceive effective SIAs as portraying an exceptional contribution to the current state of EIA decision making, while four of the fourteen (4 of 14; 28,57%) suggested that an adequate contribution is achieved. Two of the fourteen (2 of 14; 14,29%) identified SIAs as having a neutral contribution, whereas the majority of the respondents (6 of 14; 42,86%) were of the view that SIA portray a slight contribution to the current state of EIA decision making.

In their elaborations to Question B.5 above, respondents continued to reiterate the squandered potential of SIA's, while additionally highlighting that effective SIAs will assist in providing informed decisions (RN 4, RN 7 and RN 13). However, RN 2 stresses that "EAPs and proponents have the freedom of judgement with regards to the extent of detail included within the SMPs including their implementation therefore affecting the effectiveness of SIAs". On the other hand, RN 3 argued that "SIA would by default be effective if it makes a significant contribution to decision making". RN 3, 4, 5 and 12 further emphasised that, despite the strides made by SIA through the provision of comprehensive and well executed SIAs, the contribution to decision making is poor, as a result of weak integration to EIA reports and failure to flag such incidents by the decision-making authority.

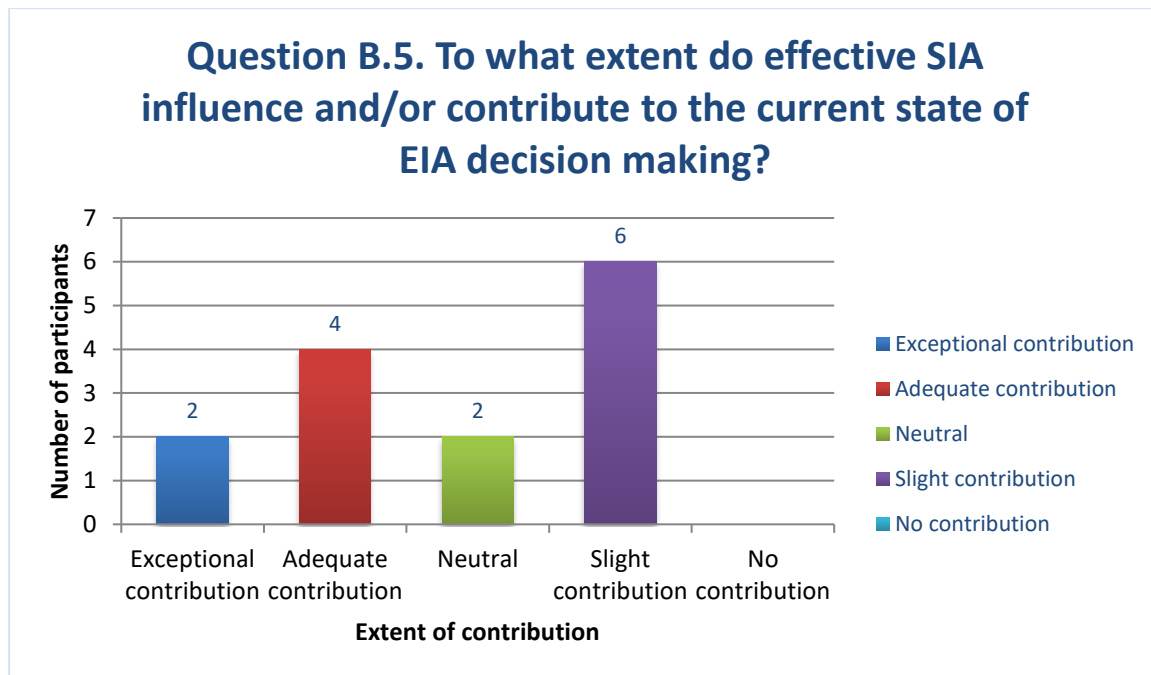


Figure 4-5: Perspectives on the extent to which effective SIAs influence and/or contribute to EIA decision making (Question B.5).

The last question that formed part of this theme (Question B.6) investigated the common flaws or shortcomings encountered in SIA practice that affects its effectiveness and contribution to decision making. At the forefront was an outcry about the emergent trend of professionals and “assessors” from other fields of studies with minimal knowledge of social dynamics undertaking SIAs (RN 1, RN 3, RN 5, RN 6 and RN 7). RN 1 highlighted that “the socio-economic dynamic is now being overridden by economic factors which is a clear indication of the job being done by economists and not SIA practitioners or socially inclined professionals”. RN 3 further substantiated by stating the following incident in practice:

Professionals from other disciplines are thinking that they can do SIAs. I once was commissioned to review a SIA Report for a very large project that would have enormous social impacts, to the extent that it should be considered as a fatal flaw, but the SIA was done by economists, who only considered economic impacts such as employment creation and contribution to GDP, but not any of the numerous other negative social, cultural and health impacts that the project would have. Also, what I found very disturbing was that they did not consult any potentially affected people; their study was purely desktop with a focus on economic considerations. This study was passed as a Social Impact Assessment, and was accepted as such by both the EAP and the decision-making authority.

The second matter of concern was the strict timeframes and meagre financial commitments towards social studies inhibiting the production of comprehensive studies (RN 2, RN 4 and RN 7). Third is the misapprehension that “consultation” equals SIA, exacerbated by the lack of understanding by stakeholders involved in the process. RN 4 suggested that “Social Impact ‘Assessors’ with no real training or knowledge tend to display the misapprehension that ‘consultation’ equals social impact assessments, which is a trend unfortunately encouraged by EAPs and regulatory authority through accepting such submissions”. The contribution by RN 13 somewhat supports the latter by suggesting that the “lack of knowledge of stakeholders and a lax approach of EIA legislation in implementing SIA as part of EIA assessment process is a concern on the rise”. The fourth shortcoming identified was the lack of-, or rather the inability of the specialist to manage and monitor the SIA process throughout the various stages of project implementation (RN 6, RN 8, RN 9 and RN 10). Lastly, the failure to distinguish links between the biophysical environment and human health or wellbeing i.e. the basic concept of sustainability is poorly understood (RN 4, RN 8, RN 11 and RN 14).

From this section, the perspectives provided by respondents with regards to SIA effectiveness were deliberated. The final element of substantive effectiveness is unravelled in the following section.

4.2.3 Theme 3: Influence of SIA in EIA decision making

The last theme (Section C of the questionnaire) consisted of five (5) questions i.e. C.1 to C.5. The first question that formed part of this section asked participants about their perspectives regarding the extent to which SIA gives effect to environmental rights within EIA decision making. Figure 4-6 below provides a breakdown of the responses. Here it is indicated that three of fourteen (3 of 14; 21,43%) respondents are of the view that SIA has a strong effect, one of fourteen (1 of 14; 7,14%) suggested a moderate effect, while two of fourteen (2 of 14; 14,26%) respondents proposed that SIA are neutral. However, the majority of the respondents (7 of 14; 50%) are of the perception that SIA possesses a slight effect, and lastly one of fourteen (1 of 14; 7,14%) suggested that SIAs illustrate no effect.

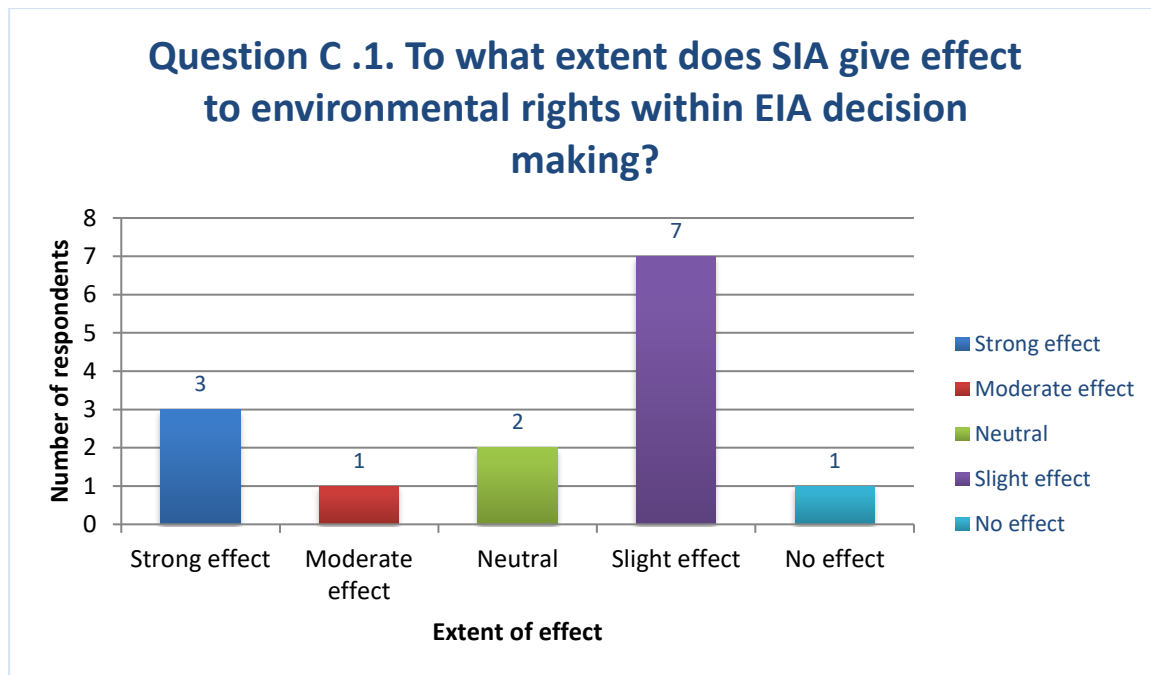


Figure 4-6: The extent that SIA gives effect to environmental rights (Question C.1).

In their reasoning to Question C.1, participants highlighted that SIA indeed has the potential to give effect to environmental rights (RN 2, RN 4, RN 7, RN 8 and RN 9). RN 8 goes further by stating that “SIA is not a tool to prevent any development, it is meant to ensure sustainable development”. Respondents additionally echoed that despite the potential, in current practice, achieving a state whereby SIA bears influence in decision making and ultimately giving effect to environmental rights is a mammoth task. RN 6 substantiated by stating that “the SIA has the scope to play a crucial role in ensuring environmental rights however, due to factors such as a lack of understanding of the value of the SIA, it may not always materialize”. RN 8 concurs with the latter through the following contribution: “as it stands, I don't believe that SIA contributes or adds any substance to the decision making, but the potential is there for it to give effect to environmental rights”.

The second question of the theme (Question C.2) asked participants how SIA has positively contributed to ensuring that EIA decision making endorses and facilitates the principle of sustainable development. Respondents are of the view that SIA embraces the principle of holism as it encapsulates all elements of sustainable development. RN 10 elaborated on this through stating that, “SIA includes social, economic, and certain environmental issues and this holistic approach assists the decision-makers”. A contribution to this view by RN 8 states that “It does so in every way, ensuring that development projects consider all sustainable development criteria (social, economic, environmental, governance). To me, the SIA brings all these things together,

better than what an EIA can achieve! The SIA looks at how a project is meant to achieve human well-being, which incorporates all the sustainability criteria". SIAs therefore seek to strike a balance amongst all key pillars of sustainable development (biophysical, social, economic and even governance). However, this is difficult as other role players fail to come to the party. RN 13 further substantiates the previous statement by stating that "it is sustainable in that it considers social-, economic- and environmental issues. SIA should ensure that social issues are considered just as important as environmental and economic but since, in my opinion, the results produced fall short. Then SIA contribution to sustainable development in practice is negligible". RN 14 adds on to this view by stating that "the lack of statutory SIA contributes to the poor consideration of SIA results; unless it has a legal framework. Then it will remain difficult to enforce and act on non-compliance associated with its practice. The lack of a clear mandate further contributes to the fact that it does not have a clear role and place in the entire life cycle of the project, hence it's a once off exercise. Its effectiveness cannot be easily measured but my view with regard to it facilitating SD, it is currently not delivering". Nonetheless, respondents stress that SIAs are a true vanguard of sustainable development as opposed to EIA but this potential is not being realised (RN 2, RN 3, RN 5, RN 6, RN 7 and RN 11).

Following the second question, the third question (Question C.3) unravelled the degree to which SIA contributes to inclusivity, transparency and accountability in decision making. Figure 4-7 below illustrates the views of the participants. Three of fourteen (3 of 14; 21,43%) respondents suggested that SIAs provides an exceptional contribution and four of fourteen (4 of 14; 28,57%) suggested an adequate contribution, while four of fourteen (4 of 14; 28,57%) respondents proposed that it is neutral in contribution, lastly three of fourteen (3 of 14; 21,43%) submitted the view that it contributes slightly. Conversely, respondents are of the consensus that SIA in practice bears an insignificant contribution to concepts of inclusivity, transparency and accountability, however, some did suggest that it is contingent on whether SIA processes were undertaken adequately and a quality report was produced and applied. The preceding statement was further unpacked by RN 8, stating that:

"The SIA and SIA consultation process can assist the public participation process and make the latter more inclusive. If SIA consultation is done effectively it can add to the transparency of the process. Management and mitigation measures provided as part of the SIA can make project proponents more accountable if incorporated and implemented as part of EMP. However, no 'social' audits are done. In the mining environment one can only rely on the Social and Labour Plans to 'audit socially' ".

RN 4 supported this by stating that “If SIA is done properly, then it can make this kind of contribution. But it all hinges on whether a good SIA was conducted and considered in the decision-making process”. In line with RN 4, RN 5 proposed that “It can make exceptional contribution but then only if the SIA is conducted properly and its findings and recommendations applied”. Additionally, respondents highlighted that the lack of definitive guidelines exacerbates the inhibiting factors, though civil societies are becoming more involved and aware of their rights (RN 3 and RN 11). RN 2 stressed that “it is mostly up to impacted communities and how they choose to organise themselves when faced with impacts from a planned intervention, in that, it is largely the strength of community structures that determine how they hold developers accountable”. RN 3 highlights that “it is unfortunate that oftentimes these three elements are realised through riots and court proceedings”.

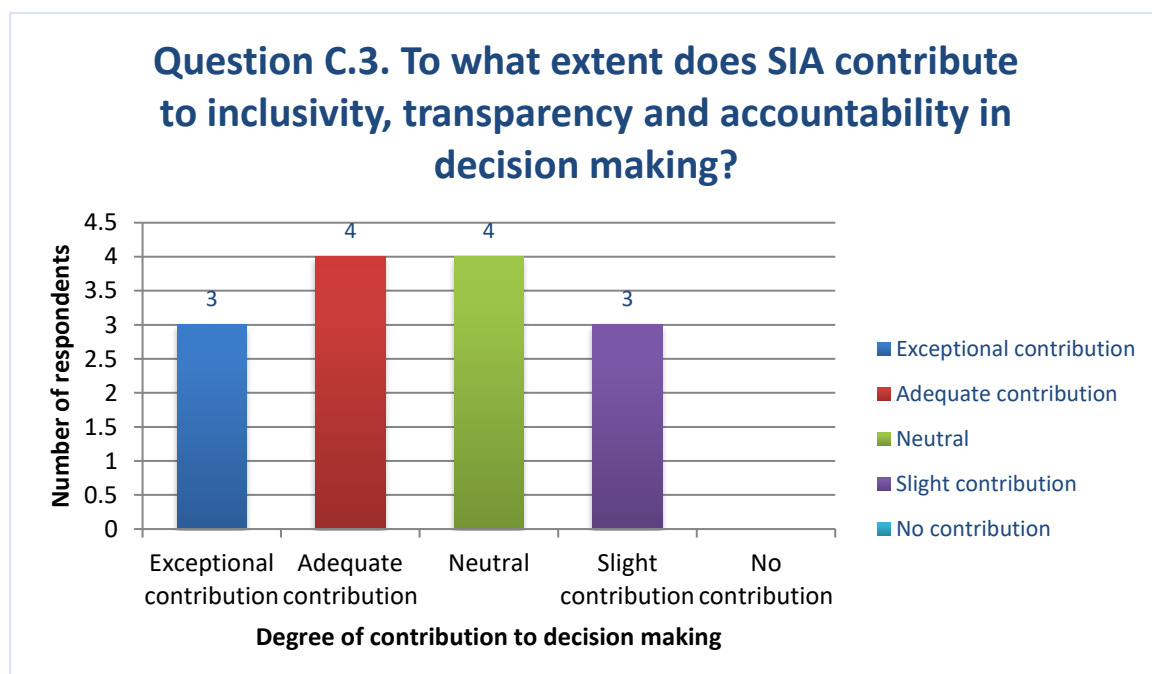


Figure 4-7: Perspective unto the degree of SIA contributions to inclusivity, transparency and accountability in decision making (Question C.3).

The fourth question that formed part of this section (Question C.4) sought to determine the degree to which SIA encourages and reinforces the implementation of administrative justice and accountability (refer to Figure 4-8 below). An overview of the received responses demonstrated that one of fourteen (1 of 14; 7,14%) respondents suggested that SIA achieve exceptional contributions, and four of fourteen (4 of 14; 28,57%) identified SIA as having an adequate contribution. However, five of fourteen (5 of 14; 35,71%) proposed a neutral contribution, while the last four respondents (4 of 14; 28,57%) suggested that SIA portrays a slight contribution in encouraging and reinforcing administrative justice. In their reasoning, however, the respondents

unanimously echoed that SIA barely influences the model of administrative justice (RN 1 to RN 14). RN 2 suggested that “if best practice is applied then then these will be encouraged, however, best practice is only achieved in well-funded projects with external influences and international watchdogs”. This suggests that administrative justice is only sought afterwards as a result of external influences. This line of thought is supported by RN 5 who suggested that SIA encourages administrative justice at an international level and unfortunately not in a South African context. RN 7 suggests that “administrative justice and accountability can be reinforced if social audits would be undertaken”, which is synonymous with the follow-up process within EIA. Through this ideology SIA follow-up is highly encouraged.

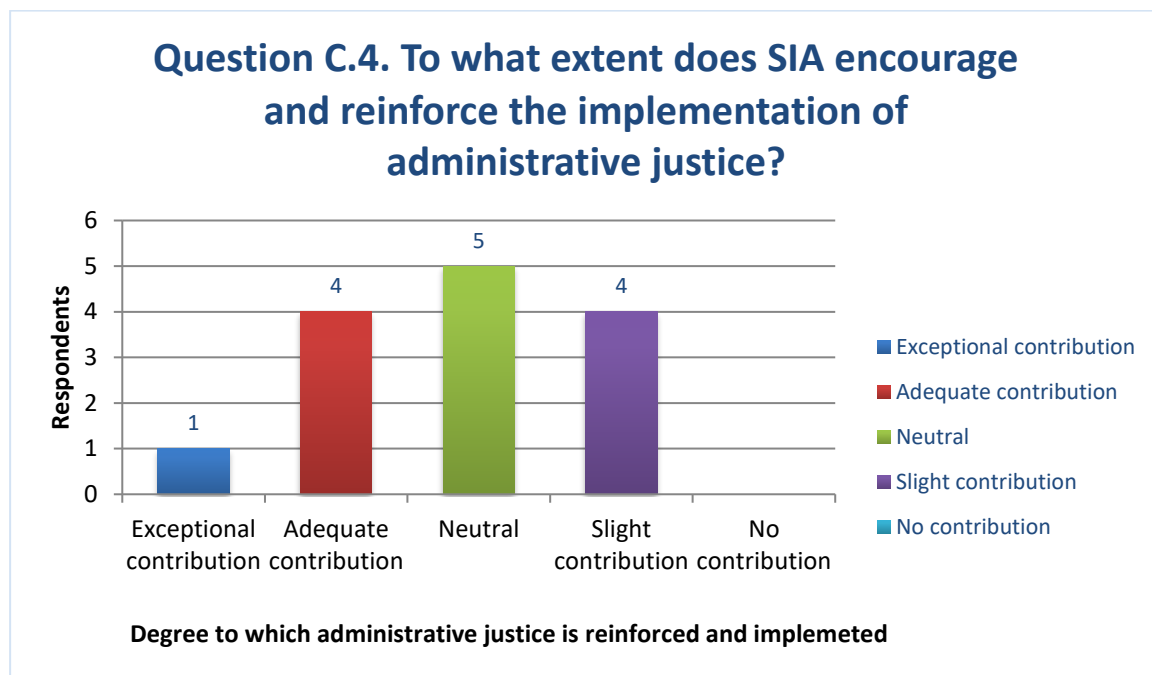


Figure 4-8: The extent that SIA encourages and reinforces the implementation of administrative justice (Question C.4).

The last question that formed part of this theme, and the questionnaire as a whole (Question C.5), probed respondents on their professional perceptions pertaining to the degree to which they agree with the impression that there is room for improvement with regards to SIAs effectiveness and consideration towards EIA decision making (see Figure 4-9 below). In their Likert scale responses, the majority of the respondents (10 of 14; 71,43%) strongly agreed with the notion that there is room for improvement, while two of fourteen (2 of 14; 14,29%) moderately agreed, and the remaining two respondents (2 of 14; 14,29%) assumed a neutral stance.

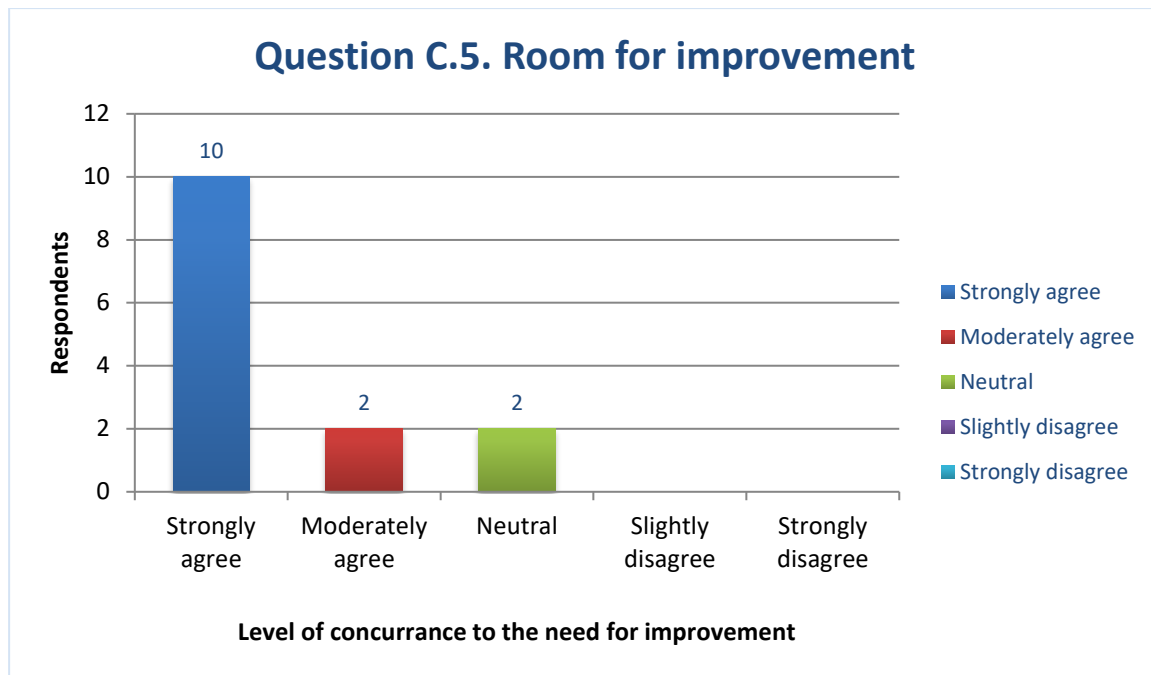


Figure 4-9: Perceived potential for improvement in SIA (Question C.5).

In their expansions to the answers provided in the Likert scale options, the respondents highlighted the need for concise statutory legislations with regards to SIA. RN 3 furthered this notion stating “that current legislation makes provision for equal consideration of social aspects although not sufficient and clear however if not enforced and driven by regulators in decision making processes then SIAs will continue to be undermined”. Various respondents concur with the idea that regulators are more biophysically orientated in their training and therefore need to be more proficient with social studies (RN 1, RN 2, RN 3, RN 8 and RN 10). RN 4 argued that “the overall weakness is not so much in SIA itself, but in its position within the broader EIA process”. Respondents additionally identified and highlighted the need for a registration body and the requisite to be viewed in the same light as biophysical studies (RN 2, RN 4, RN 5, RN 6 and 14). RN 9 on the hand, expressed that “impartiality of the process will improve if developers do not own the process and documents produced by specialist are submitted directly to the competent authority”.

This section conveyed primary data from respondents in its raw sense, the following section will now contextualise the data with reference to existing literature.

4.3 Discussion of findings

Section 4.2 pronounces the views of the professionals that participated in this study. This section will now scrutinise correlations and contradictions of the responses received to existing literature

with special emphasis on the points highlighted earlier in Chapter 2. The discussions below are in accordance to the thematic analysis of acquired responses i.e. Background and experience of participants (Theme 1); SIA effectiveness (Theme 2); and the contribution of SIA to EIA decision making (Theme 3).

4.3.1 Theme 1: Background and experience of participants

Since this study's focal point was based on the experiences of experts, this theme was vital in determining the level of expertise amongst respondents to ensure that participants are extensively familiar with both practice and theory. This follows the notion that professional competency and proficiency is directly linked to SIA effectiveness (Kruger *et al.*, 2021:175). Becker (2001:312) suggests that the pool of SIA consultants is growing globally and that introductory and advanced training is offered to assist the emergent influx. On the contrary, in a South African context, Kruger *et al.* (2021:167) highlights the need for formal training with regards to SIA's application. The latter is substantiated by findings from Kruger and Sandham (2014:24) citing that a lack of skill by practitioners as a constituent of the reasons for poor performance in SIA quality. The results acquired by this study conveyed that the educational profile of respondents illustrates that 86% of the respondents are at various levels of postgraduate studies, which clearly indicates theoretical knowledge that is beyond just adequate. This was an indication that, despite the dispersed distribution of theoretical knowledge, the majority is well versed.

Emanating from the lack of formal training in SIA, the practice in South Africa is therefore considered an interdisciplinary social science, hence incorporated a variety of fields (Esteves *et al.*, 2012:34). It is, however, due to this reason that a loss of substance, translating to an impeded ability to achieve best practice is experienced. This study is, however, somewhat advantaged by the fact that 64% of the respondents completed socially orientated studies. Nevertheless, in terms of practical experience ten respondents are beyond the ten-year threshold, which offers extensive knowledge unto the theoretical and practical interface. The following sections therefore deep dive into the discourse of SIA in South Africa in terms of its effectiveness.

4.3.2 Theme 2: SIA effectiveness

Chapter 2, Section 2.4, unpacks the effectiveness of SIA. In order to remain true to the title and objectives of this dissertation, the term "effectiveness" was stripped down to four criteria of which substantive effectiveness was the focal point. This definition of effectiveness was further deliberated through a breakdown of four factors, namely:

- regulatory framework for implementing impact assessment,

- public participation,
- the quality of impact assessment reports, and
- mechanisms in decision making context.

The feedback received from participant's rates SIA as ineffective, however a number of reasons were brought forth. One of the recurring outcries by respondents is the lack of concise regulatory guidance, which constitutes one of the key factors of substantive effectiveness. Aucamp (2015:175) corroborates this finding by stating that "there is a need for a consistent approach to SIA in South Africa and that guidelines would address this need". Although the Constitution, the NEMA and other legislations mandate SIA and social considerations, SIA in South Africa lacks explicit guidelines and legal enforcement, leading to serious consideration of the results produced by SIA (Aucamp, 2003:5). Participants are therefore of the view that specific legislation would create an enabling environment for the development of national guidelines, and that they would assist in regulating activities and the emerging trend of non-specialists undertaking SIAs. Conversely, Kruger *et al.* (2021) introduces an interesting debate between prescriptive and flexible regulations and guidelines. The authors findings' depicted no consensus was reached regarding the most suitable, but continued to caution that prescriptive requirements do not necessarily constitute best practice (Kruger *et al.*, 2021:176).

Stakeholder engagements are regarded as the strength and crown jewel of SIA, however participants warn of the misapprehension that "consultation equals SIA". The former is synonymous to the caution by Kruger and Sandham (2018:399), accentuating the mounting confusion between SIA and public participation amongst the impact assessment community. Nonetheless, stakeholder engagement performs adequately within the auspice of substantive effectiveness of SIA. The quality of SIA reports, however, is a factor that produced diverse views amongst respondents. The study by Hildebrandt and Sandham (2014:23) revealed that SIA report quality is relatively weak, despite a modest improvement from the ECA to the NEMA regime. Respondents stress that provision of comprehensive SIAs carried out successfully bears an insignificant impact, as the Environmental Assessment Practitioner (EAP) has freedom of judgement and control over what makes it into the final report for submission. Unfortunately, EAPs and project proponents have displayed a tendency to sieve through the reports submitted by SIA specialists, often retaining details of minimal responsibility. This, however, correlates with findings by Hildebrandt and Sandham (2014:23), including Alberts *et al.* (2020:7), which highlight a poor performance in the following two areas i.e. (1) the identification and evaluation of key impacts and (2) the provision of alternatives and mitigation measures. In contrast, the NEMA regulations (GNR 982, Section 13 (1)(a)-(f)) provide general requirements for the appointment of EAPs and specialists, which advocate for independence, objectivity and impartiality. Aucamp *et al.* (2011:46)

suggests that the regulations do not adequately protect specialists and practitioners. It is therefore possible that pressure can be exerted either inadvertently or with an ominous undertone. This, in turn, affects the quality of reports produced.

To avoid confusion and duplication, this last point i.e. mechanisms for decision making, is infused within the subsequent theme, which focuses on SIA's influence on EIA decision making.

4.3.3 Theme 3: Influence of SIA in EIA decision making

This last theme set out to determine the influence and contributions SIA makes to decision making in EIA. Respondents are of the view that SIAs are at the forefront of sustainable development, as they employ the principle of holism, meaning that SIAs are cognisant of the Triple Bottom Line (TBL) in their application. Developments are of social disposition, which in turn bears fiscal and societal beneficitation. However, through SIA, consideration of biophysical elements can be endorsed. Respondents elaborated by stating that the right to a clean environment (air, water, etc.) can be measured in socio-economic terms as external costs to communities. This indicates that SIA can actually give effect to environmental and human rights.

In addition, SIAs facilitate rigorous stakeholder involvement, which adds substance to the reports emanating from consultative sessions. Investigations into SIA and EIA report quality by Hildebrandt and Sandham (2014), Sandham and Pretorius (2008) and Alberts *et al.*, (2022) all reveal some synonymous findings, in that both the SIA and EIA are characterised by strong public involvement. However, respondents caution that in practice, a grave tendency of omissions and deficiencies pertaining to the identification and evaluation of impacts, including the provision of alternatives, is on the rise. This fact is validated by the aforementioned studies. Nevertheless, Alberts *et al.* (2022), cautions that poor substance in final report submissions translates to ill-informed- and poor decision making.

By undermining the consultative processes, principles of administrative justice are being compromised and therefore SIA is being used as a smokescreen, a box-ticking exercise to gain authorisation (Aucamp, 2015:78). Nonetheless, SIA has the potential to facilitate conflict resolution, but practice has very limited contribution to EIA decision making.

4.4 Chapter summary

Chapter 3 highlights that seventy-five (75) practitioners were engaged in a bid to acquire perspectives regarding SIAs distinct contribution to EIA decision making. From the seventy-five (75) only ten (10) participants responded and shared their views in the end. The ten (10) were

augmented by four (4) regulators to produce a total of fourteen (14) respondents. These respondents are of the general view that SIA provides an insignificant impact or influence within the EIA system, and worse within the decision-making processes. From the feedback received, the frustration amongst respondents is evident, as they continuously emphasise missed opportunities. Respondents do perceive SIA as a key policy implementation tool spearheading sustainable development. However, they also acknowledge that the discipline is plagued with numerous flaws inhibiting it from blossoming and achieving its intended purpose.

Nonetheless, it is worth noting that SIA theory and practice are considerably detached and most of the positive feedback was in reference to potential whereas practice paints a grim picture.

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter (Chapter 4) provided feedback from the disseminated questionnaire, coupled with discussions of the findings in relation to the literature in Chapter 2. This chapter presents the conclusion which assesses whether the goal and objectives of the dissertation have been met. The latter was accomplished by reflecting on the key literature and findings presented in previous chapters. This chapter additionally provides recommendations for further research. The following section therefore provides the concluding remarks to the study.

5.2 Conclusion

The aim of this study was to determine the contribution of SIA to EIA decision making, by investigating perspectives of the SIA community with regards to the role and extent to which SIA influences EIA decision making. This section provides a summary of the main findings with respect to the research objectives and investigations undertaken.

5.2.1. RO1: To investigate the perspectives on the position/role of SIA to EIA decision making

To answer the first research objective, Chapters 1 and 2 provide secondary data by virtue of a literature review, in order to unpack the background of the SIA discipline, its value, the legal mandates for SIA in South Africa, the disciplines' effectiveness, its role in South Africa and lastly its role in EIA decision making. The first chapter highlights that SIA's inception was parallel to that of the EIA and their development emanated as a response to the requirements of the National Environmental Policy Act in 1969 (NEPA) in the USA. NEPA-like legislation then spread globally, giving each region its own set of laws to govern within the borders of its state. The second chapter highlights that South African environmental legislation is recognised amid the best in the world and in addition endorses the nested egg model of sustainable development. The latter is pivotal, as it illustrates that legislative provisions mandate and strengthen environmental management tools such as EIA and SIA. This importance cascades down to decision making, as it is an act of governing henceforth projecting elements of lawfulness and accountability.

Despite the common notion that SIA is a tedious exercise due to its processes, SIA is regarded as the moral compass and obligation of regulators, urging them to impartially consider all possible adverse and/or positive implications resulting from plans, policies and programs (PPP). The SIA additionally advance the philosophy of democratic developments by striving for inclusivity and

additionally serving as a voice for the historically disenfranchised. For the former, SIAs in South Africa commenced as specialist studies aimed at augmenting the substance of data and knowledge provided within the EIA report hence providing a rather holistic picture prior to decision making.

This discussion provided a summary of secondary data related to the research objective highlighted above. The primary data is articulated in the following section, thereby also linked to and addressing this objective. The following section provides a synopsis of the findings or perspectives of the respondents that took part in the study.

5.2.2. RO2: To investigate the perspectives on the extent to which SIA influences EIA decision making

This section provides a summary of the primary data acquired from the empirical investigation embarked on in Chapter 4. The data is relayed in accordance to the three themes determined and investigated in the aforementioned chapter.

5.2.2.1. Theme 1: Background and experience of participants

The feedback obtained from the participants illustrated that the majority are well versed in both the theoretical and practical application of SIA under the auspice of EIA. Findings indicate that 86% of the respondents are in possession of various levels of postgraduate qualifications, 64% have their studies socially orientated and 36% possess qualifications in both social- and biophysical or environmentally orientated backgrounds. The latter therefore facilitated the juxtaposition of the two disciplines. The importance of this theme was further encouraged by literature findings and comments from respondents remarking that a lack of relevant experience, a lack of relevant skills and the promotion of none socially orientated educational backgrounds dilutes efforts to mainstreaming SIA good practice.

5.2.2.2. Theme 2: SIA effectiveness

For the purpose of this study, the term SIA effectiveness was stripped to yield four criteria of which substantive effectiveness was the focal point. This was further stripped to produce four core areas of discussion, namely:

- regulatory framework for implementing impact assessment,
- public participation,
- the quality of impact assessment reports, and
- mechanisms in decision making context.

The feedback received portrays SIA as an ineffective environmental management tool due to innumerable hurdles and loops on SIAs track to good practice. Respondents highlighted a lack of explicit regulatory frameworks and guidelines as the principal concern, followed by the confusion between public participation and SIA. Respondents strongly caution of the misconception that consultation and public participation equates to SIAs. Responses received also extensively align to the secondary data in Chapter 2 by emphasising that, although some success is achieved with regards to SIA report quality, the overall performance is observed as poor. The respondents cite numerous reasons for this matter, one being that Environmental Assessment Practitioners (EAPs) and project proponents have illustrated a tendency to sieve through the SIA report and recommendations, often retaining only details of minimal responsibility as part of the final EIA report. Such action thus defeats the purpose and degrade SIA to a mere greenwashing exercise. The last point of discussion was deliberated in the following theme to avoid repetition.

5.2.2.3. Theme 3: Influence of SIA in EIA decision making

Respondents unanimously emphasised that the EIA process remains resolute in being overbearing with biophysical aspects. However, SIA possesses the principle of holism in that it is considerate of the triple bottom line (TBL) in its application. Feedback from respondents stressed that biophysical elements can be measured in socio-economic terms as external costs to communities. This action therefore indicates that SIA can in actual sense give effect to human and environmental rights. SIA additionally pays attention to the cumulative effects of impacts resulting from continuous developments as development in itself is a socio-economically induced phenomenon. SIA endorse rigorous stakeholder consultations which in turn improves the level of substance included within the EIA report and also facilitates the application of administrative justice principles. The latter urges authorities to be lawful, reasonable and procedurally fair prior to decision making.

5.3 Recommendations and areas of future research

The data acquired from the study clearly depict that SIA practice in South Africa is plagued with a variety of problems. The participants of this study have nonetheless provided some proposed solutions to improve the state of SIA. The most recommended point was to have statutory legislation, improved SIA standards and provision of guidelines for those new in practice so as to improve on the basis of social impact enforcement and -compliance. Another strongly emphasised point was to have a statutory or regulatory body registering all socially orientated practitioners so as to ensure accountability and offer support to one another, especially to up-and-coming practitioners. Emphasis was additionally placed on the need for specialised training and skills

development for SIA practitioners. Some respondents are of the view that SIAs should be conducted parallel to the EIA process, or to have the specialist report submitted directly to the competent authority, thereby eliminating the possibility of sieving or omission of facts by either the EAP or project proponent. Further deliberations suggested that a new team of socially orientated competent authorities should be developed or current biophysically orientated authorities should undergo training and registration to a social science regulatory body.

In conclusion, future research can be conducted to unpack the mechanisms of decision making of EIA as it expands into various sectors. SIA as an element of the decision-making criteria should be researched in more detail, as South African law is extensively human orientated. This fact should also remind current practitioners not to try to reinvest or operate parallel to the current framework of SIA practice out of frustration. The SIA community should rather build on the existing framework and enhance the consultative powers of the discipline, resulting in social upliftment. Additionally, as a recommended field of study, it would also be interesting to obtain the perspectives from regulators in the mining and renewable energy fields, clients, and communities.

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ANNEXURE A



Institution: North-West University

Campus: Potchefstroom

Field of Study: Master of Environmental Management

Mini-dissertation title: Perspectives on the contribution of SIA to EIA decision-making in South Africa.

Student Name: Mr. Obakeng Lesomo

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Contact number: +2782 525 2004

Ethics number: NWU-1219-22-A9

Supervisor: Dr. L. Kruger (Leandri.Kruger@nwu.ac.za)

Dear Participant,

My name is Obakeng Lesomo. I am a registered post-graduate Masters student in Environmental Management at the North-West University, Potchefstroom campus under the supervision of Dr. Leandri Kruger. You are hereby invited to participate in my study which aims to investigate *perspectives on the contribution of SIA to EIA decision-making in South Africa*.

The objectives of my study are to:

- To investigate the perspectives on the position/ role of SIA in EIA decision-making; and
- To investigate the perspectives on the extent to which SIA influences EIA decision-making.

You are invited to participate because of your expertise in the discipline of Social Impact Assessments (SIA). The data to be collated from professionals such as yourselves is vital in achieving the objectives of this particular study and contributes to the body of knowledge regarding the SIA discipline.

This structured questionnaire consists of 14 closed- and open-ended questions divided into three (3) sections, respectively. The questionnaire will require approximately 30 – 45 minutes of your time to complete and this will be conducted through the use of Google forms. This questionnaire

is self-administered however, face-to-face interviews through electronic platforms (Zoom, Microsoft Teams, or Skype) and telephonic interviews can be conducted as per the interviewee's preference and/or request. In addition, I am available for any form of clarity sought by the interviewee through email (tsaonalesomo@gmail.com). Participation will be on a voluntary basis and you are free to withdraw from the questionnaire at any time. The study poses no risks and will ensure the confidentiality and anonymity of all participants (Ethics number: NWU-1219-22-A9). I therefore humbly request to have the questionnaires completed by the 30th of July 2022.

Thank you in advance for your participation in this study.

Kind Regards,
Mr. Obakeng Lesomo

Informed Consent:

Please mark with "x" to indicate your selection with regards to participation in the study

1. I have read, understood, and agree to participate in the study ☐
2. I have read, understood, and do not wish to participate in the study ☐

For interviewees preferring face-to-face or telephonic interviews, please indicate if you give consent to the recording of this interview.

A. YES	B. NO
☐	☐

Questionnaire

Research Title: Perspectives on the contribution of SIA to EIA decision-making in South Africa.

Instructions:

- Please use X to indicate your selection where applicable.
- Kindly elaborate on your answers where necessary.

SECTION A: BACKGROUND OF PARTICIPANTS

The following questions relate to your academic and professional background.

A.1. What is your highest level of qualification?

A. Diploma	B. BSc/ BA	C. MSc/ MA	D. PhD	E. Other

Kindly elaborate on your qualification details (field of study), and if your answer is “E. Other”, kindly include your qualification level.

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A. 2. In which sector/s did you gain your experience with Social Impact Assessments (SIA)? More than one answer is acceptable.

A. Government	B. Private consultancy	C. Academia	D. Private Institutions	E. Other

Kindly elaborate if your answer is “E. Other”.

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A.3. How many years of working experience do you have in the field of SIA?

A. 1-5 years	B. 6-10 years	C. 11-15 years	D. 16 – 20 Years	E. More than 20 years

Kindly elaborate on your years of experience working with SIA.

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SECTION B: SIA EFFECTIVENESS

The following questions are related to SIA effectiveness and your views on the subject matter. For this section, **effectiveness** is understood as the extent to which the purpose and objectives of SIA are being met through the processes undertaken and outcomes reached.

B.1. In your professional opinion, kindly elaborate on how SIA in theory differs from how SIA is being practiced.

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B.2. In light of your previous answer, to what extent do you perceive SIA as an important environmental management tool?

A. Very important	B. Moderately important	C. Neutral	D. Slightly important	E. Not important

Kindly elaborate on the reasoning for your answer provided.

B.3. As a professional in the field, what is your perspective on the effectiveness of SIA practice in South Africa?

B.4. Bond and Morrison-Saunders (2013:7) define substantive effectiveness as “*the extent to which the goals, or objectives, of the assessment process have been met (this might mean a more sustainable outcome)*”. With this definition in mind, how does the component of need and desirability within the EIA procedure affect the substantive effectiveness of SIA?

B.5. In your professional opinion, to what extent do effective SIAs influence and/or contribute to EIA decision-making?

A. Exceptional contribution	B. Adequate contribution	C. Neutral	D. Slight contribution	E. No contribution

Please elaborate by detailing how SIA effectiveness currently influences or contributes to EIA decision-making.

B.6. What are the common flaws or shortcomings encountered in SIA practice that hinder its effectiveness and SIA's actual contribution to the EIA decision-making process?

SECTION C: INFLUENCE OF SIA IN EIA DECISION-MAKING

The following questions are related to the contributions of SIA to EIA decision-making and the envisaged goal of SIA.

C.1. To what extent does SIA give effect to environmental rights within EIA decision-making?

A. Strong effect	B. Moderate effect	C. Neutral	D. Slight effect	E. No effect

Kindly elaborate on the reasoning for your answer provided.

C.2. In your professional opinion, how has SIA positively contributed to ensuring that EIA decision-making endorses and facilitates the principle of sustainable development?

C.3. To what extent does SIA contribute to inclusivity, transparency, and accountability in decision-making?

A. Exceptional contribution	B. Adequate contribution	C. Neutral	D. Slight contribution	E. No contribution

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Kindly elaborate by detailing how it contributes in practice as opposed to in theory.

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C.4. To what extent does SIA encourage and reinforce the implementation of administrative justice and/or accountability?

A. Exceptional contribution	B. Adequate contribution	C. Neutral	D. Slight contribution	E. No contribution

Kindly elaborate by detailing how it contributes in practice as opposed to in theory.

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C.5. To what extent do you agree that there is room for improvement with regards to SIA's effectiveness and consideration towards EIA decision-making?

A. Strongly agree	B. Slightly agree	C. Neutral	D. Slightly disagree	E. Strongly disagree

Kindly expand on the option chosen above.

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..... **THE END**

ANNEXURE B



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Senate Committee for Research Ethics

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ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Faculty of Natural and Agricultural Sciences Ethics Committee (FNAS-REC)**, the Faculty of Natural and Agricultural Sciences Ethics Committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWU-SCRE) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Perspectives on the contribution of SIA to EIA decision making in South Africa															
Study Leader/Supervisor: Dr L Kruger															
Student: OT Lesomo															
Ethics number:	N	W	U	-	0	1	2	1	9	-	2	2	-	A	9
	Institution				Study Number						Year			Status	
Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation															
Application type: Single				Risk Category:				Minimal							
Commencement date: 25/02/2022															
Expiry date: 25/05/2023															
Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.															

Special in process conditions of the research for approval (if applicable):

- The following documentation are archived by FNASREC and should be complete and kept up to date:
 - Research proposal
 - Signed approval from the scientific committee indicating the proposed risk category
- All researchers involved in the study should submit signed NWU code of conduct statements annually.
- All researchers of low risk studies should submit proof of relevant ethics training every two years.
- All researchers that take part in activities that pose a safety and security threat to the researchers or the environment should submit a risk assessment form annually.
- All research involving human interaction should follow best ethical practise and keep documents as proof. This includes informed consent, questionnaires, incorporation of risk-benefit, and responsible data management.
- Any research at governmental or private institutions, permission must still be obtained from relevant authorities and provided to the FNASREC. Ethics approval is required BEFORE approval can be obtained from these authorities.

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- *The study leader/supervisor (principle investigator)/researcher must report in the prescribed format to the FNASREC:*
 - *annually (or as otherwise requested) on the monitoring of the study, whereby a letter of continuation will be provided, and upon completion of the study; and*
 - *without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.*
- *The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the study leader/researcher must apply for approval of these amendments at the FNASREC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.*
- *Annually a number of studies may be randomly selected for an external audit.*
- *The date of approval indicates the first date that the study may be started.*
- *In the interest of ethical responsibility, the NWU-SCRE and FNASREC reserves the right to:*
 - *request access to any information or data at any time during the course or after completion of the study;*
 - *to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process;*
 - *withdraw or postpone approval if:*
 - * *any unethical principles or practices of the study are revealed or suspected;*
 - * *it becomes apparent that any relevant information was withheld from the FNASREC or that information has been false or misrepresented;*
 - * *submission of the annual (or otherwise stipulated) monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and / or*
 - * *new institutional rules, national legislation or international conventions deem it.*
- *FNAS-REC can be contacted for further information or any report templates via Roelof.Burger@nwu.ac.za 018 299 4269*

The FNASREC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the FNASREC or the NWU-SCRE for any further enquiries or requests for assistance.

Yours sincerely,



Prof Roelof Burger
Chairperson Faculty of Natural and Agricultural Sciences Ethics Committee (FNASREC)