

The significance and status of Social Impact Assessment (SIA) in a South African context

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Dissertation submitted in fulfilment of the requirements for the degree Masters in Geography and Environmental Management at the Potchefstroom Campus of the North-West University

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Potchefstroom

2012

The financial assistance of the National Research Foundation (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the NRF.

Acknowledgements

I would like to thank the following people without whom this study would not have been possible:

- My supervisor, Prof Luke Sandham, for your leadership throughout this entire process. I appreciate all your advice and guidance.
- Tanya Fouché for your help and support during the review process.
- The ACDS team for all your guidance, understanding and support over the past year.
- Marlaine Kruger for your assistance with the language editing of my dissertation.
- To my parents and my sister you were my biggest cheerleaders throughout my studies. Dad, thank you for the encouraging messages you always sent to me, they meant so much to me. It was the fuel that kept me going. Mommy, thank you for the phone calls every day, for always trying to understand and for being my best friend. Dad and Mom, thank you for working hard and giving me the opportunity to study and live out my dreams. ‘Sussa’, thank you for always lighting up my day, for spoiling me and for always being there. Thank you all for your unconditional love, support and patience with me during the past two years. Thank you for always believing in me and being there for me through all the good and the bad. I love you all very much!
- Le Roux Kruger for encouraging me along the way and for always being so understanding. Thank you for always being so supportive, for making me a better person and for loving me unconditionally. Thank you for being the one I can always rely on. I love you with my whole heart!
- Most importantly, I would like to give thanks to my Heavenly Father, for being the light on my path during this time. Without Him this journey would not have been possible.

“Thy word is a lamp unto my feet, and a light unto my path.” (Psalm 119:105).

Summary

Social Impact Assessment (SIA) identifies the intended and unintended impacts that proposed projects or developments are likely to have on a community or individuals and suggest mitigation measures to prevent these impacts and enhance the positive impacts. The main aim of this dissertation is to explore the significance and the status of SIA in a South African context. EIA is currently in its third era of mandatory practice and with an increasing number of SIAs, it is essential that the practice of SIA should be investigated.

The aim of this dissertation was firstly reached by exploring the perspectives of SIA practitioners in South Africa through a questionnaire. The practitioners' perspectives showed that despite distinct weaknesses in the practice of SIA, i.e. the lack of a fixed set of guidelines and a shortage of SIA skill in the practitioner community, SIA practice has improved since 1997 with the promulgation of ECA, although there is still room for improvement. Secondly a quality review was conducted on a sample of SIARs in South Africa using an adapted review package. The results revealed relatively weak report quality compared to EIA report quality, but with an improvement, in report quality since 1997. The quality review findings appear to confirm the perspectives of the practitioners regarding the state of SIA practice in South Africa. Despite the weaknesses in the SIA process, it appears that the SIA practitioner community is driven by best practice considerations, and that SIA practice is in line with international trends.

It appears therefore that despite the observed weaknesses, SIA practice in South Africa is relatively healthy. It is recommended that instead of seeking to strengthen SIA practice by means of regulation and guidelines, SIA practitioners should rather ensure that SIA delivers what it is intended to deliver by ongoing pursuance of best practice, and by improved training and skills development.

Keywords: Social Impact Assessment (SIA), Social Impact Assessment Report (SIAR), SIA practitioners, SIA questionnaire, SIA quality review, South Africa.

Opsomming

Sosiale Impak Assessering (SIA) identifiseer die moontlike bedoelde en onbedoelde impakte wat voorgestelde projekte en ontwikkelinge op 'n gemeenskap of op individue kan hê, en stel ook versagtinge maatreëls voor om die impakte te voorkom of te verminder en die positiewe impakte te verbeter. Die doel van die verhandeling is om die betekenis en die status van SIA in 'n Suid-Afrikaanse konteks te verken. Omgewings Impak Assessering is tans in die derde era van verpligte praktyk en met 'n toename in die aantal SIAs jaarliks, is dit noodsaaklik dat daar ondersoek ingestel word teen die praktyk van SIA.

Die doel van die verhandeling is eerstens bereik deur die perspektiewe van SIA praktisyns in Suid-Afrika te ondersoek deur die gebruik van 'n vraelys. Die perspektiewe van die praktisyns het daarop gedui dat ten spyte van beduidende swakhede in die SIA praktyk, soos die gebrek aan 'n vasgestelde stel riglyne en 'n tekort aan SIA vaardighede in die praktisyns gemeenskap, die SIA praktyk verbeter het sedert 1997 in terme van die verklaring van ECA, alhoewel daar steeds ruimte vir verbetering is. Tweedens is die kwaliteit van 'n aantal SIA verslae in Suid-Afrika hersien deur die gebruik van 'n aangepaste hersien pakket. Die resultate openbaar 'n relatiewe swak kwaliteit verslae in vergelyking met die Omgewings Impak Assessering verslae se kwaliteit, maar daar is 'n verbetering in die kwaliteit van die verslae sedert 1997. Die bevindings van die kwaliteit van die verslae bevestig die perspektiewe van die praktisyns wat die SIA praktyk in Suid-Afrika betref. Ten spyte van die swakhede in die SIA proses, kom dit voor dat die SIA praktyk in gemeenskap gedryf word deur die oorwegings van beste praktyk, en dat SIA praktyk in Suid-Afrika in lyn is met internasionale tendense.

Dit kom dus voor dat ten spyte van die waargenome swakhede, dat SIA praktyk in Suid-Afrika op 'n relatiewe gesonde standaard is. Dit word aanbeveel dat SIA praktisyns in plaas van om die SIA praktyk te versterk deur middel van regulasies en riglyne, eerder moet verseker dat SIA voorsien wat dit veronderstel is om te voorsien met die deurlopende ingeolge van beste praktyk, en deur SIA opleiding en ontwikkeling van SIA vaardighede te verbeter.

Sleutelwoorde: Sosiale Impak Assessering (SIA), Sosiale Impak Assesseringsverslag (SIAV), SIA praktisyns, SIA vraelys, SIA kwaliteit, Suid-Afrika.

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Chapter 1: Introduction

1.1. The origin of SIA:

In a general sense, the term 'Environmental Impact Assessment' (EIA) is seen as the process of identifying the future environmental consequences of a current or proposed action. According to Becker (2001:312), one of the major subfields of an environmental impact assessment is a Social Impact Assessment (SIA). In June 1992, a milestone event was hosted by the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. At this conference the UNCED made it evident that we can no longer think of the environment as well as economic and social development as separate fields.

The Rio Declaration contains the fundamental principles on which nations can base their future decisions and policies, considering the environmental implications of socio-economic development (Keating, 1992:1). The principle of the Rio Declaration is about putting people first and is regarded in the broader social science community as a non-negotiable, command to development programmes (Du Pisani & Sandham, 2006:708). In the late 1970s, many developed countries and some developing countries adopted SIA as a means of addressing social issues emerging from development initiatives. However, SIA basically remained an integral component of EIA (Momtaz, 2005:34). Barrow (1997:226) argues that the social, economic, physical and biological aspects of the environment are so interconnected that impact assessments should not treat them separately, but rather link them. EIA and SIA share the following:

- A proactive approach (in theory);
- An attempt at conducting a structured assessment;
- Efforts to be as objective as possible;
- Consideration of development alternatives;
- Production of a clear, concise and unbiased impact assessment;

- Involving the public, where possible, in the planning and decision making processes; and
- Cultivating a concern for the goal of sustainable development (Barrow, 1997:227-228).

Social impact assessment is less widely applied in EIA today, because of the lack of distinct separation between EIA and SIA. Thus, in agreement with Barrow (1997:228), they should be seen as opposite ends of the same spectrum (Figure 1.1). Therefore, environmental and social impact assessments overlap, but they are still separate assessments.



Figure 1.1: EIA and SIA as opposite ends of the same spectrum (Barrow, 1997:228)

The social component differs from the biophysical component of the environment in that it can react in the expectation of change. SIA, in comparison with EIA, should affirm that individuals or communities that are involved or affected by projects or developments will also assess the impacts and participate in decisions that will have a possible effect on their future. SIA should also declare that decision makers are aware of their actions before they commit themselves to a project or development (Barrow, 1997:230).

What is meant by the term 'Social Impact Assessment'? Barrow (2010:293) mentions that there is no universal definition of Social Impact Assessment (SIA). Some definitions of SIA include:

- "It refers to the efforts to assess, in advance, the social consequences, whether intended or unintended, positive or negative, that are likely to follow from specific actions, projects, policies and programmes" (Vanclay, 2006:9) ;

- “It’s the process of assessing and managing the consequences of development projects, policies and decisions on people” (Momtaz, 2005:33) ;
- “It’s a means of integrating development and sustainability into core business strategies and can assist in building collaboration between the company and communities and the government” (Esteves & Vanclay, 2009:137).

The objective of SIA is to identify the intended as well as unintended effects of planned interventions in the social environment in order to develop sustainable management plans (Momtaz, 2005:34 and Du Pisani & Sandham, 2006:708) and help project planners in proposed project developments to do so. SIA must be applied early in order to support proactive governance and management. SIA can aid in understanding the cause of conflict, make developers more accountable, help integrate diverse disciplines involved in planning and assist in efforts to achieve sustainable development (Barrow, 2010:293). According to Esteves and Vanclay (2009:140), SIA can be of particular value in understanding broader sustainability issues and in addressing these through the company’s community contribution program. The application of SIA, in practice, is often limited to being a project planning tool. A narrow understanding of the concept ‘social’ should not limit the practice of SIA. Esteves and Vanclay (2009:140) go further by saying that SIA can be better understood as an umbrella that incorporates the evaluation of all impacts on humans and on all the ways in which people and communities interact with their socio-cultural, economic and biophysical surroundings.

Where does SIA originate from? SIA has an international history that goes back a long time when SIA and EIA began alongside each other (Esteves et al., 2012:34). In February 1970, a six page EIS statement was submitted by the Bureau of Land Management in the U.S. Department of the Interior to build an 800 mile Trans-Alaskan pipeline. After the decision was made to build the pipeline, one of the Inuit chiefs of Alaska questioned what the impact would be on his people and culture. According to Burdge (2004a:7), it was as a result of the chief’s questioning that the issue of the impacts of development on human populations came to be discussed. In 1973, the term ‘Social Impact Assessment’ (SIA) was first used referring to the changes in the indigenous Inuit culture due to the pipeline. The International Association for Impact Assessment (IAIA), founded in 1981, provided an

international forum for persons interested in research and the practice of EIA and SIA. By 1983, SIA was adopted by U.S. Federal and state agencies (Burdge, 2004a:7).

According to Burdge (2004a:8), in 1994, the practice of SIA in the U.S. received a major lift with the publication of *Guidelines and Principles for SIA* (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 1994). This was the first interdisciplinary and standardized statement as to what the content of SIA should be. These International guidelines and principles for SIA (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 1994) were published later on by the IAIA in 2003 under the leadership of F. Vanclay and were flexible enough to suit developed as well as developing countries (Burdge, 2004a:9). The publication of these guidelines also became a milestone in the history of SIA because it represented the main procedures and the understanding of SIA. Today, there is a representative amount of research documents on the history of SIA and many of them report about all the apprehensiveness of SIA. In the past, legislations favoured biophysical impact above social impact despite SIA practice. The good news is that after 40 years of SIA history, SIA is a research and practice field, an example, a discourse and a regulation in its own right (Esteves et al., 2012:34-36).

1.2. EIA and SIA in South Africa:

The history of EIA in South Africa dates back to the mid 1970's when EIA was still practiced on a voluntary, non-mandatory basis and guided in part by the IEM series of guideline documents (DEAT, 1992). It was only later, in 1997, that EIA became formalized as a legal requirement with the promulgation of EIA regulations in terms of the Environment Conservation Act (ECA) of 1989 (South-Africa, 1989). After nine years of EIA practice, following the publication of draft regulations for public comment, new EIA regulations were promulgated in 2006 in terms of the National Environmental Management Act (NEMA) of 1998 (South Africa, 1998:8). Further

amendments to the regulations were made and promulgated in 2010 (Sandham et al., 2013:156).

In South Africa, SIA is fully incorporated into EIA in terms of the definition of the environment in NEMA, which identifies human surroundings and how the environment people find themselves in effects their health and well-being (South Africa, 1998:8). This definition of the environment includes people in the environment and integrates them, which in effect, is an indication that SIA is an integral part of EIA. Du Pisani and Sandham (2006:712) state that this integration can also be due to the fact that environmental issues and social development cannot be separated in a country like South Africa. SIA in South Africa today is still frequently used as a method or tool in development projects as an integral part of EIA.

Burdge (2002:3), Du Pisani and Sandham (2006:709) refer to SIA as an 'orphan' of an assessment process which has not been fully adopted by the decision making process. The reasons for this are that there is still very little consensus about what is meant by the term SIA, the relationship between EIA and SIA, when an SIA is required and what it entails and if there is a research body that can assist and direct practitioners when doing an SIA. Burdge (2002:6-7) identified the absence of SIA requirements in the early development stages of SIA and the misplacement of public involvement with SIA as the reasons for why SIA is often referred to as an 'orphan' of assessments. One of the main problems identified by Du Pisani and Sandham (2006:713) is that SIA's should preferably be undertaken by persons trained in a variety of social sciences, but in practice, the majority of EIA consultants in South Africa have a background in natural science, rather than that of social science. Other problems identified are that the size and focus of SIA is too narrow and that there are no clear, conceptual frameworks for SIA in South Africa. Barrow (2010:294) identifies that developers do not adequately understand the potential and scope of SIA as problematic - which is also the case in South Africa.

SIA and EIA have cross-fertilized one another, but in South Africa, SIA has spread slower, is less widely applied and there is less uniformity of approach. The reason for this may be due to a lack of awareness and a shortage of SIA practitioners with

the adequate background in social sciences in South Africa. Esteves et al., (2012:35), claim that since 1973, there has been an increase in the number of SIA's, from one SIA in 1973 to 624 SIA's in 2010 and still growing. The effectiveness of EIA in South Africa has received a limited amount of attention, mainly by means of report quality review since 1998 (Sandham et al., 2013:161), but not much attention has been directed at the effectiveness of SIA, apart from Du Pisani and Sandham's work. With EIA currently in its third era of mandatory practice with an increasing number of SIA's, it is essential that SIA practice be investigated. This is the main focus of this research project.

1.3. Research aim and objectives:

The main aim of this study is to examine the significance and status of Social Impact Assessment (SIA) in the South African context. In order to achieve this goal, the following objectives have been set:

1. To explore the role, value and importance of SIA.
2. To explore the views of SIA practitioners in South Africa.
3. To compare SIA regulations according to ECA and NEMA in theory and in practice.
4. To critically evaluate and describe the quality of a sample of social impact assessments.

1.4. Division of chapters and research methodology:

This dissertation has five chapters. Chapter 1 includes the introduction to the theme as well as the objectives of the dissertation. The second chapter is a literature study which critically discusses the role, value and importance of SIA. The third chapter focuses on the perspectives of practitioners in SIA practice. The methodology used to investigate the practitioners' viewpoints is called 'Action Research'. This includes the use of questionnaires.

Chapter 4 includes a comparison between the ECA and NEMA regulations, focusing on social aspects. This chapter is an empirical study that critically evaluates and describes the quality of a sample of SIA's in South Africa by means of a review of selected SIA reports using an adapted version of the Lee and Colley hierarchical review framework. Finally, a comparison is made between the quality of SIA before and after the implementation of the new EIA regulations in August 2010.

Chapter 5 is the final chapter that summarizes the concluding remarks of this dissertation and includes a list of recommendations for the future of SIA.

1.5. Conclusion:

'Social Impact Assessment' (SIA) is a sub-discipline of 'Environmental Impact Assessment' (EIA) which is an integrated assessment process in South Africa. EIA was formalized for the first time in 1997 in South Africa with the promulgation of ECA which was followed after nine years with the EIA regulations by NEMA. Further amendments were made and promulgated in 2010. The history of SIA is far reaching. Even though SIA has improved over the years, a lack of research, shortage of SIA practitioners and the fixed guidelines of SIA are areas of concern in South Africa. The next chapter will further explore the role, value, importance and main research trends in SIA. This will also include what exactly is expected from SIA and what it entails.

Chapter 2: The role, value and importance of SIA

2.1. Introduction

In the previous chapter, it was stated, that in South Africa, there is very limited research in the field of SIA and because of this, there is a necessity for future research in SIA. Therefore, the main goal of this dissertation is to examine the significance and status of SIA in South Africa. To achieve this goal, it is this chapter's aim to outline and describe the role, value and importance of SIA.

In 1992, the United Nations Conference on Environment and Development (UNCED) took place in Rio de Janeiro, Brazil, where stakeholders participated in this event to discuss global problems. It was the aim of this conference to relieve the global environmental system by introducing the paradigm of sustainable development. According to Anon (2011a:1), this emphasized that economic and social progress depends on the preservation of the natural resource base and the effective use of measures to prevent environmental degradation. At this time in, 108 governments adopted three major statements which were intended to change the traditional approach to development. These three statements are the following (Anon, 1997:2):

- Agenda 21;
- The Rio Declaration on Environment and Development; and
- The Statement of Forest Principles.

The Rio Declaration consists of 27 principles. Principle 17 made provision for EIAs, which requires EIAs to be used as a national decision making instrument when proposed activities can be identified as having an anticipated adverse effect on the environment (Anon, 2011b:2). The one important principle that stood out at this event and that ensured an international future for SIA was Principle 1 that stated: "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature" (Anon, 2011b:1). Since the Earth Summit in Rio de Janeiro, environmental awareness has increased

worldwide and, because of this conference, people are now considered to be an integral part of the environment worldwide. South Africa is no exception (Aucamp, 2003:1).

The Rio Declaration of 1992 coincides with South Africa's new democratic constitutional order. On 27 April 1994, South Africa became a democratic country, which not only resulted in a vital change in the political landscape, but also introduced a new constitutional legal order, embodied in the adoption of a final constitution in December 1996. According to Abrahams (2008:1), the constitution included a Bill of Rights for the first time and South Africa was ready to embrace the Rio principles. The Bill of Rights attracted the greatest interest and has, and continues to have, the greatest impact on the lives of South Africans. The Constitution of the Republic of South Africa (Act no 108 of 1996) included environmental rights for the first time in 1996 where it stated that:

“Everyone has the right—

- a) To an environment that is not harmful to their health and well-being; and
 - b) To have the environment protected...through reasonable legislative and other measures that—
 - i) Prevent pollution
 - ii) Promote conservation, and
 - iii) Secure ecologically, sustainable development and the use of natural resources while promoting sustainable economic and social development”
- (South Africa, 1996: 1251–1253).

South Africa's awareness of SIA has grown over the years as practitioners have learnt from other countries, through best practice, and mainly because of South Africa's Bill of Rights and the implementation of the country's own EIA legislation. SIA still has not received the same status in national legislation in comparison with EIA requirements (Burdge, 2004b:11). In 2006, a new set of EIA regulations was promulgated in terms of the National Environmental Management Act (NEMA) of 1998, which will be discussed in further detail in Chapter 4. Even though SIA in

South Africa is an established field in terms of regulations, there still is not a fixed set of guidelines that is separate to the formal EIA regulations and the SIA guidelines for the Western Cape (Barbour, 2007) to outline and describe exactly what is expected from an SIA, how the process works and what it consist of. The following sections describe the origin and nature of SIA and explores SIA in South Africa.

2.2. The origin and nature of SIA

Vanclay (2003:1) stated that the definitions of SIA were originally only linked to a regulatory context, but Social Impact Assessment (SIA), according to Esteves et al., (2012:34), is the assessment that includes the management process of social aspects that are associated with planned projects and developments. The main goal of SIA is to bring about a more sustainable, balanced human and biophysical environment (Olga, 2007:14). SIA is a technique that can be used as a stand-alone function or to assist an EIA in predicting social impacts—depending on a country's national legislation. According to IAIA (2003:2), important features in understanding SIA are the following:

- The main goal of SIA is to bring about a more sustainable and equitable ecological, socio-cultural and economical environment and to promote community development and empowerment, capacity building, as well as developing social networks and trust.
- The focus of concern in SIA is a proactive position to development and better development outcomes instead of negative, unintended outcomes.
- SIA is a methodology that can be applied to a wide range of planned interventions.
- SIA needs to inform the design and operation of planned interventions because it contributes to the process of adaptive management.
- SIA utilizes public participation processes and builds on a community's local knowledge.
- SIA, in practice, accepts that social, economic and biophysical impacts are interconnected.

- SIA, in theory and in practice, should be a process of reflection and evaluation.

In 1997, when EIA and SIA practice were still in their early development stages, Olsen and Merwin (1977:45) identified two forms of SIA:

- *Impact research*: This form of SIA examines proposed projects in order to identify and measure the likely impacts that a project could have on people; and
- *Impact forecast*: This form of SIA predicts the consequences that will most likely result from a proposed project.

Today, after more than 40 years of SIA practice, these two forms have been combined and contribute to the definition of SIA. The objective of a Social Impact Assessment (SIA) is thus to ensure that the benefits of developments are maximized and their negative impacts minimized, especially those that are borne by communities.

Why is SIA important and what is the role thereof? SIA, according to Burdge (2004c:40), developed along with EIA during the 1970's as a planning tool. The reason for this was to identify the social advantages and disadvantages of proposed developments in advance, in order to mitigate or eliminate the identified impacts. SIA, therefore, is a tool that provides information to stakeholders and communicates about social factors that need to be considered in the decision-making process. SIA also provides a mechanism to incorporate values and local knowledge into decisions that need to be made and helps the decision-maker to identify the most beneficial course of action (The Interorganizational Committee on Principles and Guidelines for SIA, 2004:83). Another reason why SIA is important is that it may assist in increasing public awareness and promote public debate (Barrow, 1997:232).

Research in SIA provides a direction for understanding the process and guidance in the management of social change in advance of implementing a proposed action (Burdge & Vanclay, 2004:283). In the years before 1994, with the publication of International Guidelines and Principles for SIA, most SIA's were conducted on an *ad-*

hoc basis with no attempt at grounding the work on a theoretical foundation or methodology that could be replicated by others. There is a lack of available guidance and research in South Africa. Much research on SIA has been done internationally, where more guidance is available to practitioners, e.g. the International Guidelines and Principles for SIA and, in order to determine the value of SIA, the core values of SIA should be considered, as suggested by IAIA (2003:5). Just like the core values, the SIA fundamental principles and guidelines, SIA variables, and the SIA project cycle and process should be considered for effective assessments, which will be discussed in this sequence later on in the chapter. The core values of SIA refer to the fundamental statements of belief that have been accepted and strongly upheld. The six values in Table 2.1 set the foundation on which SIA is built upon.

Table 2.1: Core values of SIA (IAIA, 2003:5)

1.	Fundamental human rights are equally shared across cultures and gender.
2.	Laws protect those fundamental human rights and ensure that they are equal, fair and available to everyone.
3.	People have the right to live and work in a healthy environment that promotes good quality of life.
4.	The environment's social dimensions are important aspects of people's health and quality of life.
5.	People and communities have the right to be involved in planned interventions that will have a likely effect on their lives.
6.	People's local knowledge and experience can be of great value to enhance planned interventions.

2.2.1. SIA guiding tools:

With the basis of SIA being set according to the core values, practitioners need guiding tools in the SIA process in order to stay true to the values mentioned in Table 2.1. In this case, the guiding tools are the fundamental principles, guidelines and variables of SIA. Much attention is currently being directed by social practitioners and researchers toward the process of SIA. Burdge and Vanclay (2004:283) state that SIA has always been part of a project planning and policy evaluation and also a part of EIA. SIA practitioners and researchers are looking to SIA to assist in the process of the evaluation of alternatives and to assist in

managing the process of social change. Practitioners, therefore, rely on the principles and guidelines of SIA to conduct an assessment and to truly understand the SIA process. SIA principles, according to IAIA (2003:5), can be regarded as general statements of a common understanding or a statement of an indication via IAIA, i.e. an indication of what needs to be done. A guideline, in comparison with a principle, is a course of action, i.e. how a specific action should be carried out. Table 2.2 indicates the principles and guidelines of SIA that should be considered by SIA practitioners before the SIA process is conducted.

Table 2.2: Fundamental principles and guidelines of SIA (IAIA, 2003:5–6)

Fundamental Principles	Guidelines
All actions should be reinforced by respect for human rights.	SIA should focus on social, sustainable development.
Equity and democratization should be promoted by the drivers of development planning.	Local community's democratic processes need to be strengthened by social and human capital.
Social and human dimensions should be included in the broad definition of the environment.	Development processes that violate human rights should not be accepted.
Proposed developments should be approved by community members that are affected by the development.	Potential mitigation measures for both social and environmental impacts need to be considered.
Decisions should not solely be made upon experts' views.	The knowledge and experience of cultures need to be incorporated into any assessment.
Communities' perspectives should be included in decisions.	Violence, harassment, force and intimidation need to be avoided in development planning.
The main focus of proposed developments should be on positive outcomes and not negative outcomes.	Proposed developments can be modified to enhance positive impacts and reduce negative impacts.
Decision makers need to be aware of the consequences of their decisions because they will be held accountable.	Equity should be the fundamental element in development planning and in impact assessment.
Decision makers will be held accountable for their actions.	Social impacts and environmental impacts can be predicted before a development starts.
Decisions should be made fairly.	Beneficiaries need to be investigated.
Diversity between cultures should be recognized and valued.	SIA should be an integral part of the development process.
	Alternatives should be considered in planned interventions.

Developing these principles and guidelines for international purposes was difficult, because each country's cultural, social, economic and regulatory context differs (IAIA, 2003:1). These principles and guidelines proclaim a new understanding of what SIA is. The purpose of these principles and guidelines are to be used by SIA practitioners around the world as a template or as a basis on which to develop their own national principles and guidelines that are suited to their country's needs.

After the principles and guidelines, the SIA variables in Table 2.3 are a tool for further guidance that practitioners should use to guide the SIA process and to conduct effective SIAs. Social Impact Assessment (SIA) variables indicate changes that are measurable in human populations or communities and social relationships that are the result of a proposed development project. According to the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994:9–11), the SIA variables are for illustrative purposes only, and should be used by social practitioners as a starting point to obtain data from proposed interventions. Table 2.3 lists the five SIA variables suggested by the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994:8–10).

Table 2.3: SIA variables (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 1994:8–10)

SIA Variables	Description
Population characteristics or impacts	The changes in population, relocation of communities and diversity in race, age, gender etc. should be identified.
Communities and institutional structures	This variable refers to organizational structures, history, employments, stakeholders and interest groups and indicates how they relate to each other.
Communities in transition	Interested and affected parties (I and AP's), and leaders in the community should be identified and also the distribution of authority.
Individual and family level impacts	Factors that affect the daily living-patters of communities, cause changes in leisure opportunities, public health, religion and disrupt social networks must be indicated.
Community infrastructure needs	Changes in community infrastructure like land disposal and acquisition, and effects on cultural, sacred, historical and archaeological resources.

Practitioners should be encouraged to use the above mentioned principles, guidelines and variables to assist them in guiding them through the SIA process. To be able to effectively assess anticipated impacts, SIA practitioners should understand the SIA process in order to use the guiding tools. The SIA project cycle and process contain the steps in which these guiding tools should be used in order to conduct an SIA.

2.2.2. SIA project cycle and process

Table 2.4 below is an example of the models of project cycle in EIA's and SIA's. The first column in the table below illustrates an example of the project cycle in EIA and the second column is an example of the project cycle in SIA. A clear difference can be seen between the EIA process and SIA process, i.e. the SIA process is continuous and starts long before the actual development is conducted.

Table 2.4: Models of project cycles in environmental and social impact assessment (Becker, 2003:131)

EIA project cycle	SIA project cycle
<ol style="list-style-type: none"> 1. Selection of site and environmental screening and scoping. 2. Detailed assessment of significant impacts, identification of mitigation needs, input to cost-benefit the analysis. 3. Detailed design of mitigation measures. 4. Implementation of mitigation measures. 5. Monitoring, post-evaluation and lessons for future projects. 	<ol style="list-style-type: none"> 1. Problem analysis and communication strategy. 2. System analysis. 3. Baseline analysis. 4. Trend analysis and design monitoring. 5. Project design. 6. Scenario design. 7. Design of strategies. 8. Assessment of impacts. 9. Ranking of strategies. 10. Mitigation of negative impacts. 11. Reporting. 12. Stimulating implementation. 13. Decision making. 14. Implementation of policy. 15. Monitoring. 16. Impact management. 17. Auditing and ex-post evaluation.

Previous models of SIA's key problem showed that they were all based on projects. According to Vanclay (2005:3), the bottom line of an effective SIA model is that it is a process that can repeat itself and is fully participatory. The ideal form of SIA would be this dynamic model in Table 2.4, but it is different to the way SIA is normally considered. For SIA to be more effective in its mission, it needs to be reformulated into a process that guides development. Vanclay (2005:4) states that if an SIA is to be a guiding process, then the "quality" of SIA should be judged by the effectiveness of its process. According to Aucamp (2003:28), SIA is a process of change management and should therefore not be viewed as a once-off assessment because it will reduce its value. For this reason, the SIA process, according to the Interorganizational Committee on Guidelines and Principles for Social Impact

Assessment (1994:25–32), contains 10 steps that are logically consequential, but they are designed in such a way that it allows the steps to often overlap in practice. The suggested SIA process is given below.

1. Public involvement—An effective public involvement plan needs to be developed to include communities that potentially can be affected through a development.
2. Identification of alternatives—Alternatives that are reasonable should be described together with the proposed action.
3. Baseline conditions—The relevant human environment or area that might be affected and baseline conditions need to be described.
4. Scoping—All probable social impacts need to be identified.
5. Projection of estimated effects—The probable impacts identified in the previous step need to be investigated.
6. Predicting responses to impacts—The identified social impacts significance need to be determined.
7. Indirect and cumulative impacts—Consecutive and cumulative impacts need to be estimated.
8. Changes in alternatives—New or changed alternatives should be recommended and their consequences should be projected.
9. Mitigation—A mitigation plan should be developed.
10. Monitoring—A monitoring program should be developed (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 2004:103–111).

Sloutweg et al., (2003:56) are of the opinion that SIA and EIA can become important project planning instruments if applied in the early stages of the decision-making process. If SIA and EIA are properly applied in a project, it may lead to a significant improvement in the quality of project proposals, and it will lead to important costs savings on project implementation because of reduced negative impacts and better acceptance of the project objectives. SIA should be an integrated, continuous process and should not be a point in time assessment of the potentially negative social impacts of planned interventions (Vanclay, 2005:6). Therefore, for SIA to reach its mission of being a process of navigation in the course of project

development and in assisting communities to choose between project developments options, SIA must be a socially informed process of adaptive management. This view of SIA, therefore, supports the SIA model in Table 2.4. According to Barbour (2007:19), one of the key challenges SIA faces is not the physical disruption of human populations, but rather for these populations to understand the meanings and social significance of changes due to project development. Esteves et al., (2012:34) state that SIA is also conceived as a methodological framework in addition to being a research field. There are significantly different guidelines and research in the history of SIA, and most respond with unease to SIA (Esteves et al, 2012:35). The SIA guidelines and principles essentially prescribe best practice in SIA and there is a wider purpose for SIA. The guidelines, principles and variables will therefore assist practitioners so that the SIA process could be effectively conducted. SIA, therefore, needs to become a mechanism that could be effective in the absence of regulation, but also needs to be able to deal with multiple regulations and enhance the outcomes of development projects.

All of these requirements are relevant to SIA in South Africa—the theme of Section 2.3.

2.3. SIA in South Africa

Wood (1999:52–59) describes the early history of Environmental Impact Assessment (EIA) in South Africa, which is provided in the previous chapter where it also explained that, because of NEMA's definition of the environment, SIA is an integral part of EIA. In South Africa, the EIA process started on a non-mandatory basis in the 1970's when EIA's were practiced voluntarily. It only became mandatory in 1997 with the promulgation of the EIA regulations in terms of the Environment Conservation Act (ECA) of 1989. These ECA regulations had been effective for just over a year when the first environmental management legislation was promulgated in 1998 in the form of the National Environmental Management Act (NEMA). However, EIA remained under ECA until the new EIA regulations were promulgated in terms of

NEMA in 2006 which, thereby, initiated the second era of mandatory EIA (Kidd & Retief, 2009:971–1047; Sandham et al., 2013:2).

According to Bezuidenhout (2009:6), Social Impact Assessment and Environmental Impact Assessment are two different processes which focus on two different environments at a particular location which run parallel to each other. To understand the role of SIA, the term 'social impact' should be clearly defined. In the previous chapter, it was noted that the word 'social' has a wide range of meaning and, according to Du Pisani (2005:20), the term 'social' is often used in a rather fuzzy way. Du Pisani also warned that the inclusion of SIA as an integral part of an EIA may lead to a superficial treatment of the socio-economic aspects of a project.

According to Aucamp (2003:3), SIA is not a separate assessment to EIA, but can be done for any plan, project or policy that could have an impact on the human environment. This can vary between individuals and communities. In a developing country like South Africa, SIA should be fully incorporated into the project life cycle in order to reach its full potential and be optimally effective (Aucamp, 2003:4). According to Barbour (2007:21), the improvement of social well-being should be an issue assessed in SIA in South Africa, specifically focusing on job creation, poverty reduction and development objectives. Barbour also stated that the SIA process within South Africa and developing world should include a commitment to:

1. Social sustainability and principles of sustainable development;
2. Vulnerable groups;
3. Basic needs and services should be met;
4. Livelihood strategies;
5. Equity and fairness;
6. Social justice;
7. Openness and participation; and
8. Accountability.

This commitment corresponds well with the principles and guidelines of SIA given earlier in this chapter. Chapter 3 and 4 will further explore SIA practice in South Africa which will contribute to the aim of this dissertation.

2.4. Conclusion

The aim of this chapter was to outline and describe the role, value and importance of SIA. The origin and nature of SIA was investigated locally and internationally. SIA's core values set the basis on which SIA principles and guidelines were developed. These guidelines and principles differ from country to country as the social and cultural contexts differ and, just like the principles and guidelines, SIA variables are also just a template for practitioners. Social practitioners should adapt these lists of principles, guidelines and variables to their country's or project's needs. In order to use all of these guiding principles in SIA, the process of SIA should be understood. SIA in South Africa is an integral part of EIA because of the very wide definition of the environment in the Constitution and in NEMA. South Africa also lacks a formal set of guidelines for SIA. SIA in South Africa, therefore, needs to become a mechanism that can be used effectively in practice even with the absence of regulations. To further explore the significance and the status of SIA in South Africa, the perspectives of SIA practitioners in SIA will be investigated in Chapter 3 and the quality of a sample of SIAR's will be investigated in Chapter 4.

Chapter 3: Practitioner perspectives on the practice of Social Impact Assessment (SIA) in South Africa

3.1. Introduction

Chapter 2 states that SIA in South Africa is an integral part of EIA because of NEMA's inclusion of humans in the environment. Chapter 2 also indicates that there is a lack of a formal set of guidelines for SIA in South Africa. It was, therefore, the aim of Chapter 2 to outline and describe the role, value and importance of SIA. This objective was achieved by exploring the guidelines, principles, values and variables of SIA that should be adopted by SIA practitioners and adapted according to the country's needs. Chapter 3 aims to explore the perspectives of practitioners on certain aspects of Social Impact Assessments. To reach this objective, questionnaires were answered by a group of practitioners. In Section 3.2, the methodology of the compilation of the questionnaire and the results that were obtained are discussed. The 'Action Research' approach was adopted as a method to gather and analyze the data.

In the Southern African context, the nature of socio-political change is such that the issue of the impact of projects on communities has become a sensitive one. In South Africa there is very limited research on the perspectives of SIA practitioners, therefore the perceptions and opinions of practitioners in the field of SIA need to be investigated. The experiences of SIA practitioners were discussed by Bews (2003) and other researchers (Morgan et al., 2012 and Morrison-Saunders & Bailey, 2009) discussed only what is expected from SIA practitioners in theory, but their perspectives and opinions on the state of SIA practice in South Africa have not been investigated, hence the aim of this chapter.

According to Morgan et al., (2012:11), interprofessionalism refers to people with distinct professional backgrounds that collaborate to execute activities which requires a specialist's input. Social Impact Assessments (SIA's) can also be viewed as interprofessionalism, because they involve practitioners within a disciplinary field

and with different professional backgrounds that are all working toward a common end result. Morgan et al., (2012:11) states that there should be a shared view among practitioners about what an acceptable impact assessment is made of. This, therefore, sets the basic standard which practitioners should aspire to and contributes to the aim of this chapter—to further explore practitioners' perspectives on the practice of Social Impact Assessment in South Africa.

3.2. Methodology: A Qualitative Research Approach

Qualitative data research (Anon, 2006:1) aims to achieve further research and theories, rather than to verify them. Qualitative data research mainly relies on converting information from observations, reports and recordings into data and then into the written word. A qualitative research study usually involves less people or a smaller sample in comparison to a quantitative research study (Anon, 2006:1). There are various approaches when it comes to analyzing qualitative data, but 'Action Research' is regarded as the most appropriate for this study.

Action Research has a cyclic or spiral process (see Figure 3.1) because it rotates between action and critical reflection (Anon, 2006:1). In later cycles, it continuously refines the method, data and interpretation in the light of the understanding that was developed in the earlier cycles. Action Research (sometimes referred to as participatory action research), therefore, represents a feasible, practical strategy for social science studies that require an investigation that is systematic, organized and reflective, and is also one of the minor research approaches that embraces principles of participation, reflection, empowerment and the emancipation of groups of people that are interested in improving their current situation in their daily lives (Berg, 2004: 195-196).

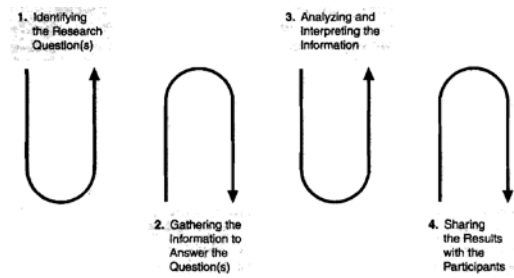


Figure 3.1: Action Research Spiral Process (Berg, 2004:198)

3.2.1. Applying Qualitative Research approach to the views of SIA practitioners

Action Research involves four main stages, as explained below (Berg, 2004:197–202). At each stage, the theoretical information, as well as the application of this SIA research into each of these stages, is given.

Stage 1—Identifying the research questions:

In the first stage, the researcher identifies a problem and brings it to the attention of stakeholders. This means that the researcher formulates research questions and, as the questions are created, assists in formulating questions that are answerable. In this step, it depends on the size of the project, but it also has to do with the availability of relevant information for the researcher (Berg, 2004:197–202).

In this SIA study, a questionnaire was formulated to investigate the perspectives of a group of Social Impact Assessment (SIA) practitioners. The questionnaire was compiled from questions that arose from a literature study. The questionnaire was compiled in such a manner that it could also be seen as an indirect interview that also fits in with the Action Research approach. The questionnaire started off with four preliminary questions in order to establish the practitioners' backgrounds and experience in the social field, followed by the actual survey questions which consisted of 15 long and short questions. After the initial compilation of the

questionnaire, a pilot study was conducted to test the content and sight validity of the questionnaire. This involved two senior lecturers, two fellow masters students and two statisticians. After the pilot study, the questions were adapted accordingly and recommendations from the participants in the pilot study were incorporated into the final draft of the questionnaire. The final questionnaire, as it was sent out to the practitioners, is included in Appendix A and an abbreviated version is given below in Table 3.1.

Table 3.1: Abbreviated version of the SIA questionnaire

<u>Questionnaire</u>
<p><u>Preliminary questions</u></p> <ul style="list-style-type: none"> i) Level degree/ Academic background= Degree/ Honours degree/ Masters degree/ Doctors degree ii) Academic field= Natural Science/ Social Science/ Law/ Other iii) Work experience= Government/ Academic/ Private Consultancy/ Other iv) Time in practice= 1 year/ 1–5 years/ 5–10 years/ More than 10 years <p><u>Survey questions</u></p> <ol style="list-style-type: none"> 1. As a specialist in the field, what does SIA in practice mean to you? 2. How does SIA in practice differ from in theory? 3. Previous studies have found that public participation is often confused with SIA. Do you= A- Strongly agree/ B-Slightly agree/ C-Slightly agree/ D-Strongly disagree 4. When looking at the new EIA regulations of 2010 and comparing them to the previous requirements for SIA, how do the new regulations differ from the previous? 5. There is still room for improvement= A-Strongly agree/ B-Slightly agree/ C-Slightly disagree/ D-Strongly disagree 6. To what extent is SIA in practice an important assessment tool? = A-Very important/ B-Moderately important/ C-Important/ D-Unimportant/ E-Moderately unimportant/ F-Useless 7. Indicate to what extent SIA in practice is effective? = A-Very effective/ B-Moderately effective/ C-Slightly effective/ D-Not effective 8. What impact does the effectiveness have on the value of SIA? = A-Major impact/ B-Moderate impact/ C-Little impact/ D-No impact 9. What do you feel are the most important shortcomings of an SIA? 10. Currently an SIA is an integrated part of an EIA. It should rather be a separate assessment= A-Strongly agree/ B-Slightly agree/ C-Slightly disagree/ D-Strongly disagree 11. It appears that there are a lot of problems surrounding SIA. One of these problems is that there are not enough specialists in the social field = A-Strongly agree/ B-Slightly agree/ C-Slightly disagree/ D-Strongly disagree 12. To what extent can someone that is more specialised in another field truly understand and connect with social problems and their impacts? = A-Very well/ B-Moderately well/ C-Well/ D-Poorly/ E-Very poorly/ F-Useless 13. What effect does the above have on the outcome of an SIA? = A-Major effect/ Moderate effect/ C-Little effect/ D-No effect 14. From a specialist's point of view, what is the goal of SIA in South Africa? 15. How do you see the way forward for SIA in South Africa?

Stage 2—Gathering the information to answer the questions:

During the second phase of 'Action Research', any information the researcher gathers can potentially be used to answer the questions that have been identified. The way a researcher goes about gathering the data depends on the method a researcher chooses (Berg, 2004:197–202).

During this part of the SIA study, the questionnaires were distributed to the SIA practitioner community throughout South Africa. Initially, it was attempted to get responses from SIA specialists only and therefore the questionnaires were sent to SIA specialists chosen for their knowledge of the history and current issues of SIA in South Africa. The response was poor, with only five questionnaires that were returned. For this reason the survey was expanded to include some EIA practitioners with knowledge of SIA, after which another six responses were received. Of approximately 30 questionnaires that were sent out, 11 were returned and therefore constitute an availability sample. Although this sample cannot be regarded as statistically representative, it can be regarded, in terms of 'replication logic', as providing a reliable and useful indication of the perspectives of the SIA and EIA practitioner community regarding SIA practice in South Africa.

Stage 3—Analyzing and interpreting the information:

At this stage of the research process, the researcher should focus on analyzing and interpreting the information that has been gathered. From the perspective of Action Research, 'data analysis' is the examination of data in relation to potential resolutions to the questions. The analysis also depends on the method that was used to gather the data (Berg, 2004:197-202).

The transformation of data into research results is called 'analysis' (Le Compte, 2010:146). Le Compte also compares analysis with a puzzle that is being taken apart and reassembled. Ensuring that the qualitative data that is collected is as unbiased as possible is an important step at this stage. To ensure that the data is unbiased, the researcher should also be informed of the effects of both 'tacit' and

'formative' theory. According to Le Compte (2010:146), these are the two theories of selectivity. The tacit and formative theories create something equivalent to a filter that admits relevant data and screens out what is not interesting, even if it could have been useful.

The procedures for using interview data and the ethnographic data of Berg (2004:200) were used in the analysis. Berg (2004:200) explains that the responses to questions (from interviews) and statements from field notes (ethnography) should be recorded and then placed in summary charts or on tally sheets. In most cases, analysis involves categories or themes and the data is then sorted into piles that share the same broader characteristics. After this, a summary that captures the essence of each broader categorical characteristic can be written. This material will then be used to create a descriptive report (Berg, 2004:200).

Validity is another component that contributed to the analysis. Validity refers to whether the research findings are meaningful, accurate and reasonable. According to Le Compte (2010:152), meaningful, accurate and reasonable findings are called the "goodness" of analyzed data because results will lack validity, credibility or utility if the cultural whole, presented by the researcher, makes absolutely no sense to the people for whom it is intended. An analysis that has been done thoroughly, based on articulated theories and is responsive to research questions can be a good analysis but, to create good research findings, it is necessary to ensure that the results from the analysis are valid and meaningful to the people for whom the research is intended.

At this stage of the SIA study, the completed questionnaires and the data were compiled into one document which is referred to as a tally sheet. Firstly, the researcher has ensured that the information from the tally sheets is relevant to the questions and that the information that is given is valid and can be used for analysis. The keywords for the analysis' process were identified in the questions and in the tally sheets. These keywords assisted in recognizing the four themes (see Section 3.3). It is important to be aware that no themes were identified before the questionnaires were sent out, but the themes emerged only after the data was received and compiled into a tally sheet. Therefore, the questions are not discussed

in hierarchical order, but under each theme to which they were allocated, depending on the answers to the questions—as in Table 3.2 in Section 3.3 for the allocation of the questions to each theme. The raw data (tally sheets) from the questionnaires is included in Appendix B.

Stage 4—Sharing the results with participants:

This is one of the most important steps in any research. One of the Action Research operational principles is to inform and empower people to work collectively in order to produce a beneficial change. The results of this research will be shared with all the practitioners that participated in this SIA study.

The results that were retrieved from the questionnaires are described below. All the relevant responses from the questionnaire were used for the analysis. In Section 3.3, the themes and the questions are discussed in more detail.

3.3. Results and Analysis

The first results that will be discussed are the preliminary questions i-iv.

3.3.1. Participants' Background (Preliminary questions: i-iv):

This part of the analysis involves the background of the practitioners that participated in this questionnaire. In the questionnaire, this sub-section consists of four questions. The raw data of these four questions can be viewed in Appendix B but, for the purpose of data analysis, the percentages of each were determined and can be viewed in Figure 3.2 below. In the top left corner of Figure 3.2, it can be seen that six of the 11 participants (55%), who are referred to as practitioners from this point forward, have a Masters degree, while three of the 11 practitioners (27%) have obtained a doctorate. In the top right corner of this graph, seven of 11 practitioners

(64%) come from a social science background, whereas only three of the 11 (27%) come from a natural science background. The bottom two graphs of Figure 3.2 indicate that six of 11 practitioners (67%) practice as private consultants while nine of 11 (82%) has more than 10 years experience in the social sciences field.

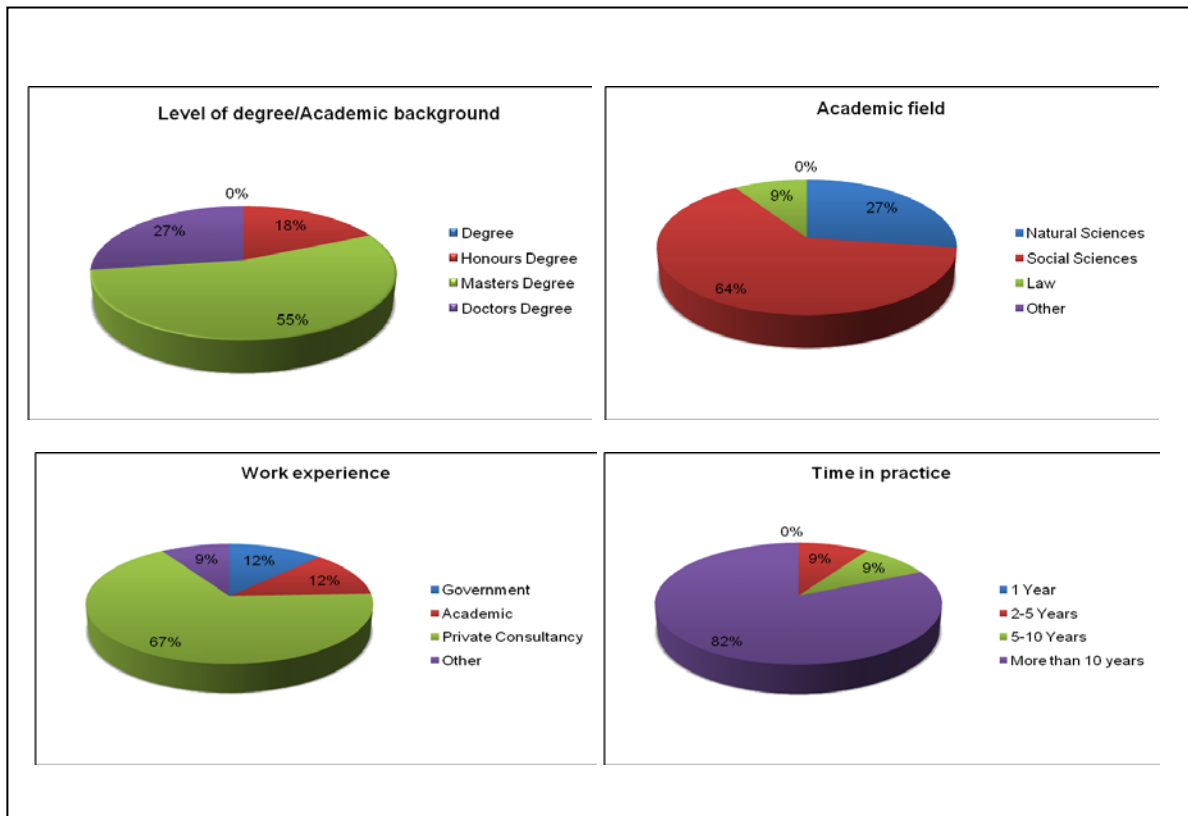


Figure 3.2: Practitioners' Background (Preliminary Questions i-iv)

After the preliminary questions, the actual survey questions followed. The results in this part of the analysis are presented in a questionnaire and are discussed according to different themes that were recognized. Keywords in the questions and in the answers that were retrieved from the questionnaires were recognized to form these themes; therefore, each question is allocated to a theme (see Section 3.2-stage 3). This particular way of analyzing data is based on the methodology previously discussed in Section 3.2. A better analysis of the data can be given and discussed with these themes as given below in Table 3.2. Table 3.2 lists all the survey questions of the questionnaire and a color is allocated to each theme. This indicated which questions belong to which theme.

Table 3.2: Allocation of survey questions to themes

Questionnaire Questions
Q1: As a specialist in the field of SIA, what does SIA in practice mean to you?
Q2: How does SIA in practice differ from in theory?
Q3: Previous studies have found that public participation is often confused with SIA.
Q4: When looking at the new EIA regulations of 2010 and comparing it to the previous requirements for SIA, how do the new regulations differ from the previous regulations?
Q5: There is still room for improvement.
Q6: To what extent is SIA in practice an important assessment tool?
Q7: Indicate to what extent SIA is effective in practice?
Q8: What impact does the effectiveness of SIA in practice have on the value of SIA?
Q9: What do you feel are the most important shortcomings of an SIA?
Q10: SIA is currently an integrated part of an EIA. It should rather be a separate assessment.
Q11: It appears that there are a lot of problems surrounding SIA. One of these problems is that there are not enough specialists in the social field.
Q12: To what extent can someone that is more specialized in another field truly understand and connect with social impacts and problems?
Q13: What effect does the above have on the outcome of an SIA?
Q14: From a specialist's point of view, what is the goal of SIA in South Africa?
Q15: How do you see the way forward for SIA in South Africa?

Color Keys of Themes
Theme 1: SIA in practice
Theme 2: Problems in SIA
Theme 3: Effectiveness of SIA
Theme 4: The future of SIA

The rest of the survey's results will be given under each of these themes and the results are discussed in Section 3.5.

3.3.2. Theme 1—SIA in Practice (Question 1 and 2):

'SIA in Practice' is the first of four themes recognized and has emerged mainly from the data collected in Questions 1 and 2. The practitioners were initially asked what SIA in practice means to them. A wide variety of answers was received from the practitioners. SIA in practice, to this group of practitioners, is the identification and management of social impacts. SIA is an "umbrella assessment" where you are able to predict the likely impacts of a proposed project on a community and mitigate the negative impacts that affect the people and the enhancement of benefits. SIA in

practice, from a practitioner’s perspective, is a “robust addition to the EIA process”, and a tool where you “look out” for the interests of people. Therefore, all practitioners are in agreement on the meaning of the term ‘Social Impact Assessment’ and that it is a tool used by those who have people’s best interest at heart. The second half of this theme emerged from Question 2. This list includes all the relevant responses from the practitioners, which they listed on how they perceived SIA in reality (practice) to differ from the ideal (theory), as listed in Table 3.3.

Table 3.3: SIA Ideal vs SIA Reality (Theme 1–Question 2)

<p><u>Ideal:</u></p> <ul style="list-style-type: none"> - SIA ideally presumes that you, as an SIA practitioner, have a long time to do assessments. - SIA “changes quickly”, therefore, as a specialist, one needs to be “flexible and creative”. - “SIA is supposed to be a tool for enhancing social sustainability and the benefits of projects.”
<p><u>Reality:</u></p> <ul style="list-style-type: none"> - In reality, SIA practitioners have a short time to do the assessments. - “SIA is one of the tools of the EIA regulations.” - In practice, there are “problems between law and implementation”. The department who should monitor the validity of SIA before awarding a license, is in effect, the one seeking the license. - There are in practice, “time and budget constraints”. - Limited availability of important information makes it difficult to accurately predict impacts. - In practice one needs to “apply theory in a manner that allows”. - SIA is “only a box-ticking exercise that is being undertaken as part of the environmental authorization process”. - “Management measures are not always easy to implement”. - “SIA is superficial” and “lip-service” while there actually is “little real interaction”. - “If social impacts are considered it is often done by EAP’s with natural science background that lacks an understanding of social issues”.

The above list includes some problems in SIA practice which leads us to the next theme; ‘Problems in SIA’ which emerged from the practitioners answers.

3.3.3. Theme 2—Problems in SIA (Questions 3, 4, 9, 10, 11, 12 and 13):

Problems in SIA, the second recognized theme, mainly evolve around the problems that the practitioners perceive in SIA in South Africa. One of the main problems that emerged from literature research was that public participation is often confused with

SIA and this is the issue raised in Question 3. In Figure 3.3 below it can be seen that five of the practitioners (45.45%) strongly agree with this statement and six (54.54%) slightly agree, thus all practitioners are broadly in agreement about this confusion. From the practitioners' perspective, this confusion causes problems in the EIA process, because the information from the public participation process may be used by the project proponent in order to produce an SIA report. According to the practitioners, this mistaken view is sometimes found amongst clients who have limited knowledge and experience of SIA. People need to be aware of both processes and their requirements, and if the SIA process is managed and done thoroughly, this mistaken view would occur much less.

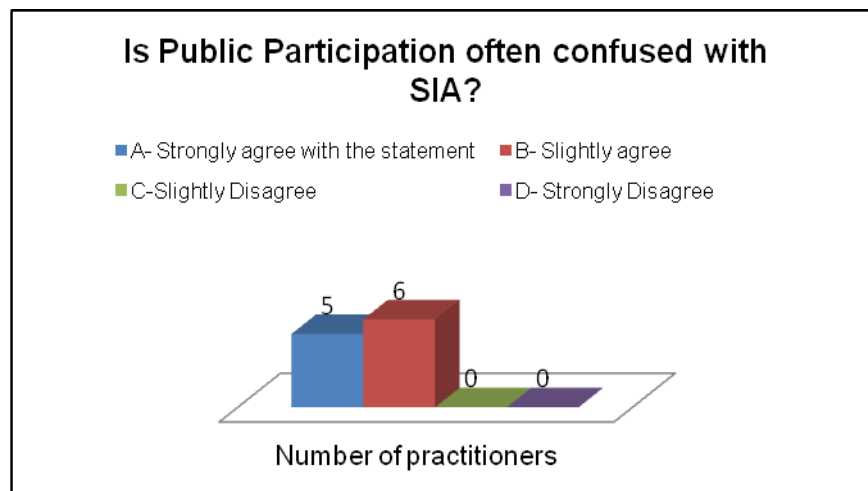


Figure 3.3: Public Participation vs SIA? (Theme 2- Question 3)

In Question 4, practitioners were asked how the SIA requirements in the 2012 NEMA regulations differed from the previous ECA regulations. This question in particular elicited different answers and reactions from the practitioners. On the one hand the practitioners responded that SIA is not required by law and therefore they aren't aware that there are requirements for SIA. On the other hand the practitioners responded that the new regulations do not differ from the previous ones and the requirements concerning SIA might be tightened up a little, but because of the fact that this is not done thoroughly enough, it is still allowing for incompetence in this field. Some of the changes that the participants did point out were:

- That the "contents of reports for specialist studies is defined";

- There is more “emphasis on money to be spent and race and gender aspects”;
- “Participation requirements have changed slightly and I & AP’s are offered more opportunities to comment on proposed developments”; and
- “Additional requirements for assessing social impacts have, however, not been included in the 2010 regulations”.

The most important shortcomings of an SIA from a practitioner’s perspective were asked in Question 9 and are listed below:

- There is too much focus on the “identification of impacts and too little on the effective management of impacts”;
- SIA is “generally understood as a contextual requirement, but not perceived as a major tool that can “make or break” a project”;
- “Lack of training from an undergraduate level, so that a clear career path is available at different levels in practice”;
- “Insufficient follow-ups”;
- “The actual enforcement of the implementation of identified mitigation measures”;
- “A lack of method” and “insufficient thought and insight given to the “significance” in terms of social impacts”; and
- The “value” and “extent to which SIA informs decision-making in practice”.

A further problem identified by practitioners is that SIA in South Africa is often integrated into EIA’s (Question 10). Four of the practitioners (36.36%) strongly disagreed that they should be separate assessments, and three practitioners (27.27%) slightly agreed that SIA and EIA should be separate assessments (Figure 3.4). For the four practitioners that strongly disagreed it depends mainly on the proposed project that was conducted. This group of practitioners feels that separating the processes will only lead to “more red taping and reporting” and “delayed authorization of projects and developments even further than is already the case”. It will only result in “bureaucracy” and “less effective decision-making”. They feel that there should be a “greater integration” between these processes to make SIA even more effective.

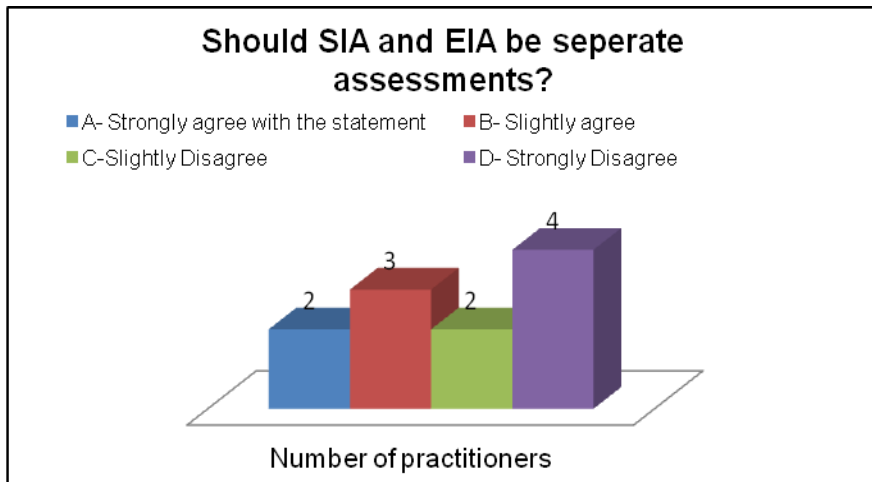


Figure 3.4: SIA vs EIA (Theme 2- Question 10)

Question 11 raises a further problem i.e. that there are not enough specialists in the social field. More than 72% (eight of 11) of the practitioners agree on this statement (Figure 3.5). It should firstly be kept in mind that “being a specialist takes a number of years that not only comes with a degree, but with experience”. The practitioners’ reason for why there are not enough specialists in the field is mainly because in South Africa there is no training for SIA practitioners, there is no regulation or professional body and nowhere to gain experience of SIA practice. According to the practitioners there seems to be a perception that “anyone” can do an SIA. The problem identified here is, therefore, not only the shortage of SIA practitioners, but rather a shortage of competent practitioners with strong academic backgrounds, solid research skills and an ability to engage with diverse stakeholders, with good analytical abilities and writing skills.

Figure 3.5 also shows that four practitioners (36.36%) agree that someone that is more specialized in another field can poorly understand and connect with social impact and problems (Question 12), and five of the practitioners (45.45%) expressed their opinion that this has a moderate effect on the outcome of SIA’s (Question 13).

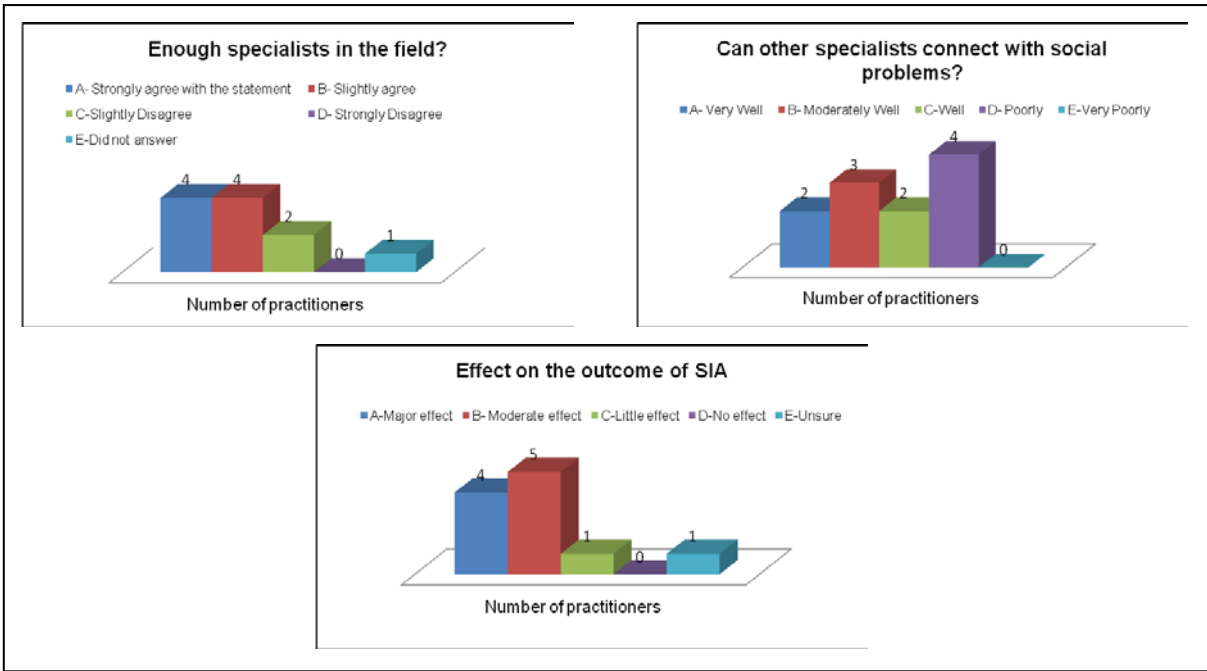


Figure 3.5: Problems in SIA practice and the effect thereof (Theme 2- Questions 11, 12 and 13)

3.3.4. Theme 3—Effectiveness of SIA (Question 6, 7 and 8):

This theme emerged mainly from the answers to Questions 6, 7 and 8. Figure 3.6 shows that seven of the practitioners (63.63%) agree that SIA in practice is a very important assessment tool, despite of the problems identified in Theme 2. Eight of the practitioners (72.72%) are of opinion that SIA in practice is moderately effective, and only two practitioners (18.18%) feel that SIA is slightly effective. Figure 3.6 also shows that seven of the practitioners (63.63%) agree to the statement that the effectiveness of SIA has a major impact on the value of SIA.

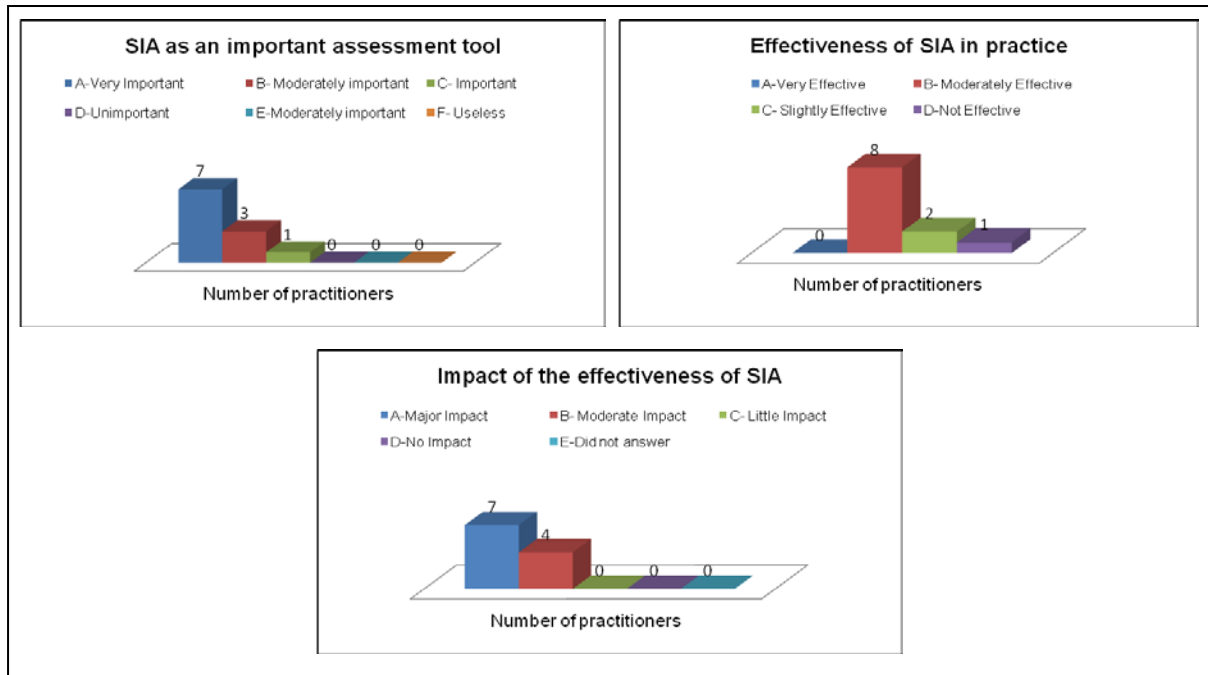


Figure 3.6: Effectiveness of SIA (Theme 3- Questions 6, 7 and 8)

3.3.5. Theme 4—The future of SIA (Questions 5, 14 and 15):

This theme deals with the concept of the future of Social Impact Assessment (SIA) in South Africa, and emerges mainly from Questions 5, 14 and 15. The practitioners that took part in this research all had different perspectives about what the goal of SIA in South Africa is. The goals of SIA in South Africa for the future, from the practitioners' perspectives are (Question 14):

- To “mitigate the impacts that projects have on the way people live”;
- To be a “social development tool”;
- “SIA is and will probably remain one of the “boxes to tick” on the way to environmental authorization”, but what SIA really needs is a “set of incentives for decision-makers to obtain unbiased, rational information on the likely outcomes of their decisions and actions”;
- To “contribute to sustainable development by bringing the social perspectives to the assessment”;
- “To provide meaningful context” and “make a positive contribution to solving the many social problems South Africa has”; and
- SIA should provide direction to “reach the millennium development goals” and to improve the living standards and well-being of South Africans.

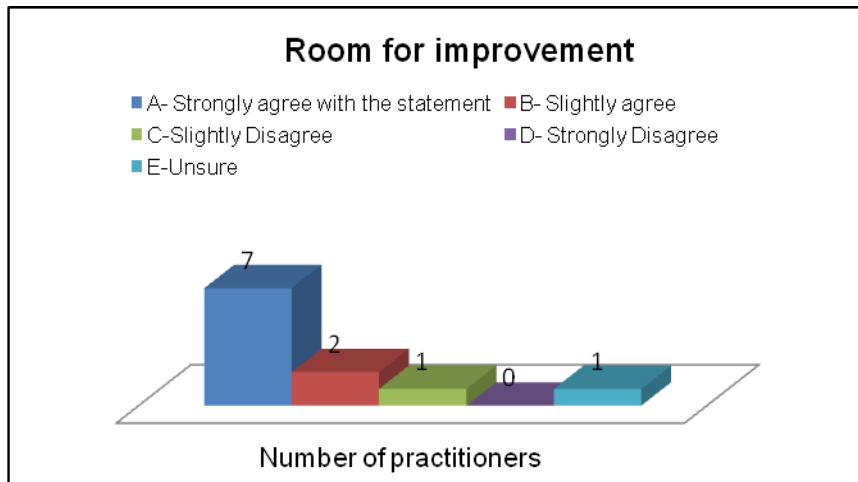


Figure 3.7: Room for improvement in SIA (Theme 4- Question 5)

Figure 3.7 shows that seven of the practitioners (63.63%) strongly agree with the statement that there is still room for improvement in the practice of SIA. How does the way forward for SIA in South Africa look? From the responses to Question 15, for SIA in South Africa to have a positive, growing future ahead, SIA should:

- “Become an assessment tool”, because in a developing country like South Africa, we cannot afford not to use it as a tool for social development;
- “Instead of being a part of EIA, SIA should have it’s own legislation and professional body”;
- “Improve the social constraints” South Africa faces and “improve the socio-environmental quality of development”;
- Encourage SIA practitioners to “consider the importance of guiding the SIA field”;
- Have a “greater integration between SIA and activities that take place after approval”; and
- “Clarify the aims of the process” and “educate professionals”.

All the questions are now allocated to a theme and the results from the survey questions are given accordingly. Section 3.4 further discusses the results that were obtained from the survey.

3.4. Discussion of perspectives

The questionnaire starts off with four preliminary questions (i-iv), where it can be seen that these practitioners are not only highly qualified in the field of SIA, but their years in practice and their qualifications are what makes them experts in this field. The results in the rest of the survey are therefore of great value for this research, even if the questionnaires that were returned were only an availability sample of SIA practitioners in South Africa. After the preliminary questions, the actual survey questions follow and the themes that emerge from the analysis and are also included in the survey questions of the discussion.

3.4.1. Theme 1—SIA in practice

The first of four themes that emerge are “SIA in practice” based on Questions 1 and 2. The practitioners are firstly asked what SIA in practice means to them, i.e. they should have given their own definition of SIA. According to Vanclay and IAIA (2004:274), there are different levels by which to understand the term SIA, and Vanclay and IAIA defines SIA as “a field of research and practice or a paradigm consisting of a body of knowledge, techniques and values”. The definitions the practitioners gave were formulated upon each practitioner’s own perspective of their experience in the SIA field, and are therefore the reason why no two definitions are the same. The second part of this theme illustrates from a practitioner’s perspective, how SIA in theory differs from SIA in practice. According to Barrow (1997:235), the theory of SIA is still evolving. Practitioners feel that, ideally, SIA should have sufficient time to do assessments, practitioners should be flexible and creative, and SIA should enhance social sustainability and benefits of projects.

In contrast to how SIA is ideally supposed to be, the practitioners also express their perspectives of how SIA is in practice. The practitioners feel that SIA in reality have problems with the implementation of laws and management measures, SIA practice has budget and time constraints and is only a box ticking assessment. This is evidence that correlates directly with Barrow (1997:233), where Barrow states that

SIA often deals with a broad range or variety of things, but to do SIA comprehensively and accurately is not that easy. It seems that the practitioners listed the points that irritate them most in practice and it is clear that, theoretically, these reality points are not being addressed. Therefore, because of these differences, it makes it more difficult for practitioners to execute the assessments effectively.

3.4.2. Theme 2—Problems in SIA

The second theme emerged from Questions 3, 4, 9 to 13, which address different problems in SIA practice. Question 3 addresses the first problem, where all of the practitioners are in agreement that the public participation process is sometimes confused with SIA. SIA's generally facilitate the public participation process. "At the very least, an SIA provides an opportunity for people to voice their concerns in a mode that is less combative and more reliable than the public hearing process" (Finsterbusch, 1995:235). Therefore, the practitioners suggest that, if there is an even greater integration between EIA and SIA, then the public participation process would be less confused with SIA. This mistaken view is found when clients associate the word 'social' with the word 'public', therefore clients link the two processes, but they are two different assessments and the public and other stakeholders need to be informed about the differences between these two processes. This is therefore an area for improvement.

Question 4 addresses the following issue, i.e. if there has been an improvement or any changes in the regulations from 2010 under NEMA and the ECA regulations with regard to SIA? This question was either misunderstood by some of the practitioners or they are not aware of the changes, because some of the practitioners did respond that there are changes in the regulations, and others were not aware that there are regulations. In Chapter 4, the differences or improvement are discussed in more detail, but Chapter 4 indicates that the NEMA regulations do address more social issues than the previous ECA regulations.

Another problem that emerged is that EIA and SIA are integrated processes. Conflicting answers were elicited from the practitioners, i.e. some practitioners are of the opinion that EIA and SIA should remain integrated processes and other practitioners are of the opinion that these two assessments should be separated and are assessments in their own right. In South Africa SIA is integrated into the EIA process, and because of this, there are also no set guidelines for specialists on when an SIA should be conducted. The practitioners that are of the opinion that EIA and SIA should stay an integrated process, share the view of Burdge (2003:226) where he said that when SIA and EIA are integrated, practitioners will gain more knowledge of social learning (Burdge, 2003:226). The other practitioners that do not agree that the two processes should be integrated, perhaps share the same view as Bezuidenhout (2009:6-7), where he writes that, despite the many advances in the field of SIA and its incorporation into the EIA process, there are not many examples where the integration actually made a difference in the project decision-making processes.

A problem that emerged from Questions 11 to 13 is that there are not enough specialists in the social field. Although most of the SIA practitioners in South Africa come from a social sciences background where they studied social work or psychology, they go into practice without any or very limited practical experience of SIA. These practitioners are of the opinion that this problem may be because there is nowhere in South Africa for a SIA practitioner can gain experience and no professional body where they can register with. The practitioners give their opinion that practitioners from another field, i.e. natural sciences, cannot truly understand and connect with social issues, because it is not their area of specialization. The lack of skills in SIA and practitioners from other disciplines may have an effect on the effectiveness of the SIA process, i.e. the SIA is conducted poorly. Chapter 4 will reflect this finding in more detail. From Theme 2 it is clear that SIA practice in South Africa has a number of problems and that this does not limit SIA practitioners from conducting an effective SIA.

3.4.3. Theme 3—Effectiveness of SIA

Theme 3, the effectiveness of SIA, emerged from questions six to eight. According to Sandham and Pretorius (2008:229), the term ‘effectiveness’ refers to whether something works as intended and if it meets the purposes for which it is intended. The practitioners agreed that SIA is an important assessment tool, and they are of the opinion that SIA practice in South Africa is moderately effective. The effectiveness of SIA thus has a major impact on the value of SIA. According to O’Faircheallaigh (2009:96), three preliminary points should be noted when exploring alternative approaches to effectiveness in SIA, i.e. i) SIA practitioners usually do not agree on the same definition for effectiveness; ii) there is very limited research that specifically focuses on the effectiveness of SIA; iii) and authors of articles or books often claim that they have been dealing with the effectiveness of SIA, but in reality, they only dealt with an aspect of effectiveness and not effectiveness as a whole (O’Faircheallaigh, 2009:96). Burdge and Vanclay (1996:83) state that the effectiveness of an SIA and even EIA depends on practitioners’ integrity. There are also two issues that arise in relation to effectiveness in SIA, i.e. what SIA consists of and what the purpose of SIA is. The definition of effectiveness of SIA and how SIA is pursued depends on the assumptions that are made regarding the purposes of SIA (O’Faircheallaigh, 2009:97). The practitioners’ understanding of ‘effectiveness’ is thus formulated from the priority they attach to the different SIA approaches.

3.4.4. Theme 4—Future of SIA

The last theme to emerge is the future of SIA in South Africa, where practitioners are of the opinion that SIA in South Africa has a positive, growing future ahead and the progress in South Africa has been remarkable, but there is still room for improvement. SIA practice in South Africa is not poorly executed, but a reflection on theme 1, 2 and 3 proves many areas in SIA practice where improvement is needed, i.e. SIA in reality differs significantly from how SIA ideally is supposed to be, public participation is often confused with SIA, the integration of SIA with EIA, enough social specialists and the implementation of regulations. “Social impacts will have to

be taken much more seriously in South Africa, because they are crucial in empowering disadvantaged communities and in strengthening democratic processes” (Du Pisani & Sandham, 2006:720).

3.5. Conclusion

As stated in Chapter 1, and at the beginning of this chapter, there is limited published research on SIA practitioners’ perspectives and this was the reason for conducting this chapter in the dissertation. Questionnaires were used to gather data from the practitioners using Action Research as a methodological approach.

From the practitioners’ professional backgrounds, it can be seen that these practitioners are not only highly qualified in the field of SIA, but it is their different backgrounds and especially their years in practice that make them specialists in the field. SIA in practice, problems in SIA, effectiveness in SIA and the future of SIA, are the emerging themes that reflect the practitioners’ perspectives. In general, the practitioners are aware of the weaknesses in the SIA field, although there has been significant progress in the SIA field. From the practitioners’ perspective, SIA in South Africa has a positive future ahead, but there is still room for improvement, therefore the weaknesses should be addressed and improved on. Recommendations are made in Chapter 5. Most importantly, best practice in SIA in South Africa needs to be promoted among practitioners in order for SIA not to forgo the progress it has already made and to ensure that Social Impact Assessment keeps on improving.

Chapter 4: Evaluation of SIA report quality in South Africa

4.1. Introduction

The perspectives of practitioners have been investigated in Chapter 3 and the findings revealed that there is a convergence in the views regarding SIA practice in South Africa. Chapter 4 consists of two objectives in order to further investigate the quality of SIA practice in South Africa. The first objective is to report on a comparison between the SIA regulations according to ECA and NEMA. In conjunction with this, the second objective of this chapter is to critically describe and evaluate the quality of social aspects in a sample of EIR's in the South African context.

Within the broad context of EIA, SIA has evolved as a specific type of impact assessment and has developed in tandem with EIA, but in South Africa, SIA has evolved in the shadow of EIA. According to Du Pisani (2005:21–26), this is because many practitioners regard EIA as the mother of all impact assessments. Because of NEMA's definition of the environment, SIA is often incorporated mostly on a limited scale into EIA, but NEMA also makes more detailed provision for SIA than ECA.

According to Sandham and Pretorius (2008:230), the implementation of new EIA regulations underscores the concern for an effective EIA system and thereby emphasizes the need to explore the quality of EIR's as a contribution for determining the effectiveness of the South African EIA process. Sandham and Pretorius (2008:229) also state that quality is an important aspect of measuring the effectiveness of the EIA process, speaking of quality as it refers to whether something works as intended and meets the purpose(s) for which it is intended. Sandham et al., (2013:1) explain that an important component of effectiveness deals with the quality of EIR's, and there is a general assumption that poor quality reports could contribute to a degree of ineffectiveness. The overall success of the EIA process thus depends, *inter alia*, on the quality of EIR's (Lee & Colley, 1992:1). It is also clear that an appropriate EIA review package is required to assist in the

assessment of the quality of environmental reports in South Africa. In the past, various methods of determining the quality of EIR's have been developed and used worldwide, but the method that is most commonly used is a checklist or a review package (Sandham & Pretorius, 2008:229). Apart from Du Pisani's work, there is very limited research in South Africa on the review of SIA report quality.

SIA should be a socially informed process of adaptive management in order to reach its mission of being a process of navigation in the course of development and in assisting communities to choose between development options. SIA is an established research field and to varying degrees, SIA has become a legal requirement in project and policy planning around the world, as nations implement their own legislation. However, in South Africa SIA has not yet received the same standing in national legislation as EIA. Consequently, and also because of the lack of a distinct division between SIA and EIA, SIA is less widely applied in South Africa than EIA. To further investigate the significance and the status of SIA in South Africa, the two objectives mentioned at the beginning of the chapter will be discussed in detail in the sections that follow.

4.2. Comparison between ECA and NEMA regulations

In South Africa, the environmental impact assessment (EIA) process started on a non-mandatory basis in the 1970's and early 1980's. It was only later in September 1997 when the mandatory period started with the promulgation of EIA regulations in terms of the Environment Conservation Act of 1989 (Van Heerden, 2010:43). According to the Environment Conservation Act (ECA) of 1989 (South-Africa, 1989:2), the term 'environment' is defined as "the aggregate of surrounding objects, conditions and influences that influence the life and habits of man or any other organism or collection of organisms".

In April 2006, the second phase of mandatory EIA started with the promulgation of a new set of more detailed EIA regulations in terms of the National Environmental Management Act of 1998 (South-Africa, 1998:8), which defines the 'environment' as:

“The surroundings within which humans exist and that are made up of-

- (i) The land, water and atmosphere of the earth;
- (ii) Micro-organisms, plant and animal life;
- (iii) Any part or combination of (i) and (ii) and the interrelationships among and between them; and
- (iv) The physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.”

On 2 August 2010, the third phase of mandatory EIA started when the third set of EIA regulations came into effect with the aim to improve the efficiency and effectiveness of EIA (Van Heerden, 2010:43).

By comparing the ECA and NEMA regulations, the term ‘social’ was investigated in each of these regulations to determine the occurrence of the word or any words that relate to social aspects or the human environment, and if there are any changes in the occurrence of this term from ECA to NEMA. The occurrence of social aspects in ECA and NEMA are listed below in Table 4.1. In Table 4.1., it can be seen that there has been a significant improvement in the regulations from ECA to NEMA.

Table 4.1: Comparison of the occurrence of social aspects between ECA and NEMA.

Section	Environment Conservation Act (ECA) of 1989 (South-Africa, 1989:1-21)
S 26	Regulations regarding EIRs: (a) “The scope and content of Environmental Impact Reports, which may include, but is not limited to- (iv) The identification of the economic and <u>social</u> interests which may be affected by the activity in question and by the alternative activities. (v) An estimation of the nature and extent of the effect of the activity in question and the alternative activities on the <u>social</u> and economic interests.”
Section	National Environmental Management Act (NEMA) of 1998 (South Africa, 1998:1-72)
S 2	(1) “The principles set out in this section apply throughout the Republic to the actions of all organs of state that may significantly affect the environment and— (a) shall apply alongside all other appropriate and relevant considerations, including the State's responsibility to respect, protect, promote and fulfil the <u>social</u> and economic rights in Chapter 2 of the Constitution and in particular the basic needs of categories of persons disadvantaged by unfair discrimination. (2) Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and <u>social</u> interests equitably.

S23	<p>(3) Development must be <u>socially</u>, environmentally and economically sustainable.</p> <p>(4d) Equitable access to environmental resources, benefits and services to meet basic human needs and ensure <u>human well-being</u> must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.</p> <p>(4h) <u>Community wellbeing</u> and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.</p> <p>(4i) The <u>social</u>, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated and decisions must be appropriate in the light of such consideration and assessment.</p> <p>(4q) The vital role of <u>women and youth</u> in environmental management and development must be recognised and their full participation therein must be promoted.</p> <p>(2) The general objective of integrated environmental management is to:</p> <p>(a) identify, predict and evaluate the actual and potential impact on the environment, <u>socio-economic conditions</u> and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimizing negative impacts, maximizing benefits and promoting compliance with the principles of environmental management set out in section 2;</p> <p>(d) ensure adequate and appropriate opportunity for <u>public participation</u> in decisions that may affect the environment.”</p>
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In ECA, the word ‘social’ occurred only twice. NEMA improved by adding not only social aspects but included the human environment; therefore there is an improvement in the regulations because social aspects were addressed nine times in NEMA. In ECA the term ‘natural environment’ was used extensively, but in NEMA the focus was broadened to include social and economic aspects. Even if there are no set guidelines for SIA in South Africa, the quality of SIARs still need to be tested. It is seen in Table 4.1 that there is an improvement in the regulations, but there is a need to test if there has been an improvement in practice. Therefore, a quality review of a sample of EIRs was done, focusing on social aspects of these reports, because of the fact that SIA and EIA in South Africa are integrated. This quality review will be discussed in the section that follows.

4.3. Methodology

This section firstly describes the development of the review package and the selection of the sample EIA reports that were reviewed. Lastly, the method on how the review was conducted will be described.

4.3.1. Development of review package for Social Impact Assessment

The Lee and Colley review package is the most commonly used review package that is available to reviewers, but its main focus is on the quality of environmental aspects. This study made use of the Lee and Colley package as a template, but it was adapted in order to customize the focus of this review only onto the social aspects within an Environmental Impact Report (EIR), i.e. the aim of this review is to determine the quality of social aspects in an EIR. The outline of this review package remains as in the Lee and Colley review package, but the focus is only on social aspects. The Lee and Colley Review package consists of four review areas (RA), 17 categories and 53 sub-categories, but after adaptations the review package used for this study consists of four review areas, 14 categories and 40 sub-categories. Under each RA, the categories and sub-categories are listed to refine the review process. Table 4.2 compares the categories and sub-categories under each RA for the Review Package used for this study (from now on referred to as the SIA review package) with the Lee and Colley review package.

Table 4.2: Comparison of the outline between Lee and Colley, and SIA review package

	Lee and Colley Review Package	SIA review package
RA 1- Categories	1.1 – 1.5	1.1 & 1.2
RA 1- Sub-categories	1.1.1 – 1.1.5 ; 1.2.1 - 1.2.5 ; 1.3.1 – 1.3.3 ; 1.4.1 – 1.4.2 ; 1.5.1 – 1.5.3	1.1.1 – 1.1.3 ; 1.2.1 – 1.2.4
RA 2- Categories	2.1 - 2.5	2.1 – 2.5
RA 2- Sub-categories	2.1.1 – 2.1.4 ; 2.2.1 – 2.2.2 ; 2.3.1 – 2.3.3 ; 2.4.1- 2.4.3 ; 2.5.2 – 2.5.3	2.1.1 -2.1.5 ; 2.2.1 – 2.2.2 ; 2.3.1 – 2.3.1 ; 2.4.1 ; 2.5.1
RA 3- Categories	3.1 – 3.3	3.1 – 3.3
RA3- Sub-categories	3.1.1 – 3.1.3 ; 3.2.1 - 3.2.3 ; 3.3.1 – 3.3.2	3.1.1 – 3.1.4 ; 3.2.1 – 3.2.3 ; 3.3.1 – 3.3.2

RA 4- Categories	4.1 – 4.4	4.1- 4.4
RA 4- Sub-categories	4.1.1 – 4.1.4 ; 4.2.1 - 4.2.3 ; 4.3.1 – 4.3.2 ; 4.4.1 – 4.4.2	4.1.1 – 4.1.4 ; 4.2.1 – 4.2.3 ; 4.3.1 – 4.3.3 ; 4.4.1- 4.4.2

From the table above it can be seen that there is a significant difference in the size of the two review packages, because irrelevant categories and sub-categories were left out to ensure that the SIA review package stays focused on social aspects, and changes were also made to the information that is being reviewed, i.e. the focus was changed from environmental impacts to social impacts. Therefore the four review areas of the SIA review package are as follows:

1. Description of the development, local environment and social baseline conditions.
2. Identification of key social impacts; the relationship between social and biophysical impacts; estimation of expected significance of impacts for society; time duration and public participation.
3. Alternatives and mitigation.
4. Communication of results.

The collation sheet of the adapted review package that was used can be seen in Appendix C, and the descriptive review package is included in Appendix D. The SIA review package was now ready for the review process, but first the sample of the EIR's was chosen for the review process.

4.3.2. Selection of sample

For the purpose of this study, a sample of 23 EIAs was reviewed that was provided by the National Department of Environmental Affairs. The list of cases as well as a short description of each appears in Appendix E and a brief list can be viewed below in Table 4.3. The 23 files are made up of 10 files under ECA and 13 files under NEMA, in order to explore changes in the quality of the EIAs done under ECA, i.e. from 1997, and NEMA from 2006. In all of these files, the SIAs were not separate specialist reports, but they were included in the EIRs. From here on out, the files will

be referred to as Social Impact Assessment Reports (SIARs), because they include 'proper' SIARs and social aspects of EIRs.

Table 4.3: Brief list of EIA samples reviewed

	ECA files
1.	Upgrade of Berths 601, 602, 603, 604 and associated deepening of the Ben Schoeman Dock.
2.	Garona-Aries 400kv Transmission Power line and upgrade of existing substation.
3.	Development at Rooisand Nature Reserve, Kleinmond.
4.	Development of Knysna River Reserve.
5.	Development of Mdluli Safari Reserve.
6.	Development of nine 132KV Eskom powerlines between Grassridge substation and Coega Industrial Development Zone.
7.	Establishment of a transmission line between Poseidon substation and Grassridge substation.
8.	Rehabilitation and upgrading of the N17 Tollroad from Springs to Ermelo.
9.	Development of The Village Green, Durban by Tsogo Sun.
10.	Development of Mdluli Lodge.
	NEMA files
1.	Small craft harbour and marina development, Shelly Point.
2.	Smokey Hill project for supplying electricity.
3.	ACSA landside development precinct 3, Cape Town International Airport.
4.	Installation of SEA cable system in Kwazulu-Natal.
5.	Construction of a new sub-station and a new sub-transmission power line.
6.	Construction of the new crossing loop (7A) on the iron ore line between Kanakies and De Kop.
7.	Construction of a sewerage purification plant in Golden Gate Highlands National Park.
8.	Construction of Spitskop-Phoko powerlines project.
9.	Wolf power line in the Steelpoort area.
10.	Pumped storage power generation facility for Eskom.
11.	Installation of 23m ³ underground diesel tank.
12.	Construction of a forensic science laboratory.
13.	Development of the Ibhubesi gas field and associated infrastructure, West Coast, South Africa.

In the above list a broad variety of projects are listed and the composition of these projects is outlined in Figure 4.1.

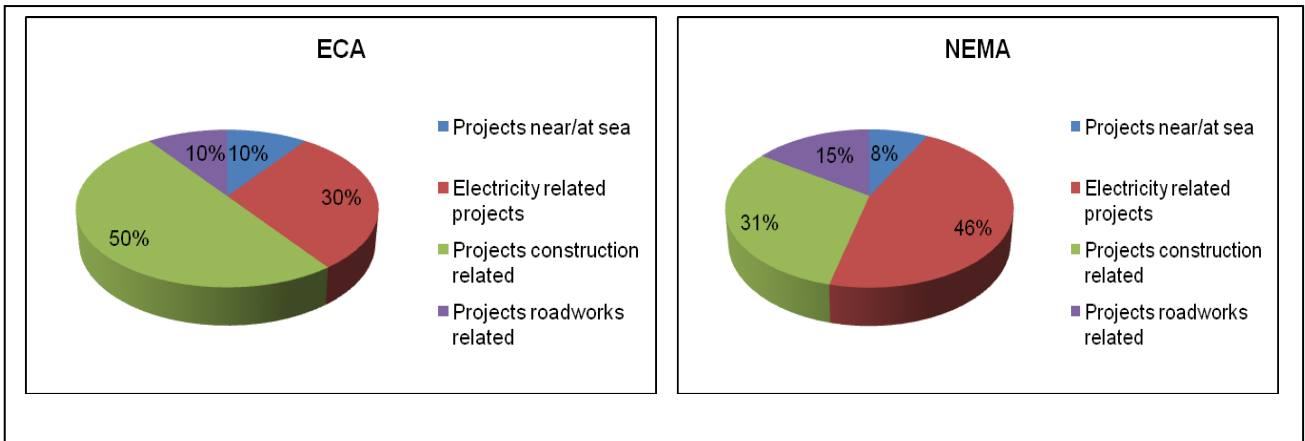


Figure 4.1: Composition of project types under ECA and NEMA

Half of the ECA projects are construction related. Construction related means that they are projects where buildings like storerooms are constructed. 30% of the EIAs under ECA are related to the construction of power lines for the transport of electricity and only 10% of these EIAs are projects that are road works related and projects that took place at sea. The 13 NEMA files are comprised of six files (46%) that are electricity related and four files (31%) that are construction related. Only 8% are projects at sea and 15% are road works related. A representative range of social impacts is thus likely to occur with the distribution of these project types.

4.3.3. Conducting the review

After the composition and adaptation of the review package and the selection of the sample, the actual review process began. This review package enables reviewers to do a review quickly, accurately and reproducibly. According to Lee *et al.*, (1999:23), it is the purpose of the review to:

- Provide the reviewers with a framework within which to interpret this information;
- Enable reviewers to assess the quality and completeness of the information relatively quickly; and
- To enable reviewers to make an overall judgment of acceptability.

The review package was tested, using pairs of independent reviewers, consisting of two masters students to review the sample of SIARs. Five of the files were reviewed independently by each reviewer, after which the results were compared, differences were identified and consensus scores allocated. The degree of similarity in the reviews were such that it was adequate to continue the review process with only one reviewer, similar to the approach followed by Sandham et al., (2013).

The standard Lee and Colley assessment symbols are used during the review process to evaluate the reports (Table 4.4). ‘Letters’ rather than ‘numbers’ are used as grading symbols, to discourage reviewers from crude aggregation to obtain assessments at higher levels in the pyramid (Lee *et al.*, 1999:6).

Table 4.4: Assessment symbols

Symbol	Explanation
A	Well performed: Relevant tasks are well performed, no important tasks are left incomplete.
B	Satisfactory and complete: Generally satisfactory and complete, only minor omissions and inadequacies.
C	Just satisfactory: Can be considered just satisfactory despite omissions and/or inadequacies.
D	Just unsatisfactory because of omissions: Parts are well attempted but must, as a whole, be considered just unsatisfactory because of omissions and inadequacies.
E	Not satisfactory/poorly attempted: Not satisfactory because of significant omissions or inadequacies.
F	Very unsatisfactory: Important task(s) are poorly done or not attempted.
N/A	Not applicable: The topic is not applicable or irrelevant in the context.

For this study, the Lee and Colley review approach is used completely for the review process, except for the adaptations made in the SIA review package. The review package of Lee and Colley contains three levels that are hierarchically arranged (Figure 4.2). The levels are:

- *Review Areas:* These are the four major areas;
- *Review Categories:* These are the categories which must be undertaken within each review area; and
- *Review Sub-categories:* These are the detailed review sub-categories within each Review Category (Lee *et al.*, 1999:24).

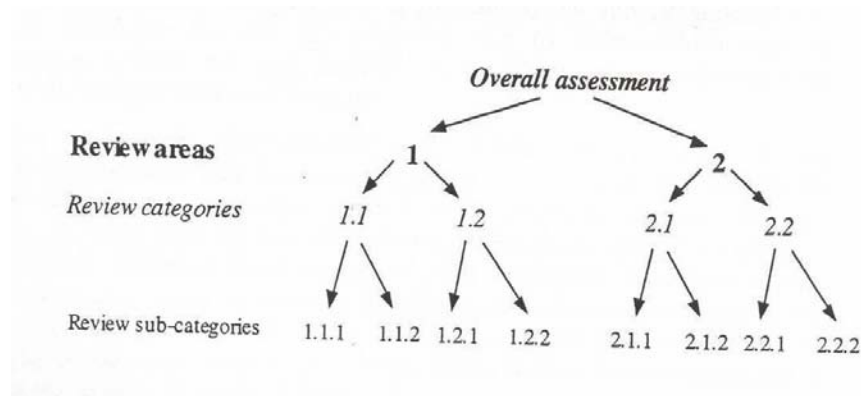


Figure 4.2: A schematic representation of the review topic hierarchy (Lee *et al.*, 1999:24).

The review process is started at the lowest level (Review Sub-Categories) and progressively moves upwards to the next level (Review Categories), applying more complexity until the overall assessment is complete (Review Area), i.e. the quality assessments of the review sub-categories are used to assess the review categories and the review categories' assessments are then used to evaluate the review areas and finally to award an overall grade to the report as a whole. After the review of all SIARs, the data of all the results from the review process are compiled into one document for analysis, and can be viewed in Appendix F.

4.4. Results and discussion

In this section of this chapter, the results that were obtained during the review process are evaluated and discussed. The results and discussion are divided into two parts in order to allow for a comparison between the results from the SIARs conducted under ECA and NEMA respectively. The results retrieved from the review process are presented in table format where the results will be given in percentages. ECA percentages are calculated according to the 10 files that were reviewed and the NEMA percentages for the 13 files that were reviewed. The strengths are allocated to the percentages that can be considered as areas that performed exceptionally well, and the weaknesses are the areas that performed exceptionally poor. The

following keys are used to illustrate the strengths and the weaknesses in each review topic.

Key	Colour	%
Strength		>70% A-C, >50% A-B
Potential strength		50-60% A-C
Acceptable		40-50% A-C
Potential weakness		40-60% E-F
Weakness		>70% E-F

Figure 4.3: Key used to assess possible strengths and weaknesses.

The grading symbols used in the tables of results used for analysis purposes differ from the symbols used in Table 4.4. The reason for this is that only the weaknesses (Symbols E-F) and the strengths (Symbols A-B) are illustrated, as well as the areas that performed relatively well (Symbols A-C). The symbol D is not included in the analysis, for the focus is to identify if there has been an improvement from ECA to NEMA and if not, symbols E-F, which indicate areas which are completely unsatisfactory, are areas which should be improved on. This format of analysis enables outliers to be identified in large amounts of data.

4.4.1. Summary of all review areas:

In this section, the summary of the results of all review areas, together with the final grades, are discussed. The review process consists of 4 review areas, which are also mentioned earlier in this chapter:

- Review Area 1: Description of the development, local environment and social baseline conditions.
- Review Area 2: Identification of key impacts; the relationship between social and biophysical impacts; estimation of expected significance of impacts on society; time duration and public participation.
- Review Area 3: Alternatives and mitigation.
- Review Area 4: Communication of results.

The summary of all the review area's results appear in Table 4.5 and the differences between the ECA and NEMA results can be seen.

Table 4.5: Summary of all the review areas.

Regulatory era		ECA [n= 10]			NEMA [n= 13]		
Summary grades		A-B	A-C	E-F	A-B	A-C	E-F
Overall grade		20	40	10	15	53	0
RA 1	Description of development, environment & social baseline	30	70	0	16	70	0
RA 2	Identification and evaluation of key impacts	20	40	40	8	54	39
RA 3	Alternatives and mitigation	10	40	40	15	53	46
RA 4	Communication of results	20	80	0	46	77	0

From the results of the ECA files, it can be seen that Review Area 1 and Review Area 4 were the two areas with the best performance (RA1: A-C=70%; RA4: A-C=80%). These two areas were also identified as the areas of strength. The two remaining review areas (RA2: E-F=40%; RA3: E-F=40%) were identified as areas of possible weakness. Even though these areas are weak they are still of an acceptable standard, but improvement is needed.

In the NEMA results, a relatively similar pattern of performance can be seen as with the ECA results. Again, Review Area 1 and 4 are the areas with the best performance. Review areas 2 and 3 performed poorly again. Although the pattern is the same, there is a clear improvement from ECA to NEMA. Review Area 2 improves by 14% (A-C) and Review Area 3 with 13% (A-C). In the overall grades for the EIR's, the files under ECA are 40% and are considered at a satisfactory (A-C: acceptable) level. The files under NEMA on the other hand are 53% and considered as at a satisfactory (A-C: acceptable) level. The results indicated a modest improvement of 13% in the satisfactory level for the files under NEMA.

4.4.2. *Review Area 1: Description of the development, local environment and social baseline conditions*

Review Area 1 is the area where the development and local environment of a proposed project is described. The social baseline conditions describe the affected environment as it is currently and as it could be expected to develop if a project were not to proceed. In Table 4.6, the results from the categories and sub-categories of Review Area 1 are given. Here it is indicated that category 1.1, both in ECA and NEMA, are strengths. These percentages indicate that sub-categories 1.1.1 and 1.1.3 are satisfactory overall (100% A-C). At sub-category 1.1.2 the estimated duration of the construction, operational and decommissioning phase should be given and in this case is evaluated as a weakness. The reason for this low score is that in both the ECA and NEMA files that were reviewed, sub-category 1.1.2 was poorly attempted or not even attempted at all.

Table 4.6: Review Area 1- Description of the development, local environment and social baseline conditions

Regulatory era		ECA [n= 10]			NEMA [n= 13]		
Summary grades		A-B	A-C	E-F	A-B	A-C	E-F
1.1	Development and local environment	20	90	0	39	77	0
1.1.1	Design and size	70	100	0	46	100	0
1.1.2	Estimated duration	20	20	70	15	38	46
1.1.3	Likely area to be affected	90	100	0	84	99	0
1.2	Social baseline	30	60	10	16	54	0
1.2.1	Identification and description of important components	20	70	0	23	61	8
1.2.2	Existing data sources	30	90	0	38	76	0
1.2.3	Social baseline conditions	30	70	10	8	77	0
1.2.4	Quantity of social baseline data	30	70	20	15	101	16

Category 1.2 reflects the quality of the description of social baseline conditions. In the ECA files that were reviewed, this category is identified as a possible strength, but the NEMA files score a 54% between A-C, which is still acceptable and partly

well attempted, but is just too inadequate to receive a higher score. There is still room for improvement in category 1.2.

4.4.3. Review Area 2: Identification of key impacts; relationship between social and biophysical impacts; estimation of expected significance of impacts for society; time duration and public participation

Review Area 2 consists of five categories. It is the purpose of this review area to evaluate how well a SIA practitioner executes the following:

- the identification of the type of social key variables or impacts;
- the identification of the relationship between social and biophysical impacts;
- determination of the estimation of expected significance of impacts for society;
- determination of the time duration of social impacts; and
- the identification of how many public participation inputs on social impacts are given during the public participation process and how well it is done.

For the purpose of the discussion of these results, discussion the main focus will be on the five review categories, i.e. 2.1, 2.2, 2.3, 2.4 and 2.5 in Table 4.7 below.

Review category 2.1 indicates how well the type of key social impacts are identified. More specifically, the population impacts, the arrangements between communities, communities in transition, impacts on individual and family level and the needs of community infrastructure are evaluated. In both the ECA and NEMA files, this category emerges as a possible weakness. In category 2.2 the relationship between the social and biophysical impacts are reviewed, which also indicates that there is a significant improvement from ECA to NEMA in this category. The ECA files are scored here as acceptable (50% A-C), but 70% of the NEMA files scored between A-C. It is noticeable that the comprehensiveness of the biophysical impacts identified (2.2.2), both under ECA and NEMA, still have higher scores than the social impacts identified (2.2.1).

Table 4.7: Review Area 2- Identification of key impacts; relationship between social and biophysical impacts; estimation of expected significance of impacts for society; time duration and public participation

Regulatory era		ECA [n= 10]			NEMA [n= 13]		
Summary grades		A-B	A-C	E-F	A-B	A-C	E-F
2.1	Identification of impacts	20	40	30	8	39	38
2.1.1	Population impacts	20	60	30	23	54	23
2.1.2	Community arrangements	20	40	20	8	46	38
2.1.3	Communities in transition	10	20	30	0	31	23
2.1.4	Individual and family level impacts	20	40	30	8	46	30
2.1.5	Community Infrastructure needs	20	40	40	15	38	23
2.2	Social vs. biophysical impacts	30	50	30	16	70	23
2.2.1	Comprehensiveness of social impacts identified	30	50	50	23	61	31
2.2.2	Comprehensiveness of biophysical impacts identified	40	70	10	23	77	15
2.3	Impact significance	10	40	50	15	53	38
2.3.1	Description of significance of impacts	10	40	30	16	54	31
2.3.2	Significance of impacts	10	30	40	23	46	31
2.3.3	Method of assessing significance	10	40	50	15	53	46
2.4	Duration	30	40	40	46	61	23
2.4.1	Expected duration of social impacts	30	40	40	46	61	23
2.5	Public participation	30	80	20	16	62	30
2.5.1	Inputs on social impacts	30	80	20	16	62	30

Review category 2.3 reflects the performance of the expected significance of impacts for societies. The ECA files scores a 50% E-F. This emerges as a possible weakness against NEMA's 38% between E-F. The NEMA files scored 53% A-C, which is acceptable and there is a slight improvement from the ECA files. In the expected duration of social impacts (category 2.4), 40% scored A-C while there is a significant improvement in the NEMA files with 61% scoring A-C. This outcome emerged as a possible strength. The amount of public participation inputs on social impacts as well as the quality of the public participation process in both instances (ECA and NEMA) also emerges as strengths. Although they were indicated as strong results there is still a decrease from 80% (A-C) under ECA to a 62% (A-C) under NEMA.

4.4.4. Review Area 3: Alternatives and Mitigation

Review Area 3 reflects the performance of the feasible alternatives as well as the scope and effectiveness of the mitigation measures. In this review area, developers should be committed and being capable to carry out mitigation measures. This review area has three categories (see Table 4.8). Review category 3.1 is where feasible alternatives should have been considered, which indicate that 50% of the ECA files score E-F and 46% respectively of the NEMA files. Even though there is a slight improvement, this category is poorly attempted in both regimes and is a weakness. Category 3.2 deals with the scope and effectiveness of mitigation measures. In the ECA files, this category is very unsatisfactory, with 40% E-F. The case worsens with the NEMA files, where 46% scored E-F. Category 3.3 also reflects poor performance, where 50% of the ECA files score A-C, which is acceptable, but there is a possible weakness because 40% score E-F. The NEMA files, in contrast to the ECA files, show weaker performance with 38% A-C and a high 46% E-F.

Table 4.8: Review Area 3- Alternatives and Mitigation

	Regulatory era	ECA [n= 10]			NEMA [n= 13]		
	Summary grades	A-B	A-C	E-F	A-B	A-C	E-F
3.1	Alternatives	10	40	50	15	38	46
3.1.1	Alternative sites	10	40	50	15	53	39
3.1.2	Alternative processes, designs and operating conditions	20	40	50	16	39	46
3.1.3	Unexpected severe adverse impacts	0	40	50	8	31	54
3.1.4	Comparative assessment of alternatives	10	40	50	15	38	39
3.2	Mitigation measures	10	30	40	16	47	46
3.2.1	Mitigation of social impacts	20	30	50	16	47	46
3.2.2	Considered mitigation measures	10	50	30	23	46	46
3.2.3	Extent of effectiveness	10	30	40	16	53	46
3.3	Commitment to mitigation	0	50	40	15	38	46
3.3.1	Record of commitment	0	50	40	15	38	54
3.3.2	Monitoring arrangements	0	50	40	8	39	46

4.4.5. Review Area 4: Communication of results

Review Area 4 is the last review area, which evaluates the performance of the communication of results of proposed projects through the social impact assessment (SIA). The layout of the SIAR, the presentation of the information, the unbiased presentation of the information and if a clear non-technical summary of the main findings, are evaluated. This review area consists of four categories (see Table 4.9). The first of four categories, category 4.1, reports on the layout of the SIAR (Social Impact Assessment Report), which includes a brief description of the project aims (4.1.1), the logical division of chapters (4.1.2) with chapter summaries (4.1.3) and references (4.1.4). The ECA files reflect a good performance in this category with 80% A-C. The NEMA files also reflect a good performance, but in comparison with ECA perform better with a 92% A-C. Review category 4.2 reflects if the information in the SIARs is comprehensible to the non-specialist (4.2.1), if technical terms and acronyms are identified (4.2.2) and if it is presented as an integrated whole (4.2.3). This category both under ECA and NEMA performed exceptionally well (100% A-C).

Table 4.9: Review Area 4- Communication of results

Regulatory era		ECA [n= 10]			NEMA [n= 13]		
Summary grades		A-B	A-C	E-F	A-B	A-C	E-F
4.1	Layout of the report	40	80	0	54	92	0
4.1.1	Introduction	50	80	0	61	92	0
4.1.2	Arrangement of information	60	80	0	77	100	0
4.1.3	Summaries of short chapters	40	80	0	46	69	8
4.1.4	External sources	40	70	10	54	92	8
4.2	Presentation accessible	70	100	0	85	100	0
4.2.1	Presentation of information	80	100	0	92	100	0
4.2.2	Technical terms	70	90	0	69	92	0
4.2.3	Presentation as integrated whole	60	100	0	69	100	0
4.3	Emphasis	20	60	10	23	61	8
4.3.1	Prominence and emphasis	30	60	30	23	46	31
4.3.2	Unbiased statement	20	70	0	31	77	8
4.3.3	Authorized opinion	10	40	10	16	62	8
4.4	Non-technical summary	20	50	0	23	69	0
4.4.1	Non-technical summary	30	40	20	23	46	23
4.4.2	Summary of main issues	30	60	10	46	69	8

Review category 4.3 reflects if the information in the SIARs is represented without bias and that emphasis is given as appropriate and in context of the assessment. The ECA and NEMA files are scored on a satisfactory level (60% and 61% between A-C). The last category of review area 4 (4.4), requires that a clear, non-technical summary of main findings is included in the SIARs. Here, the ECA files score 50% A-C and the NEMA files perform better with 69% and scoring between A-C.

4.5. Interpretation

The results from this SIA review, both for ECA and NEMA are compared to determine the extent to which the new EIA regulations, and especially for SIA, are improving the quality of environmental impact reports. In the previous chapter (Chapter 3), the SIA practitioners' answers reveal that they feel that SIA practice has improved over the years, but that there is still room for improvement. The review results reflect the SIA practitioners' views, that there is a clear improvement in SIAR quality from 1997 to 2006, but the weakest review areas are Review Area 2 and 3.

The poor performance in Review Area 2 (Identification of social key impacts) can be because of the fact that there are no existing methods to use to predict and evaluate them. This is also indicated in Chapter 3 as a weakness, i.e. there are no set guidelines to follow. The weak grades that are reflected in Review Area 3 (alternatives and mitigation) highlights confusion and weakness in the South African SIA practice, which also supports the results in Chapter 3. Review Areas 1 and 4 are the areas of better performance. These two areas occur in many reports as standard procedures, i.e. generic EIA skills of EAPs are to introduce a project and how reports are structured. These results show that an EAP with a biophysical background can possibly execute Review Area 1 and 4 well, but not Review Area 3 and 4, because they are the two areas that require more specialization. Again this correlates with the results from Chapter 3, where the practitioners express their views that there are not enough adequate specialists with the right social background and that specialists from other backgrounds are not likely to truly understand social aspects.

The results, therefore, indicate that there has been a modest improvement in the quality of SIA reports, in contrast to a drop in EIA report quality in the corresponding period (Sandham et al., 2013). It appears that the improvement in SIA report quality is driven by best practice considerations in the SIA practitioner community, in the absence of detailed guidelines. The results from this chapter therefore also support and correlate with the results received in Chapter 3.

4.6. Conclusion

This chapter has two objectives, i.e. to report on a comparison between the SIA regulations according to ECA and NEMA, and to critically describe and evaluate the quality of social aspects in a sample of SIARs in the South African context. Chapter 5 will suggest the recommendations on how SIA practice in South Africa can be improved on.

This chapter reports firstly on an investigation into the differences in SIA requirements from ECA to NEMA and, secondly on an investigation into the state of SIA practice in South Africa as reflected in SIA report quality, after 14 years of mandatory EIA under two legislative regimes. The differences between the ECA and NEMA requirements show that there has been an improvement in the requirements for social aspects.

A review of the report quality of a sample of SIA reports is conducted using a modified review package. The findings in this research reveal that SIARs of a generally only just satisfactory quality were produced, with a distinct but small improvement from ECA to NEMA. However, despite the overall satisfactory performance, there are still several areas in which improvement is necessary. These results also correlate with the results from Chapter 3; there is an improvement in SIA practice, but SIA in SIA has its weaknesses and one of them is the absence of detailed guidelines and a lack of SIA skill. The results from Chapter 4 therefore suggests that SIA report quality is driven by best practice considerations in the South African SIA practitioner community.

Chapter 5: Conclusion and Recommendations

Social Impact Assessment (SIA) and Environmental Impact Assessment (EIA) in South Africa are two integrated assessment processes. SIA's history dates back to 1973 and, even though SIA's have improved over the years there is a lack of research, a shortage of SIA practitioners and fixed guidelines of SIA's, which are areas of concern in South Africa. The main goal of this study is to examine the significance and the status of the Social Impact Assessment (SIA) in a South African context. In order to achieve this aim, this study has four objectives, which will be summarized in this chapter.

5.1. The role, value and importance of SIA (Chapter 2)

The aim of Chapter 2 is to outline and describe the role, value and importance of SIA's, which is the first objective of this dissertation. In order to achieve the aim of this chapter, the origin and the nature of SIA's internationally and in South Africa is investigated. The core values of SIA set the basis on which SIA principles and guidelines are developed, and just like the principles and guidelines, SIA variables are also just a template for practitioners to adapt to for their country's or project's needs. To use all of these guiding tools, the SIA process should be understood. Because of South Africa's lack of a formal set of SIA guidelines, SIA's in South Africa need to become a tool that can be used effectively in practice with the absence of regulations. Chapters 3 and 4 further explore the main aim of this dissertation.

5.2. Practitioner perspectives on the practice of SIA in South Africa (Chapter 3)

Chapters 1 and 2 state that there is limited published research on SIA practitioners' perspectives and this is the reason for conducting the research in this chapter. The

second objective is to explore the perspectives of SIA practitioners regarding certain aspects of the SIA—this is presented in Chapter 3. A questionnaire has been formulated and used as the method for gathering the qualitative data from practitioners and Action Research is the methodological approach used. Four themes have emerged, i.e. SIA in practice, problems in SIA, effectiveness in SIA and the future of SIA. The practitioners' backgrounds show that they are highly qualified and their practical experience makes them specialists in the social field. The results show that, even if there has been an improvement in SIA's, SIA practitioners in South Africa are aware of the weaknesses in the SIA process. The practitioners' perspectives prove that SIA in South Africa has a positive future ahead, but there is still room for improvement. To ensure that SIA's keep on improving, best practice among practitioners should be promoted.

5.3. Evaluation of SIA report quality in South Africa (Chapter 4)

In Chapter 4, the last two objectives of this dissertation are outlined, i.e. to report on a comparison between the SIA regulations according to ECA and NEMA, and to critically describe and evaluate the quality of social aspects in a sample of SIAR's in the South African context. This chapter reports firstly on a comparison between the SIA requirements from ECA to NEMA, which show that there has been an improvement in the requirements that concern social aspects. Furthermore, this chapter explores whether there has been an improvement in the quality of the assessments from ECA to NEMA, a quality review is conducted on a sample of SIA reports by using a modified review package. The findings of the quality review reveal that SIAR's of a generally 'just satisfactory' quality were produced, with a distinct but small improvement from ECA to NEMA, but there are still several areas in which improvement is necessary. The results from this chapter correlate with the results from Chapter 3. It was found that there is an improvement in the practice of SIA, but there are weaknesses in SIA in South Africa. The results from Chapter 4 in collaboration with Chapter 3 therefore suggest that with the absence of detailed guidelines and a lack of skill, SIA report quality is improving and is driven by best practice considerations in the South African SIA practitioner community.

5.4. SIAs' relation to research trends

Although SIA hold many benefits, it is clear from this research that a lot of criticism exists around Social Impact Assessments (SIA's). The criticism identified in this research relates to international research trends in SIA as well as in South Africa:

- The definition of SIA implies that SIA in practice focus more on projects, which means that SIA's have been lifted to a regulatory defined role to predict impacts (Vanclay, 2003:2).
- Aucamp (2003:4) says that EIA regulations mention social impacts, but they give no clear framework for SIA's, and that ECA and NEMA give a clear mandate for SIA, but no clear guidelines are given, nor is it legally enforced. The need for SIA in practice is recognized but often nothing is done. This might be because of a lack of expertise in the field of social sciences.
- Bezuidenhout (2009:4) identifies that some of the persistent problems facing SIA's is that social analysis is segmented within an EIA process and often EIA practitioners don't consult scientists in the social sciences. Bezuidenhout questioned if SIA's can be done sufficiently fast to meet the requirements of decision makers and if the results are presented in such a way that officials can use them. There are also different opinions on what the process of SIA entails.
- According to Barrow (1997:249), SIA's must be integrated more closely with planning and management.

All of this criticism relates to what was found in this research study. Chapters 2 and 3 of this research study show that there is a lack of guidelines surrounding SIA's in South Africa, and that there is a lack of specialists in the field with the adequate social background. The practitioners expressed that the integration of SIA's and EIA's is not problematic, but still confusion around SIA's and public participation exists if the two processes are integrated.

5.5. Future recommendations

The following is recommended for SIA in South Africa:

- It is recommend for SIA in South Africa that a motion is brought forward that national SIA guidelines should be developed that are usable and widely available to SIA practitioners. Specific legislation for SIA's should also be enforced.
- There should be a legal body were SIA practitioners can be registered and tertiary institutions should provide training for SIA practitioners. Companies specializing in SIA's should create more internship programmes for young social scientists to gain practical experience.
- A greater integration between SIA's and EIA's is recommended and the differences between the SIA process and public participation should be clearly communicated to practitioners and communities.
- SIA's should be considered to be more of a continuous process and not as a once off assessment.

SIA practice could be compared to the Greek mythology of Janus. Janus Bifrons is the Greek god of beginnings, who is associated with doorways, beginnings and transitions, because he is a two-faced god that looks into the future and into the past (Figure 3.13) (Anon, 2012). According to Burdge and Vanclay (2004:292), the prediction of the future based on past events is tricky, but it is what Impact Assessment is all about. SIA practitioners should learn from past events and use the past to build a brighter future.



Figure 5.1: Janus—The Roman god of beginnings

Given South Africa's social problems, SIA's can play a significantly valuable role as part of EIA if the quality of SIA's can improve substantially. Most importantly, to ensure that SIA's have an effective future in South Africa, SIA practitioners need to promote best practice. The future generation of social scientists must join Burdge and Vanclay (2004:292) in the future challenge of SIA practice in South Africa, i.e. SIA practitioners need to be reminded not to reinvent the SIA process, but rather to ensure that the SIA field delivers what it is intended to deliver and presents a realistic picture of what SIA's can provide for the planning and decision-making process.

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Appendix A

To whom it may concern

Social Impact Assessment Questionnaire

I am a Masters student at the North West University of Potchefstroom. My research is focused on the significance and status of Social Impact Assessments (SIA) in the South African context. This questionnaire will be used to contribute to statistical data for this study. This questionnaire will be treated with confidentiality and will take about 30 minutes to complete. Please return as soon as possible but not later than 30 August 2011.

I will like to take this opportunity to thank you for participating.

For any further questions and information contact:

Ms. Leandri Hildebrandt- 082 447 1455; leandrihildebrandt@gmail.com ; or

Prof. Luke Sandham- 018-2991585; luke.sandham@nwu.ac.za.

Thank you

Leandri Hildebrandt

Questionnaire

Personal information

- Level degree/ Academic background:

Degree	Honours degree	Masters degree	Doctors Degree
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- Academic field:

Natural Sciences	Social Sciences	Law	Other (specify)
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- Work experience

Government	Academic	Private Consultancy	Other (specify)
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- Time in practice

1 Year	1-5 years	5-10 years	More than 10 years
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Take note: When referring to SIA in the questions, it refers to SIA in South Africa

1. As a specialist in the field of SIA, what does SIA in practice mean to you?

2. How does SIA in practice differ from in theory?

3. Previous studies have found that public participation is often confused with SIA. Do you:

A-Strongly agree with statement	B- Slightly Agree	C- Slightly Disagree	D- Strongly Disagree
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What are the reasons for your view?

4. When looking at the new EIA regulations of 2010, and comparing it to the previous requirements for SIA, how do the new regulations differ from the previous?

5. There is still room for improvement. Do you:

A-Strongly agree with statement	B- Slightly Agree	C- Slightly Disagree	D- Strongly Disagree
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6. To what extent is SIA in practice an important assessment tool?

A-Very important	B- Moderately Important	C- Important	D- Unimportant	E-Moderately unimportant	F-Useless
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7. Indicate to what extent is SIA in practice effective?

A-Very effective	B- Moderately effective	C- Slightly effective	D- Not effective
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8. What impact does the effectiveness have on the value of SIA?

A-Major impact	B- Moderate impact	C- Little impact	D- No impact
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9. What do you feel are the most important shortcomings of an SIA?

10. Currently SIA is an integrated part of an EIA. It should rather be a separate assessment. Do you:

A-Strongly agree with statement	B- Slightly Agree	C- Slightly Disagree with statement	D- Strongly Disagree
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Give reason for answer:

11. It appears that there are a lot of problems surrounding SIA. One of these problems is that there are not enough specialists in the social field. Do you:

A-Strongly agree with statement	B- Slightly Agree	C- Slightly Disagree with statement	D- Strongly Disagree
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Give reason for answer:

12. To what extent can someone that is more specialised in another field, truly understand and connect with social impacts and problems?

A-Very well	B- Moderately Well	C- Well	D- Poorly	E-Very Poorly	F-Useless
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13. What effect does the above have on the outcome of an SIA?

A-Major effect	B- Moderate effect	C- Little effect	D- No effect
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14. From a specialist's point of view, what is the goal of SIA in South Africa?

15. How do you see the way forward for SIA in South Africa?

Appendix B

Questionnaire: Raw Data

Preliminary Questions:

- *Level of degree or Academic background of practitioners*

Level of degree/ Academic background	Degree	Honours Degree	Masters Degree	Doctors Degree
Amount of practitioners	0	2	6	3

- *Academic Field of the practitioners*

Academic field	Natural Sciences	Social Sciences	Law	Other
Amount of practitioners	3	7	1	0

- *Work experience of the practitioners*

Work experience	Government	Academic	Private Consultancy	Other
Amount of practitioners	2	2	11	1

- *The time period practitioners have been in practice*

Time in practice	1 Year	2-5 years	5-10 years	More than 10 years
Amount of practitioners	0	1	1	9

Survey questions:

1. <u>As a specialist in the field of SIA, what does SIA in practice mean to you?</u>
1- "SIA has been changing over the years. Initially the focus was on the identification of social impacts, but the focus has moved to the management of social impacts. SIA is

the voice of the community; it is an umbrella assessment that includes impacts from the bio-physical, economic and social arena. It represents the human dimension of the environment and look at the impact of projects on people and people on projects.”

- 2- “SIA means, to me, the understanding of how any given project in a specific area will positively and negatively affect the people living in its proximity. For projects of a national interest, however, the country at large must be considered as well, which implies a deep understanding of national social and economic issues, priorities and dichotomies.”
- 3- “It means to ‘look out’ for the interests of the people who will be affected by a project. Also, to advice on social considerations when designing and constructing the project question.”
- 4- “It means applying the theory of SIA to a practical situation to gain an understanding of the impacts of a proposed project.”
- 5- “It is a tool for predicting likely impacts of a proposed project/development on communities and to formulating measures to avoid or ameliorate negative impacts and enhance positive ones.”
- 6- “It means that socio-economic components of affected communities are considered.”
- 7- “I am an EAP. SIA in the context of undertaking an EIA refers to assessing the potential positive and negative impacts of a proposed policy, programme or project on the potentially affected people, be they individuals, communities, organizations or the public at large. An SIA should also consider project alternatives and recommend mitigation measures for potential negative impacts and enhancement of positive impacts.”
- 8- “Identify socio-economic impacts and mitigate them as far as possible.”
- 9- “I am an EAP. SIA should in practice mean a robust addition to the EIA process that allows for real, meaningful input from the I and AP’s and detailed consideration of what this feedback means within the context of the project, communities and wider context-if done correctly of course.”
- 10- “I am an EAP. SIA is a specialist study and usually part of an EIA, to determine the potential and adverse impacts of a proposed development. In practice I expect a SIA to link activities and aspects associated with a development to be linked to potential impacts on the lives of and relationships between people.”
- 11- “Considering the potential social impacts of a proposed development with the aim of mitigating potential negative impacts and enhancing potential positive impacts.

According to NEMA the environment consists of the biophysical, social and economic environment and social impacts should therefore carry the same weight as biophysical and economic impacts. However, this does not happen in practice. SIA is a tool that can be used to further the consideration of social impacts of any new development.”

2. How does SIA in practice differ from in theory?

- 1- “Theory often presumes that you will have a long time to do your assessment. The steps in the process correlate with the theory. SIA theory is vast and changes quickly- one need to do a lot of reading to stay on top of the field. One needs to be flexible and creative because of the nature of the field- nothing is an absolute, and there are different schools and approaches, so it becomes a matter of choice and training.”
- 2- “In practice, SIA is one of the tools of the EIA regulations, which means that it is very much dependent on the integrity of the professional involved. This is particularly problematic for major development projects, where the IA should also consider the construction phase; for developments in small urban and rural areas, where minimal disruptions can cause great damage to the community; for projects that are proposed by the government, since there will be a real political interest in their realization and the SIA professional may be placed under great strains. In this last case, the problems between law and implementation are also evident, because the department, who should monitor the validity of the SIA before awarding a license, is in effect the one seeking the license.”
- 3- “There are always time and budget constraints, which sometimes make it difficult to conduct the SIA to the level of detail you (as SIA practitioner) think is necessary. Also, important information that may impact on the significance of social impacts is often not available, making it difficult to accurately predict impacts.”
- 4- “In practice one needs to be fixable and be able to apply theory in a manner that allows.”
- 5- “In theory, SIA is supposed to be a tool for enhancing to social sustainability and benefits of projects. In practice, however, it is often only a box-ticking exercise undertaken as part of the environmental authorization process.”
- 6- Did not answer
- 7- “Not much.”
- 8- “Management measures are not always easy to implement.”

- 9- "In many cases SIA is superficial and "lip service" with little real interaction from the I and AP's."
- 10- "Given limited exposure to SIA theory no response can be offered. I would however encourage SIA practitioners to employ a method of structure, conduct and present SIA studies and findings."
- 11- "Social Impacts are not considered as often as, an to the extent, it should and as is provided for in environmental legislation. If social impacts are considered it is often done by EAPs with natural science backgrounds and who lack an understanding of social issues. Officials reviewing applications are also not focused on the social impacts nearly as much as they are focused on the biophysical impacts of a proposed development, even though it should carry the same weight. It is often felt in practice that by addressing noise and dust nuisance, social impacts are assessed sufficiently."

3. Previous studies have found that public participation is often confused with SIA. Do you:

A- Strongly agree with statement	B- Slightly agree	C- Slightly Disagree	D- Strongly Disagree
5 of 11	6 of 11		

Reasons for their view:

- 1- "Communities are much better informed and many know about SIA and even ask for it. SA is unique in the sense that we have a strong legal division between SIA and PP- elsewhere it is often part of the same process, and in my practice I try and align as much as possible. I explain the difference between the processes to the people I interact with and some people seem to understand it."
- 2- "I agree with this statement and this causes problems in the EIA process itself, because the project proponent may use the information from the PPP (a phase clearly stated and regulated) to produce a SIA report. Again, the EIA practitioner should advise otherwise, but it is not always the case. This is also the case when conducting an EIA

with a SIA in areas where people are not really aware of either processes, and of their legal requirements.”

- 3- “I agree that PP and SIA are often confused- in the consulting engineering environment I work, when people hear ‘social’ they think it is everything that has to do with people. Just as there are specialists in SIA, there are specialists in PP. The average person isn’t a specialist in both and should thus not do both.”
- 4- “Many clients and other specialists believe that because of the social character and methodology of SIA it actually is part of the PP process.”
- 5- “This mistaken view is usually found among clients who have limited experience of SIA. EAPs and well-informed client usually do not make this mistake.”
- 6- “Often it seems to be the case that if the community is consulted then there is issues or concerns that are noted and no need for SIA is required. Obviously the 2 are related.”
- 7- “I believe that historically there was confusion between these disciplines and that both were frequently undertaken by the same specialists. But with the maturing of IEM in SA the objectives, deliverables and boundaries of the two tasks have become more clearly understood by all role-players. I believe that the EAP has a significant role to play in keeping these different roles focused on their objectives as it is he/she who usually defines their scope of work. If this is done and managed properly there should not be a problem.
- 8- “In reality there is often a strong overlap between these two aspects as they are interlinked.”
- 9- “As noted above-the interactions with I and AP’s is usually superficial and “lip service”. Thus the issue becomes that the input is either out of context not based on real knowledge or understanding of what the process and or project is about, and can be manipulated by not being assessed within the context of the wider development pattern area.”
- 10- “Even some SIA practitioners expect that a controversial development by default requires a SIA, with a significant or extended scope. This is not a logical explanation if SIA and public participation are viewed as two separate components which they are.”
- 11- “Public Participation is not the same as SIA, but information obtained during the public

participation process can also be used when conducting SIA (e.g. people's opinions about a proposed development, concerns people may express about a proposed development during public participation, etc.).

4. When looking at the new EIA regulations of 2010, and comparing it to the previous requirements for SIA, how do the new regulations differ from the previous?

- 1- "SIA is still not a legal requirement- I don't think this is that relevant- the MPRDA is much clearer on SIA. I don't think it need to be a legal requirement, it depends on the project."
- 2- "As a matter of fact, they do not. The 2010 regulations may pay lip service to the profession, but this is far from my acknowledging the importance of SIA in development."
- 3- "I wasn't aware that there are regulations for SIA, as far as I know. SIA's are not required by law, and is at the mercy of EIA practitioners (who decide whether to include an SIA in their EIA or not)."
- 4- "They may tighten up the requirements concerning SIA a little but are not specific enough in doing this, thus still allowing for incompetence in the field."
- 5- "Little substantive difference regarding SIA."
- 6- Did not answer.
- 7- "Content of report for specialists study is defied."
- 8- "Not sure, although there is emphasis on money to be spent, race and gender aspects (PDI) which I find extremely irritating as if it is not really part of the assessment but seems to be an underhand way of gathering economic information. It creates an impression that if your development doesn't include the right "ingredients" it will be rejected and not approved."
- 9- "To be honest I don't think the changes are really substantive, many are small changes that although given longer input periods and providing slightly more power in terms of the appeal process, are not really geared to adding true additional value

in terms of a SIA process. But then again my feeling is that the potential is present and always has been present in the EIA regulations, it is rather a case of needing more input in the form of meaningful, updated guideline information and possibly more flexibility in how interactions with the public occur.”

10- “No comment from an SIA perspective.”

11- “In my opinion it doesn’t really differ much where SIA or assessing social impacts are concerned. Information requirements for reports are the same. Public

12- “Participation requirements have changed slightly and I & AP’s are offered more opportunities to comment on proposed developments. Additional requirements for assessing social impacts have, however, not been included in the 2010 Regulations and there are no set guidelines for when a specialist SIA should be conducted as part of an application (e.g. for large infrastructure developments, etc.).”

5. There is still room for improvement. Do you:

A-Strongly agree with statement	B-Slightly Agree	C-Slightly Disagree	D-Strongly Disagree	E-Unsure
7 of 11	2 of 11	1 of 11		1 of 11

6. To what extent is SIA in practice an important assessment tool?

A-Very important	B-Moderately important	C-Important	D-Unimportant	E-Moderately unimportant	F-Useless
7 of 11	3 of 11	1 of 11			

7. <u>Indicate to what extent is SIA in practice effective?</u>			
A- Very effective	B- Moderately effective	C- Slightly effective	D- Not effective
8 of 11	2 of 11	1 of 11	

8. What impact does the effectiveness have on the value of SIA?

A- Major impact	B- Moderate impact	C- Little Impact	D- No impact	E- Did not answer
7 of 11	4 of 11			

9. What do you feel are the most important shortcomings of an SIA?

- 1- “The focus is too much on identification of impacts and too little on the effective management of impacts. The management of social impacts is a long term process and it is here that the money should be spent.”
- 2- “SIA is too reliant on the professional that conducts the assessment, it is not fully considered as integral part of an EIA (or a stand-alone practice where required), it is generally understood as contextual requirement, but not perceived as a major tool which can ‘make or break’ a project.”
- 3- “The fact that predictions are hardly ever tested upon completion of a project (predictions aren’t monitored to determine how accurate they were). The consequence is that we continue predicting impacts based on our frame of reference, and this frame of reference is never tested.”
- 4- “A lack of training from undergraduate level so that a clear career path is available at different levels in the practice. The insistence of many in trying to amalgamate SIA with Economic Impact Assessment in a Socio-economic Impact Assessment.”

- 5- “At the time an SIA is undertaken, project design is often insufficiently finalized to allow accurate prediction of social impacts. Insufficient follow-up to determine whether the impacts predicted in SIA’s actually occur, and whether recommended mitigation measures were implemented and were actually effective. Continued reliance on increasingly out-dated census data.”
- 6- Did not answer.
- 7- “Usually verbose lacking clearly implementable recommendations. Inability to clearly articulate the probable significant impacts of a proposed project on people and how those can be mitigated within the constraints of the mandate of the applicant.”
- 8- “Actual enforcement of the implementation of identified mitigation measures by responsible parties, be it regulators or contractors.
- 9- “Seen as an add-on nuisance process. Few practitioners with a real understanding or real ability to undertake such processes.”
- 10-“A) A lack of method, B) Insufficient thought and insight given to the “significance” in terms of social impacts.”
- 11- “The value that is attached to it by EAP’s, developers and authorities, and the extent to which it informs decision-making in practice.”

10. Currently SIA is an integrated part of an EIA. It should rather be a separate assessment. Do you:

A- Strongly agree with statement	B- Slightly Agree	C- Slightly Disagree with statement	D- Strongly Disagree
2 of 11	3 of 11	2 of 11	4 of 11

Reasons for their view:

- 1- "It really depends on the project and the issues around the project- if the issues are more social the emphasis will be on social aspects, especially in the mining industry the social aspects are very prominent. There are cases when SIA's are conducted as separate studies. SIA is also used outside the EIA process quite frequently, so I guess it depends from what angle you're looking at it."
- 2- "SIA should be a legal requirement for any development that currently requires an EIA, but also for developments that occur in a given locality with impacts on the community. Until it is a part of EIA, it will continue to be 'confused' with the PPP and not taken seriously by authorities and the private sector, albeit at their own disadvantage."
- 3- "I don't think SIA's should be a stand-alone assessment like an EIA- I do however think that EIA's should become ESIA's. Thus there will always be a social assessment and SIA will no longer be a specialist study that forms part of an EIA."
- 4- "There are often occasion when SIA has a standalone function."
- 5- "Social impacts are often the indirect or derived result of biophysical impacts. It is thus essential that SIA practitioners interact with these other specialists and lends a 'social perspective' to the assessment of these impacts. In order for impacts of projects to be meaningfully assessed, there should actually be GREATER integration between disciplines rather than less. Very often, the significance of environmental impacts can only be assessed on the basis of their socio-economic implications, and many socio-economic impacts are derived from changes in the biophysical environment brought about by the project."
- 6- "SIA is part of other specialist studies that comprises the EIA. It wouldn't make sense to have a separated SIA."
- 7- "The preferred alternatives from a social perspective are often contradictory to the biophysical ones. The intention of the EIA is to assess all components of the environment usually requiring some form of trade-offs between components in order to arrive at the best practical environmental option. It is only in an integrated process that this can be achieved."
- 8- "It would lead to more red tape and reporting and delay authorization of projects and

developments even further than already the case.”

9- “Separating the process will just make it be seen as more of an irritant. Rather the value of a well-run SIA process to both an EIA or town planning process should be teased out and integrated more fully into both. I for instance believe that WULA’s air pollution permits, etc. being separated makes the process be perceived as highly complex and enormous “just because”. Which becomes self-defeating to the wider planning process as a whole.”

10- “Additional processes will not render any one of them more effective. Separate Health Impact Assessment, Cumulative Effects Assessment, SIA etc. will only result in more bureaucracy, confusion of I and AP’s and even less effective decision-making. The challenge is to make EIA including all specialist studies more effective.”

11- “I feel that separate, specialist SIA’s should be required for more applications than is currently the case, but I don’t think it is reasonable to request a separate SIA for every application for environmental authorization that is submitted (because of the costs involved in conducting such a study as well as the already existing perception that EIA delays much needed development; requiring a separate SIA will reinforce that perception). I think it would on the one hand be good to have guidelines on when a separate SIA should be conducted and on the other hand if EAPs and officials were more aware of the importance of considering social impacts and including it more in reports as well as decisions.”

11. It appears that there are a lot of problems surrounding SIA. One of these problems is that there are not enough specialists in the social field. Do you:

A- Strongly agree with statement	B- Slightly Agree	C- Slightly Disagree with statement	D- Strongly Disagree	E- Did not answer
4 of 11	4 of 11	2 of 10		1 of 11

Reasons for their view:

- 1- "There is no training for SIA consultants in SA, nowhere to gain experience, no regulation, no professional body. There are not enough competent people doing SIA."
- 2- "This is a sort of Catch-22 situation, whereby there are not enough experts, because the profession is not clearly recognized, and the few professionals have to go and seek opportunities. The market is perhaps too green for SIA to be considered an important aspect of development. Furthermore, if the current professionals do not promote SIA by providing sound reports, the situation will not change."
- 3- "Being a specialist in SIA takes a number of years- it is something that comes with experience and not a degree."
- 4- "The training for SIA practitioners is limited and many practitioners do not have the correct background yet operate in the field."
- 5- "In my opinion the requirement for independence of the EAP is a bigger hurdle- it creates a barrier between the team predicting impacts and the team (the client's community relations, sustainability, etc. departments), thus preventing any real follow-through from SIA to operational-phase community relations. This requirement for EAP independence is not universal- in Australia, for instance, project proponents can do their own EIA's. I think the problem is not a shortage of social specialists per se, but a shortage of social specialists with strong academic backgrounds, solid research skills, good analytical abilities, writing skills and an ability to engage with diverse stakeholders. There seems to be a perception that "anyone" can do an SIA."
- 6- Did not answer.
- 7- "I can always find a social specialist when I need one."
- 8- "I know of several specialists in this field."
- 9- "The requirements and understanding of the stand points from which a social specialist should come are not clear. The functions and outcomes of a good SIA are not clear or well understood within the wider industry."
- 10- "There are not enough solid thinking specialists in the field."

11- “I think the fact that SIAs (or inputs from social scientists in cases where specialists studies are not required) are not required often enough by authorities is a bigger problem. If the necessary attention is given to this there might prove to be not enough specialist in this field.”

12. To what extent can someone that is more specialized in another field, truly understand and connect with social impacts and problems?

A-Very well	B-Moderately well	C-Well	D-Poorly	E-Very poorly	F-Useless
2 of 11	3 of 11	2 of 11	4 of 11		

13. What effect does the above have on the outcome of SIA?

A-Major effect	B-Moderate effect	C-Little effect	D-No effect	E-Unsure
4 of 11	5 of 11	1 of 11		1 of 11

14. From a specialist’s point of view, what is the goal of SIA in South Africa?

- 1-** “To mitigate the impacts of projects on the way people live, but it should be used as a tool for social development.”
- 2-** “SIA in SA seems to be a tool to ensure that any development project is ‘covered’ against popular protest.”

- 3-** “To prevent poor communities being ripped-off by developments.”
- 4-** “To provide a social perspective to the impact of various projects and policy decisions.”
- 5-** “Let’s be honest- SIA is and will probably remain just one of the ‘boxes to tick’ on the way to environmental authorization. Something that’s really needed in SA, is a real set of incentives for decision-makers to obtain, unbiased, rational information on the likely outcomes of their decisions and actions. At the moment, far too many decisions are informed by ideology and political rhetoric rather than by objective information. I have no idea what form such incentives should take, or whether it is even realistic to hope that they will ever be found. But it is only when decision-makers are required to make rational and informed decisions that SIA will come to fruition as a tool for building a better society. To identify ways in which project proponents can help to address the developmental challenges faced by the country- but in ways that do not force them into the role of surrogates for government.”
- 6-** Did not answer.
- 7-** “Contribute to sustainable development by bringing the social perspectives to the assessment.”
- 8-** “To ensure that social issues are understood or identified and appropriately addressed in new developments.”
- 9-** “To provide a meaningful context and consideration of issues with regards to social issues to so as to meet the socio-economic facet of the development consideration process, or at least that it is how it is written. Whether that aim is being met is a question open to a lot of discussion.”
- 10-** “SIA should contribute to provide direction to reaching the millennium development goals and improve the living and standard of well-being of South Africans.”
- 11-** “To have social issues inform decisions on whether new developments should be approved to the same extent that biophysical issues do. Also, to make a positive contribution to solving the many social problems South Africa has.”

15. How do you see the way forward for SIA in South Africa?

- 1-** “As a tool for social development with the focus on managing social impacts as opposed to just identifying it. We cannot afford not to use it as a tool for social development in a developing country such as South Africa.”
- 2-** “SIA should become a tool that developers and government uses in planning with a sustainable goal. Instead of being part of EIA, it should have its own legislation and own professional body: this would enable a full integration of existing processes, but also the understanding that SIA is not necessarily related to EIA. SIA is still generally perceived as a risk factor, particularly in reference to people’s rights entrenched in the South African Constitution. On the contrary, it should be perceived as a means to improve the social constraints this country faces and improve the socio-environmental quality of development.”
- 3-** “No idea. I don’t see anything significant changing in the next 5 to 10 years.”
- 4-** “For a group of SIA practitioners to consider the importance of guiding the SIA field.”
- 5-** “Greater integration between SIA and activities that take place after project approval- corporate social responsibility programmes, social monitoring, community relations, etc.”
- 6-** Did not answer.
- 7-** “SIA is not a pure science to which a neat formula can be applied. The causes of people’s circumstances and reactions to changes are complex and each project has to be assessed and approached individually processes have to be flexible to adapt to the requirements of each circumstance. The presentation of information and data also has a subjective component. I think that SIA should be contributing more to development planning on a strategic level. If the correct decisions are made on this level, and the correct policies and plans are in place, then the project level of SIA would become less complicated and more project and site specific. I think that South Africa is moving in that direction.”
- 8-** “I feel positive as it is already part of the legal requirements in NEMA.”
- 9-** “Clarify the aims of the process. Educate professionals linking into any form of development process on what the aim and value of the SIA process is. Make sure

usable guidelines are written to promote best practice and ensure that they are widely available.”

10-“The effectiveness and weaknesses of EIA have been pointed out over the past few years. SIA is intrinsically linked to EIA, and its effectiveness is linked to those of an EIA. This linkage to EIA does however not limit SIA practitioners to address weaknesses in SIA. Given the social challenges in South Africa, it is argued that SIA can play a significantly more valuable role as part of EIA if the quality of SIA can be improved substantially while initiatives are underway to make EIA more effective, simultaneous enhancement of SIA can only strengthen assessment.”

11- “I would like to see social considerations weighing more in the decision-making process, by requiring specialist studies more often than currently is the case, and also more input given by social scientists in the compiling of reports that form part of applications, as well as in decision-making on the authorities side.”

Appendix C

Template Review Package

Sub Category						Not Satisfactory/Poorly attempted just unsatisfactory because of omissions						
Review Area 1												
DESCRIPTION OF THE DEVELOPMENT, LOCAL ENVIRONMENT AND SOCIAL BASELINE CONDITIONS												
1.1	DESCRIPTION OF THE DEVELOPMENT AND LOCAL ENVIRONMENT											
1.1.1	Design and size of the development/project											
	Small: less than 1 hectare											
	Medium: 1-10 hectare											
	Large: more than 10 hectare											
1.1.2	Estimated duration of development/project phases											
	Construction phase											
	Operational phase											
	Decommissioning phase											
1.1.3	Indication of likely area to be affected by development											
	Description of direct environment to be affected											
	Map with location shown											
PRELIMINARY GRADE- REVIEW CATEGORY 1.1												
												N/A
1.2	SOCIAL BASELINE CONDITIONS											
1.2.1	Identification and description of important components of the affected environment											
	Disclosure of methods and investigation undertaken											
	Size and complexity in relation to assessment task											
	Uncertainty indicated											
1.2.2	Existing data sources searched and utilized											
	Local authorities											
	Specialists studies											
1.2.3	Data collected to determine social baseline conditions											
	Future state of environment											
1.2.4	Quantity of social baseline data											

	A- more than 20 sentences								
	B- 16-20 sentences								
	C- 6-15 sentences								
	D- 1-5 sentences								
	E- No sentences								
PRELIMINARY GRADE- REVIEW CATEGORY 1.2									

	SUMMARY OF PRELIMINARY GRADES- REVIEW AREA 1		A	B	C	D	E	F	N/A
1.1	DESCRIPTION OF THE DEVELOPMENT AND LOCAL ENVIRONMENT								
1.2	SOCIAL BASELINE CONDITIONS								
FINAL GRADE- REVIEW AREA 1									

	Review Area 2		A	B	C	D	E	F	N/A
IDENTIFICATION OF KEY IMPACTS; RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS; ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY; TIME DURATION AND PUBLIC PARTICIPATION									
2.1	TYPE OF SOCIAL KEY VARIABLES/IMPACTS IDENTIFIED								
2.1.1	Population impacts								
	Population change								
	Influx or out flux of temporary workers								
	Presence of seasonal residents								
	Relocation of individuals and families								
	Dissimilarity in age, gender, racial or ethnic composition								
2.1.2	Community/ Institutional Arrangements								
	Formation of attitudes toward the project								
	Interest group activity								
	Alteration in size and structure of local government								
	Presence of planning and zoning activity								
	Industrial diversification								
	Living/Family wage								
	Enhanced economic inequities								
	Change in employment equity and minority groups								
	Change in occupational opportunities								
2.1.3	Communities in transition								
	Presence of an outside agency								
	Inter-organizational cooperation								
	Introduction of new social classes								
	Change in the commercial/industrial focus of the area								
	Presence of weekend residents								
2.1.4	Individual and family level impacts								
	Disruption in daily living and movement patterns								

	Dissimilarity in religious and cultural practices								
	Alteration in family structure								
	Disruption in social networks								
	Perceptions of public health and safety								
	Change in leisure opportunities								
2.1.5	Community infrastructure needs								
	Change in community infrastructure								
	Land acquisition and disposal								
	Effects on known cultural, historical, sacred resources								
PRELIMINARY GRADE- REVIEW CATEGORY 2.1									

		A	B	C	D	E	F	N/A
2.2	RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS							
2.2.1	Comprehensiveness of social impacts identified							
2.2.2	Comprehensiveness of biophysical impacts identified							
PRELIMINARY GRADE- REVIEW CATEGORY 2.2								

		A	B	C	D	E	F	N/A
2.3	ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY							
2.3.1	Description of significance of impacts on affected community and society in general							
	Described							
	Distinguished not impact magnitude							
	Indication of: Degree to which the impact can be mitigated							
	: Degree to which the impact can be reversed							
	: Degree to which the impact may cause irreplaceable loss of							
	resources							
	Significance of impact remaining after mitigation is described							
2.3.2	Significance of impacts i.t.o. national and international values/goals							
	Assessed							
	Accounts taken of nature, duration, intensity, extent and probability of impacts in conjunction with national and local societal values/goals							
2.3.3	Justification of proposed method of assessing significance							
	Indication of methodology used							
	Choice of standards, assumptions and value systems							

	Contrary opinions summarized									
	PRELIMINARY GRADE- REVIEW CATEGORY 2.3									
			A	B	C	D	E	F	N/A	
2.4	TIME DURATION									
2.4.1	Expected duration of social impacts									
	Short term									
	Medium term									
	Long term									
	PRELIMINARY GRADE- REVIEW CATEGORY 2.4									

			A	B	C	D	E	F	N/A	
2.5	PUBLIC PARTICIPATION									
2.5.1	Public participation inputs on social impacts (Mark with √)									
	None									
	One input									
	Two inputs									
	More than two inputs									
	PRELIMINARY GRADE- REVIEW CATEGORY 2.5									

	SUMMARY OF PRELIMINARY GRADES- REVIEW AREA 2		A	B	C	D	E	F	N/A	
2.1	TYPE OF SOCIAL KEY VARIABLES/IMPACTS IDENTIFIED									
2.2	RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS									
2.3	ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY									
2.4	TIME DURATION									
2.5	PUBLIC PARTICIPATION									
	FINAL GRADE- REVIEW AREA 2									

	Review Area 3		A	B	C	D	E	F	N/A	
	ALTERNATIVES AND MITIGATION									
3.1	ALTERNATIVES: FEASIBLE ALTERNATIVES SHOULD BE CONSIDERED									
3.1.1	Consideration/description of alternative sites									
	Main social advantages									
	Main social disadvantages									
	Reasons for final choice									
	Social implications investigated and reported									
3.1.2	Consideration/description of alternative processes, designs and operating conditions									

	Social implications investigated and reported								
3.1.3	For unexpectedly severe adverse social impacts identified								
	Earlier rejected alternatives re-appraised								
3.1.4	Comparative assessment of all alternatives identified								
	PRELIMINARY GRADE- REVIEW CATEGORY 3.1								

		A	B	C	D	E	F	N/A
3.2	SCOPE AND EFFECTIVENESS OF MITIGATION MEASURES: ALL SIGNIFICANT ADVERSE SOCIAL IMPACTS SHOULD BE CONSIDERED FOR MITIGATION							
3.2.1	Consider mitigation of all significant adverse social impacts							
	Mitigation of all significant social impacts considered							
	Specific mitigation measures put forward							
	Unmitigated social impacts indicated and justified							
3.2.2	Mitigation measures considered should include							
	Modification of project							
	Alternative facilities							
	Pollution control							
3.2.3	Extent of effectiveness of mitigation when implemented							
	Expected effectiveness							
	Description of uncertainty, assumptions, gaps in knowledge							
	PRELIMINARY GRADE-REVIEW CATEGORY 3.2							

		A	B	C	D	E	F	N/A
3.3	COMMITMENT TO MITIGATION							
3.3.1	Clear record of commitment of developer to mitigation measures							
	Presented in report							
	Details of how mitigation measures will be implemented							
	Draft EMP must comply with regulations							
	Any specific information required by competent authority							
3.3.2	Monitoring arrangements should be proposed in draft EMP							
	Monitoring arrangements to correspond with scale and deviations from expected social impacts							
	Provisions to adjust mitigation measures							
	PRELIMINARY GRADE-REVIEW CATEGORY 3.3							

	SUMMARY OF PRELIMINARY GRADES- REVIEW AREA 3	A	B	C	D	E	F	N/A
3.1	ALTERNATIVES							
3.2	SCOPE AND EFFECTIVENESS OF MITIGATION MEASURES							
3.3	COMMITMENT TO MITIGATION							
	FINAL GRADE- REVIEW AREA 3							

	Review Area 4	A	B	C	D	E	F	N/A

COMMUNICATION OF RESULTS								
4.1	LAYOUT OF THE REPORT							
4.1.1	Introduction							
	Briefly describing the project							
	The aims of the environmental assessment							
	How aims are to be achieved							
4.1.2	Arrangement of information							
	Logically in sections/chapters							
	Whereabouts of important data signaled in a table of contents or index.							
4.1.3	Unless chapters are very short							
	Chapter summaries to outline main findings of each phase							
4.1.4	External sources							
	Original source must be acknowledged at that point in text and reference							
	Full reference should be included							
PRELIMINARY GRADE- REVIEW CATEGORY 4.1								

		A	B	C	D	E	F	N/A
4.2	PRESENTATION: INFORMATION SHOULD BE ACCESSIBLE TO THE NON-SPECIALIST							
4.2.1	Presentation of Information							
	Comprehensible to non specialist							
	Appropriate tables, graphs and other devices							
	Unnecessary technical language avoided							
	Unnecessary obscure language avoided							
4.2.2	Technical terms, acronyms, initials defined							
	When first used in text or in glossary							
4.2.3	Statement presented as an integrated whole							
	Summaries of data presented in separately appendices should be introduced in main body of text							
PRELIMINARY GRADE-REVIEW CATEGORY 4.2								

		A	B	C	D	E	F	N/A
4.3	EMPHASIS: INFORMATION SHOULD BE PRESENTED WITHOUT BIAS							
4.3.1	Prominence and emphasis to potentially severe social impacts							
	Potentially severe and adverse social impacts							
	Potentially substantially favorable social impacts							

4.3. 2	Statement must be unbiased								
	Should not lobby for any particular point of view								
	Adverse social impacts should not be disguised by euphemism or platitudes								
4.3. 3	Opinion as to whether the activity should/should not be authorized								
PRELIMINARY GRADE-REVIEW CATEGORY 4.3									

		A	B	C	D	E	F	N/A
4.4	NON-TECHNICAL SUMMARY: CLEARLY WRITTEN NON-TECHNICAL SUMMARY OF MAIN FINDINGS							
4.4. 1	Non-technical summary of main findings and conclusions							
	Potentially severe and adverse social impacts							
	Potentially substantially favorable social impacts							
	Technical terms, lists of data, detailed explanations, scientific reasoning should be avoided.							
4.4. 2	Summary must cover all main issues							
	Description of project and environment							
	Main mitigation measures to be undertaken							
	Description of significant residual social impacts							
	Methods by which data were obtained							
	Indication of confidence in methods to obtain data							
PRELIMINARY GRADE-REVIEW CATEGORY 4.4								

SUMMARY OF PRELIMINARY GRADES- REVIEW AREA 4		A	B	C	D	E	F	N/A
4.1	LAYOUT OF THE REPORT							
4.2	PRESENTATION: INFORMATION SHOULD BE ACCESSIBLE TO THE NON-SPECIALIST							
4.3	EMPHASIS: INFORMATION SHOULD BE PRESENTED WITHOUT BIAS							
4.4	NON-TECHNICAL SUMMARY: CLEARLY WRITTEN NON-TECHNICAL SUMMARY OF MAIN FINDINGS							
FINAL GRADE- REVIEW AREA 4								

SUMMARY OF ALL REVIEW AREAS								
1	DESCRIPTION OF THE DEVELOPMENT, LOCAL ENVIRONMENT AND SOCIAL BASELINE CONDITIONS							
2	IDENTIFICATION OF KEY IMPACTS; RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS; ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY; TIME DURATION AND PUBLIC PARTICIPATION							
3	ALTERNATIVES AND MITIGATION							
4	COMMUNICATION OF RESULTS							
FINAL GRADE REVIEW FOR EIA								

Appendix D

Descriptive SIA Review Package

The review package used for SIA report quality:

- 1. DESCRIPTION OF THE DEVELOPMENT, LOCAL ENVIRONMENT AND SOCIAL BASELINE CONDITIONS.**
- 1.1 Description of the development: the purpose(s) of the development should be described as should the physical characteristics, scale and design. On site land requirements of development and duration of each land use. Area and location likely to be affected by development proposal.**
 - 1.1.1 The design and size of the development should be described. Diagrams, plans or maps will be necessary for this purpose.
 - 1.1.2 The estimated duration of the construction phase, operational phase and, where appropriate, decommissioning phase should be given.
 - 1.1.3 The environment expected to be affected by the development should be indicated with the aid of a suitable map of the area.
- 1.2 Social baseline conditions: Description of affected environment as it is currently, and as it could be expected to develop if project were not to be proceed**
 - 1.2.1 The important components of the affected environments should be identified and described. The methods and investigations undertaken for this purpose should be disclosed and should be appropriate to the size and complexity of the assessment task. Uncertainty should be indicated.
 - 1.2.2 Existing data sources should have been searched and where relevant utilized, including local authority records and studies carried out by, or on behalf of, community/social agencies and/or special interest groups.
 - 1.2.3 Local land use plans and policies should be consulted and other data collected as necessary to assist in the determination of the “baseline” conditions, i.e. the probable future state of the social environment, in the absence of the project, taking into account natural fluctuations and human activities.

1.2.4 Quantity of social baseline data should be indicated according to specified amount of sentences.

2. IDENTIFICATION OF KEY IMPACTS; RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS; ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY; TIME DURATION AND PUBLIC PARTICIPATION

2.1 Identification of type of social key variables/impacts: Population impacts, Community/ Institutional Arrangements, Communities in transition, Individual and family level impacts, Community infrastructure needs.

2.1.1 A description of the population change, influx or out flux of temporary workers, presence of seasonal residents, relocation of individuals and families and the dissimilarity in age, gender, race and ethnic composition should be given. Direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project should be given.

2.1.2 The community or institutional arrangements should be identified/described. Arrangements such as: Formation of attitudes toward the project, interest group activities, alteration in size and structure of local government, presence of planning and zoning activities, industrial diversification, family wage, economic inequities that are enhancing, change in employment equity and in occupational opportunities.

2.1.3 Communities that are in transition should be identified, meaning that the presence of an outside agency, inter-organizational cooperation, the introduction of new social classes, change in the commercial/industrial focus of the area and the presence of weekend residents should be indicated.

2.1.4 The impact that involves individuals as well as families should be indicated.

2.1.5 The needs for community infrastructure as well as the effects on known cultural, historical and archaeological resources should be identified.

2.2 Relationship between social and biophysical impacts

2.2.1 The comprehensiveness of social impacts should be identified.

2.2.2 The comprehensiveness of biophysical impacts should be identified.

2.3 Estimation of expected significance of impacts for society.

2.3.1 There should be a description of the significance of impacts on affected community and society in general. The degree to which the impact can be mitigated, reversed and cause irreplaceable loss of resources should be indicated.

2.3.2 An assessment of the significance of the social impacts in terms of national and international standards/goals should be included.

2.3.3 The methodology used for assessing the significance should be indicated and justified, and opinions must be summarized.

2.4 Time duration.

2.4.1 The expected duration of social impacts should be identified. The duration should be indicated according to long-, short-, and medium term.

2.5 Public participation.

2.5.1 Identify how many public participation inputs on social impacts are given and how well it is done.

3. ALTERNATIVES AND MITIGATION

3.1 Alternatives: Feasible alternatives should be considered. These should be outlined, the social implications of each presented and the reasons for their rejection briefly discussed, particularly where the preferred project is likely to have significant adverse social impacts.

3.1.1 Alternative sites should be considered where these are practicable and available to the developer. The main social advantages and disadvantages of these should be discussed and the reasons for the final choice given.

3.1.2 Where available, alternative processes, designs and operating conditions should be considered and the social implications of these investigated and reported where the proposed project is likely to have significant adverse social impacts.

3.1.3 If unexpectedly severe adverse social impacts are identified during the course of the investigation, which are difficult to mitigate, alternatives rejected in the earlier planning phases should be re-appraised.

3.1.4 A description and comparative assessment of all alternatives identified during the environmental impact assessment process.

3.2 Scope and effectiveness of mitigation measures: All significant adverse social impacts should be considered for mitigation. Evidence should be presented to show that proposed mitigation measures will be effective when implemented.

3.2.1 The mitigation of all significant adverse social impacts should be considered and where practicable, specific mitigation measures should be put forward. Any residual or unmitigated social impacts should be indicated and justified. There should be an indication of extent to which social impacts could be addressed by the adoption of mitigation measures.

3.2.2 Mitigation methods considered should include modification of the project, compensation and the provision of alternative facilities as well as pollution control.

3.2.3 It should be clear to what extent the mitigation methods will be effective when implemented. Where the effectiveness is uncertain or depends on assumptions about operating procedures, climatic conditions, etc. data should be introduced to justify the acceptance of these assumptions. A clear description of uncertainty, assumptions, gaps in knowledge must be included.

3.3 Commitment to mitigation: Developers should be committed to and capable of carrying out the mitigation measures and should present plans of how they proposed to do so.

3.3.1 There should be a clear record of the commitment of the developer to the mitigation measures presented in the EIR. Details of how the mitigation measure will be implemented and function over the time span for which they are necessary should be given. The draft EMP must comply with regulations and must include specific information required by the competent authority.

3.3.2 Monitoring arrangements should be proposed to check the social impacts resulting from the implementation of the project and their conformity with the predictions

within the EIR. Provision should be made to adjust mitigation measures where unexpected adverse social impacts occur. The scale of the monitoring arrangements should correspond to the likely scale and significance of deviations from expected social impacts.

4. COMMUNICATION OF RESULTS

4.1 Layout of the report: the layout should enable the reader to find and assimilate data easily and quickly. External data sources should be acknowledged.

4.1.1 There should be an introduction briefly describing the project, the aims of the environmental assessment and how the aims are to be achieved.

4.1.2 Information should be logically arranged in sections or chapters and the whereabouts of important data be signalled in a table of contents or index.

4.1.3 Unless the chapters are very short, there should be chapter summaries outlining the main findings of each phase of the investigation.

4.1.4 Where data, conclusions or quality standards from external sources are introduced, the original source should be acknowledged at that point in the text. A full reference should be included either with the acknowledgement, at the bottom of the page or in a list of references.

4.2 Presentation: Presentation of the information should be accessible to the non-specialist

4.2.1 Information should be comprehensible to the non-specialist. Tables, graphs and other devices should be used as appropriate. Unnecessarily technical or obscure language should be avoided.

4.2.2 Technical terms, acronyms and initials should be defined, either when first introduced into the text or in a glossary. Important data should be presented and discussed in the main text.

4.2.3 The EIR should be presented as an integrated whole. Summaries of data presented in separately bound appendices should be introduced in the main body of the text.

4.3 Emphasis: Information should be represented without bias and receive the emphasis appropriate to its importance in the context of the assessment.

4.3.1 Emphasis should be given to potentially severe adverse, as well as potentially substantial favourable social impacts.

4.3.2 The report should be unbiased. It should not lobby for any particular point of view. Adverse social impacts should not be disguised by euphemisms or platitudes.

4.3.3 Opinion as to whether the activity should/should not be authorized.

4.4 Non-technical summary: Clearly written non-technical summary of main findings

4.4.1 There should be a non-technical summary of the main findings and conclusion of the study. Technical terms, lists of data and detailed explanations of scientific reasoning should be avoided.

4.4.2 The summary should cover all main issues discussed, a brief description of the project and the environment, an account of the main mitigation measures to be undertaken, and any significant residual impacts. A brief explanation of the methods by which these data were obtained and an indication of the confidence which can be placed in them should be included.

Appendix E

List of EIAs used for review process

ECA:

YEAR	NUMBER	PROJECT DESCRIPTION
2007	EE 757	Proposed upgrade to Berths 601, 602, 603, 604 and associated deepening of the Ben Schoeman Dock.
2006	EE 740	Proposed Garona-Aries 400kv Transmission Power line and upgrade of existing substation.
2005	EE 412	Proposed development at Rooisand Nature Reserve, Kleinmond.
2004	12/12/20/472	Development of Knysna River Reserve.
2002	12/12/20/8	Development of Mdluli Safari Reserve.
2002	EE 381	Proposed nine 132KV Eskom powerlines between grassridge substation and Coega Industrial Development Zone.
2002	EE 364	Proposed establishment of a transmission line between Poseidon substation and Grassridge substation.
2002	EE 288	Proposed rehabilitation and upgrading of the N17 Toll road from Springs to Ermelo.
2000	EE 216	Proposed development of The Village Green, Durban by Tsogo Sun.
1998	EE 106	Proposed development of Mdluli Lodge.

NEMA

YEAR	NUMBER	PROJECT DESCRIPTION
2008	NE 892	Proposed Small craft harbour and marina development, Shelly Point.
2008	NE 1041	Proposed Smokey Hill project for supplying electricity.
2008	NE 863	Proposed ACSA landside development precinct 3, Cape Town International Airport.
2008	NE 1100	Proposed installation of SEA cable system in Kwazulu-Natal.
2008	NE 976	Proposed construction of a new sub-station and a new sub-transmission power line.
2008	NE 874	Proposed construction of the new crossing loop (7A) on the iron ore line between Kanakies and De Kop.
2008	12/12/20/610/7/9	Proposed construction of a sewerage purification plant in Golden Gate Highlands National Park.
2007	NE 968	Proposed construction of Spitskop-Phoko powerlines project.
2007	NE 900	Proposed wolf power line in the Steelpoort area.
2007	NE 858	Proposed pumped storage power generation facility for Eskom.
2007	NE 772	Proposed installation of 23m ³ underground diesel tank.
2007	NE 842	Construction of a forensic science laboratory.
2007	NE 890	Proposed development of the Ibhuesi gas field and associated infrastructure, West Coast, South Africa.

Appendix F

Raw data for ECA from the review process

Sub Category	DESCRIPTION OF THE DEVELOPMENT, LOCAL ENVIRONMENT AND SOCIAL BASELINE CONDITIONS				D	E		
1.1	1.1. DESCRIPTION OF THE DEVELOPMENT AND LOCAL ENVIRONMENT	1	1	7	1	0	0	0
1.1.1	1.1.1. Design and size of the development/project	4	3	3	0	0	0	0
1.1.2	1.1.2. Estimated duration of development/project phases	0	2	0	1	2	5	0
1.1.3	1.1.3. Indication of likely area to be affected by development	6	3	1	0	0	0	0

		A	B	C	D	E	F	N / A
1.2	1.2. SOCIAL BASELINE CONDITIONS	0	3	3	3	1	0	0
1.2.1	Identification and description of important components of the affected environment	0	2	5	3	0	0	0
1.2.2	Existing data sources searched and utilized	2	1	6	1	0	0	0
1.2.3	Data collected to determine social baseline conditions	0	3	4	2	0	1	0
1.2.4	Quantity of social baseline data	1	2	4	1	1	1	0

	Review Area 2	A	B	C	D	E	F	N / A
IDENTIFICATION OF KEY IMPACTS; RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS; ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY; TIME DURATION AND PUBLIC PARTICIPATION								
2.1	TYPE OF SOCIAL KEY VARIABLES/IMPACTS IDENTIFIED	0	2	2	3	0	3	0
2.1.1	Population impacts	0	2	4	1	2	1	0
2.1.2	Community/ Institutional Arrangements	0	2	2	3	0	2	1
2.1.3	Communities in transition	0	1	1	4	0	3	1
2.1.4	Individual and family level impacts	0	2	2	3	0	3	0
2.1.5	Community infrastructure needs	0	2	2	2	1	3	0

		A	B	C	D	E	F	N / A

2.2	RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS	0	3	2	2	2	1	0
2.2.1	Comprehensiveness of social impacts identified	0	3	2	0	2	3	0
2.2.2	Comprehensiveness of biophysical impacts identified	0	4	3	2	1	0	0

		A	B	C	D	E	F	N / A
2.3	ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY	0	1	3	1	4	1	0
2.3.1	Description of significance of impacts on affected community and society in general	0	1	3	2	2	1	0
2.3.2	Significance of impacts i.t.o. national and international values/goals	0	1	2	3	3	1	0
2.3.3	Justification of proposed method of assessing significance	0	1	4	0	4	1	0

		A	B	C	D	E	F	N / A
2.4	TIME DURATION	0	3	1	2	0	4	0
2.4.1	Expected duration of social impacts	0	3	1	2	0	4	0

		A	B	C	D	E	F	N / A
2.5	PUBLIC PARTICIPATION	0	3	5	0	0	2	0
2.5.1	Public participation inputs on social impacts (Mark with ✓)	0	3	5	0	0	2	0

		A	B	C	D	E	F	N / A
Review Area 3								
ALTERNATIVES AND MITIGATION								
3.1	ALTERNATIVES: FEASIBLE ALTERNATIVES SHOULD BE CONSIDERED	0	1	3	1	2	3	0
3.1.1	Consideration/description of alternative sites	0	1	3	1	2	3	0
3.1.2	Consideration/description of alternative processes, designs and operating conditions	0	2	2	1	2	3	0
3.1.3	For unexpectedly severe adverse social impacts identified	0	0	4	1	1	4	0
3.1.4	Comparative assessment of all alternatives identified	0	1	3	1	1	4	0

		A	B	C	D	E	F	N / A
3.2	SCOPE AND EFFECTIVENESS OF MITIGATION MEASURES: ALL SIGNIFICANT ADVERSE SOCIAL IMPACTS SHOULD BE	0	1	2	3	2	2	0

CONSIDERED FOR MITIGATION								
3.2.1	Consider mitigation of all significant adverse social impacts	0	2	1	2	2	3	0
3.2.2	Mitigation measures considered should include	0	1	4	2	2	1	0
3.2.3	Extent of effectiveness of mitigation when implemented	0	1	2	3	1	3	0

		A	B	C	D	E	F	N / A
3.3	COMMITMENT TO MITIGATION	0	0	5	1	2	2	0
3.3.1	Clear record of commitment of developer to mitigation measures	0	0	5	1	2	2	0
3.3.2	Monitoring arrangements should be proposed in draft EMP	0	0	5	1	2	2	0

Review Area 4		A	B	C	D	E	F	N / A
COMMUNICATION OF RESULTS								
4.1	LAYOUT OF THE REPORT	1	3	4	2	0	0	0
4.1.1	Introduction	2	3	3	2	0	0	0
4.1.2	Arrangement of information	3	3	2	2	0	0	0
4.1.3	Unless chapters are very short	1	3	4	2	0	0	0
4.1.4	External sources	1	3	3	2	1	0	0

		A	B	C	D	E	F	N / A
4.2	PRESENTATION: INFORMATION SHOULD BE ACCESSIBLE TO THE NON-SPECIALIST	3	4	3	0	0	0	0
4.2.1	Presentation of Information	3	5	2	0	0	0	0
4.2.2	Technical terms, acronyms, initials defined	3	4	2	1	0	0	0
4.2.3	Statement presented as an integrated whole	2	4	4	0	0	0	0

		A	B	C	D	E	F	N / A
4.3	EMPHASIS: INFORMATION SHOULD BE PRESENTED WITHOUT BIAS	0	2	4	3	1	0	0
4.3.1	Prominence and emphasis to potentially severe social impacts	0	3	3	0	1	2	0
4.3.2	Statement must be unbiased	0	2	5	3	0	0	0

2								
4.3. 3	Opinion as to whether the activity should/should not be authorized	0	1	3	5	1	0	0

		A	B	C	D	E	F	N / A
4.4	NON-TECHNICAL SUMMARY: CLEARLY WRITTEN NON-TECHNICAL SUMMARY OF MAIN FINDINGS	0	2	3	5	0	0	0
4.4. 1	Non-technical summary of main findings and conclusions	0	3	1	3	1	1	0
4.4. 2	Summary must cover all main issues	1	2	3	3	1	0	0

SUMMARY OF ALL REVIEW AREAS		A	B	C	D	E	F	N / A
1	DESCRIPTION OF THE DEVELOPMENT, LOCAL ENVIRONMENT AND SOCIAL BASELINE CONDITIONS	0	3	4	3	0	0	0
2	IDENTIFICATION OF KEY IMPACTS; RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS; ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY; TIME DURATION AND PUBLIC PARTICIPATION	0	2	2	2	4	0	0
3	ALTERNATIVES AND MITIGATION	0	1	3	2	2	2	0
4	COMMUNICATION OF RESULTS	0	2	6	2	0	0	0
	FINAL GRADE REVIEW FOR EIA	0	2	2	5	1	0	0

Raw data for NEMA from the review process

Sub Category					D	E		
DESCRIPTION OF THE DEVELOPMENT, LOCAL ENVIRONMENT AND SOCIAL BASELINE CONDITIONS								
1.1	DESCRIPTION OF THE DEVELOPMENT AND LOCAL ENVIRONMENT	1	4	5	3	0	0	0
1.1. 1	Design and size of the development/project	3	3	7	0	0	0	0
1.1. 2	Estimated duration of development/project phases	0	2	3	2	1	5	0
1.1. 3	Indication of likely area to be affected by development	6	5	2	0	0	0	0

		A	B	C	D	E	F	N/A
1.2	SOCIAL BASELINE CONDITIONS	1	1	5	6	0	0	0
1.2.1	Identification and description of important components of the affected environment	2	1	5	4	1	0	0
1.2.2	Existing data sources searched and utilized	3	2	5	3	0	0	0
1.2.3	Data collected to determine social baseline conditions	1	0	9	3	0	0	0
1.2.4	Quantity of social baseline data	2	0	4	5	1	1	0

	Review Area 2	A	B	C	D	E	F	N/A
IDENTIFICATION OF KEY IMPACTS; RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS; ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY; TIME DURATION AND PUBLIC PARTICIPATION								
2.1	TYPE OF SOCIAL KEY VARIABLES/IMPACTS IDENTIFIED	0	1	4	3	3	2	0
2.1.1	Population impacts	0	3	4	1	2	1	2
2.1.2	Community/ Institutional Arrangements	0	1	5	0	3	2	2
2.1.3	Communities in transition	0	0	4	1	2	1	5
2.1.4	Individual and family level impacts	1	0	5	1	2	2	2
2.1.5	Community infrastructure needs	0	2	3	3	1	2	2

		A	B	C	D	E	F	N/A
2.2	RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS	1	1	7	1	3	0	0
2.2.1	Comprehensiveness of social impacts identified	1	2	5	1	3	1	0
2.2.2	Comprehensiveness of biophysical impacts identified	2	1	7	1	2	0	0

		A	B	C	D	E	F	N/A
2.3	ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY	0	2	5	1	2	3	0
2.3.1	Description of significance of impacts on affected community and society in general	1	1	5	1	1	3	1
2.3.2	Significance of impacts i.t.o. national and international values/goals	0	3	3	2	1	3	1
2.3.3	Justification of proposed method of assessing significance	0	2	5	0	3	3	0

		A	B	C	D	E	F	N/A
2.4	TIME DURATION	4	2	2	0	2	1	2
2.4.1	Expected duration of social impacts	4	2					

		A	B	C	D	E	F	N/A
2.5	PUBLIC PARTICIPATION	1	1	6	1	2	2	0
2.5.1	Public participation inputs on social impacts (Mark with ✓)	1	1	6	1	2	2	0

Review Area 3		A	B	C	D	E	F	N/A
ALTERNATIVES AND MITIGATION								
3.1	ALTERNATIVES: FEASIBLE ALTERNATIVES SHOULD BE CONSIDERED	0	2	3	2	4	2	0
3.1.1	Consideration/description of alternative sites	0	2	5	1	4	1	0
3.1.2	Consideration/description of alternative processes, designs and operating conditions	1	1	3	2	3	3	0
3.1.3	For unexpectedly severe adverse social impacts identified	0	1	3	2	4	3	0
3.1.4	Comparative assessment of all alternatives identified	0	2	3	3	4	1	0

		A	B	C	D	E	F	N/A
3.2	SCOPE AND EFFECTIVENESS OF MITIGATION MEASURES: ALL SIGNIFICANT ADVERSE SOCIAL IMPACTS SHOULD BE CONSIDERED FOR MITIGATION	1	1	4	1	3	3	0
3.2.1	Consider mitigation of all significant adverse social impacts	1	1	4	1	1	5	0
3.2.2	Mitigation measures considered should include	1	2	3	1	6	0	0
3.2.3	Extent of effectiveness of mitigation when implemented	1	1	3	2	3	3	0

		A	B	C	D	E	F	N/A
3.3	COMMITMENT TO MITIGATION	0	2	3	2	3	3	0
3.3.1	Clear record of commitment of developer to mitigation measures	0	2	3	1	4	3	0
3.3.2	Monitoring arrangements should be proposed in draft EMP	0	1	4	2	1	5	0

Review Area 4		A	B	C	D	E	F	N/A
COMMUNICATION OF RESULTS								

4.1	LAYOUT OF THE REPORT	3	4	5	1	0	0	0
4.1.1	Introduction	3	5	4	1	0	0	0
4.1.2	Arrangement of information	4	6	3	0	0	0	0
4.1.3	Unless chapters are very short	3	3	3	1	1	0	2
4.1.4	External sources	4	3	5	0	0	1	0

		A	B	C	D	E	F	N/A
4.2	PRESENTATION: INFORMATION SHOULD BE ACCESSIBLE TO THE NON-SPECIALIST	4	7	2	0	0	0	0
4.2.1	Presentation of Information	6	6	1	0	0	0	0
4.2.2	Technical terms, acronyms, initials defined	6	3	3	1	0	0	0
4.2.3	Statement presented as an integrated whole	2	7	4	0	0	0	0

		A	B	C	D	E	F	N/A
4.3	EMPHASIS: INFORMATION SHOULD BE PRESENTED WITHOUT BIAS	0	3	5	4	1	0	0
4.3.1	Prominence and emphasis to potentially severe social impacts	0	3	3	3	3	1	0
4.3.2	Statement must be unbiased	0	4	6	2	1	0	0
4.3.3	Opinion as to whether the activity should/should not be authorized	1	1	6	4	1	0	0

		A	B	C	D	E	F	N/A
4.4	NON-TECHNICAL SUMMARY: CLEARLY WRITTEN NON-TECHNICAL SUMMARY OF MAIN FINDINGS	1	2	6	4	0	0	0
4.4.1	Non-technical summary of main findings and conclusions	1	2	3	4	3	0	0
4.4.2	Summary must cover all main issues	2	4	3	3	1	0	0

SUMMARY OF ALL REVIEW AREAS		A	B	C	D	E	F	N/A
1	DESCRIPTION OF THE DEVELOPMENT, LOCAL ENVIRONMENT AND SOCIAL BASELINE CONDITIONS	1	1	7	4	0	0	0
2	IDENTIFICATION OF KEY IMPACTS; RELATIONSHIP BETWEEN SOCIAL AND BIOPHYSICAL IMPACTS; ESTIMATION OF EXPECTED SIGNIFICANCE OF IMPACTS FOR SOCIETY; TIME DURATION AND PUBLIC PARTICIPATION	1	0	6	1	4	1	

3	ALTERNATIVES AND MITIGATION	0	2	5	0	4	2	
4	COMMUNICATION OF RESULTS	0	6	4	3	0	0	0
	FINAL GRADE REVIEW FOR EIA	0	2	5	6	0	0	0