

**Social Impact Assessment: the status of practice
in the North West Province of South Africa**

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EXPRESSION OF THANKS

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- The School for Environmental Sciences and Development, Potchefstroom Campus, for teaching an old dog new tricks.
- My wife and children, for constant support and love.

This study is dedicated to my beloved Therina.

1 Corinthians 13:2

“I may have the gift of inspired preaching; I may have all knowledge and understand all secrets; I may have all the faith needed to move mountains – but if I have no love, I am nothing.”

Good News Bible – Today's English Version, Third South African edition, Bible Society of South Africa, 1993.

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ABSTRACT

Key words

Social Impact Assessment (SIA), Environmental Impact Assessment (EIA), South Africa, North West Province.

There is no doubt that the assessment of social impacts is as important, in some cases even more important, than the assessment of biophysical and economic impacts of development projects. Nonetheless, social impact assessment (SIA) has remained an “orphan” in the broader environmental impact assessment (EIA) context, both internationally and in South Africa, and is often neglected or treated as a less important aspect of an EIA.

It was the aim of this study to measure perceptions of relative neglect of SIA in South Africa against the theory and practice of SIA as reflected in the literature. The basic hypothesis was that, whereas the theory and practice of SIA has reached a sophisticated level in the developed world, the practice of SIA in South Africa is not yet on a sound footing and that it does not receive the professional attention it deserves in a country beset by enormous social challenges. Thus the research problem was whether SIA is practiced at a satisfactory level of proficiency in South Africa. Social aspects of impact assessment in the North West Province of South Africa were investigated, with the aim to identify shortcomings and their possible causes and to make recommendations for improvement.

The article format was used, and the main section of the study comprises two articles. The first article, a theoretical perspective based on a literature study, is a critical evaluation of SIA as part of the EIA process in South Africa against the background of international guidelines and best practices. The article includes sections on the historical background of the development of SIA in South Africa, the legal status and requirements of SIA in the country, and a critical evaluation of SIA regulation in South Africa. It was found that the persistent problems of SIA practice, experienced in other parts of the world, are also evident in South Africa. Apart from institutional, financial and professional constraints, there are also serious problems associated with approach and methods.

The second article is an evaluation of and recommendations for the improvement of the practice of SIA in the North West Province. An empirical study of 26 EIAs, performed in the province between 1999 and 2002, was done. It was established that in terms of social baseline data, the identification of significant social impacts, specialist studies, public participation, recommended mitigation measures, and the attention paid to social impacts in records of decision (RODs) SIA practice in the North West Province is far from satisfactory. Apathy towards social impacts is associated with a general lack of SIA expertise.

The following recommendations are made in the study to improve the level of SIA practice: a system of mandatory registration of SIA practitioners should be introduced; specialized SIA training programmes for SIA practitioners and officials should be developed and accredited; SIA specialists should be used to assess significant social impacts identified in EIAs; a policy framework and code of ethics for SIA practice should be developed; methodological guidelines for SIA should be supplied in or as a supplement to the new EIA guidelines; and the public participation process should be redesigned.

OPSOMMING

Sleutelwoorde

Sosiale Impakassessering (SIA), Omgewingsimpakassessering (EIA), Suid-Afrika, Noordwes-Provinsie

Ongetwyfeld is die assessering van sosiale impakte net so belangrik, in sekere gevalle selfs belangriker, as die assessering van biofisiese en ekonomiese impakte van ontwikkelingsprojekte. Tog het sosiale impakassessering (SIA) internasionaal en in Suid-Afrika 'n "weeskind" gebly in die breër konteks van omgewingsimpakassessering (EIA), en word dit dikwels afgeskeep of hanteer as 'n minder belangrike aspek van 'n EIA.

Dit was die oogmerk van hierdie studie om persepsies oor die relatiewe afskeping van SIA in Suid-Afrika te meet aan die teorie en praktyk van SIA, soos weerspieël in die literatuur. Die basiese hipotese was dat, hoewel die teorie en praktyk van SIA 'n gesofistikeerde vlak in die ontwikkelde wêreld bereik het, die praktyk van SIA in Suid-Afrika nog nie op 'n gesonde grondslag is nie en nie die professionele aandag kry wat dit verdien in 'n land met enorme sosiale uitdagings nie. Dus was die navorsingsprobleem of SIA op 'n bevredigende vlak van doeltreffendheid in Suid-Afrika beoefen word. Sosiale aspekte van impakassessering in die Noordwes-Provinsie van Suid-Afrika is ondersoek, met die doel om gebreke en hulle moontlike oorsake te identifiseer en aanbevelings te doen vir verbetering.

Die artikelformaat is gebruik en die hoofdeel van die teks bestaan uit twee artikels. In die eerste artikel, 'n teoretiese perspektief gebaseer op 'n literatuurstudie, is 'n kritiese beoordeling gedoen van SIA as deel van die EIA-proses in Suid-Afrika, teen die agtergrond van internasionale riglyne en beste praktyke. Die artikel bestaan uit afdelings oor die historiese ontwikkeling van SIA in Suid-Afrika, die wetlike status van en vereistes vir SIA in die land, en 'n kritiese beoordeling van SIA-regulering. Daar is vasgestel dat die knaende probleme van SIA-praktyk, wat in ander dele van die wêreld ondervind word, ook in Suid-Afrika teenwoordig is. Behalwe institusionele, finansiële en professionele beperkings, is daar ook ernstige probleme rondom benadering en metodes.

Die tweede artikel handel oor 'n beoordeling van en aanbevelings vir die verbetering van SIA-praktyk in die Noordwes-Provinsie. 'n Empiriese studie is onderneem van 26 EIA's, wat tussen 1999 en 2002 in die provinsie uitgevoer is. Daar is vasgestel dat, in terme van basiese sosiale data, die identifisering van betekenisvolle sosiale impakte, spesialisstudies, openbare deelname, aanbevole verligtingsmaatreëls, en die aandag wat in rekords van besluite aan sosiale impakte gegee word, SIA-praktyk in die Noordwes-Provinsie geensins bevredigend is nie. Apatie teenoor sosiale impakte hang saam met 'n algemene tekort aan SIA-kundigheid.

In die studie word die volgende aanbevelings gedoen om die vlak van SIA-praktyk te verhoog: 'n stelsel van verpligte registrasie van SIA-praktisyns behoort ingevoer te word; gespesialiseerde SIA-opleidingsprogramme vir praktisyns en amptenare moet ontwikkel en geakkrediteer word; SIA-spesialiste behoort gebruik te word om betekenisvolle sosiale impakte, wat in EIA's geïdentifiseer word, te assesseer; 'n beleidsraamwerk en etiese kode vir SIA-praktyk behoort ontwikkel te word; metodologiese riglyne vir SIA behoort in die nuwe EIA-regulasies, of as 'n byvoegsel daartoe, verskaf te word; en die proses van openbare deelname behoort herontwerp te word.

PREFACE

The article format is used for this dissertation and the text consists of the following sections:

- Chapter 1: Introduction.

This is an adapted version of the original research proposal.

- Chapter 2: A critical evaluation of Social Impact Assessment (SIA) as part of the Environmental Impact Assessment (EIA) process in South Africa against the background of international guidelines and best practices (Article 1).

This article will, after the examination process of the dissertation has been completed, be submitted to *Environmental Impact Assessment Review*, with the student and supervisor indicated as co-authors. The initial research was done and the first draft written by the student. Recommendations by the supervisor were then, as in any ordinary dissertation, followed up to finalise the text.

- Chapter 3: Evaluation of and recommendations for the improvement of the practice of SIA in the North West Province, South Africa (Article 2).

This article will, after the examination process of the dissertation has been completed, be submitted to *Journal of Environmental Planning and Management*, with the student and supervisor indicated as co-authors. The initial research was done and the first draft written by the student. Recommendations by the supervisor were then, as in any ordinary dissertation, followed up to finalise the text.

For both articles potential journals for publication have thus been targeted. The guidelines for authors of these journals are supplied at the beginning of chapters 2 and 3.

Source references are supplied at the end of chapters 1, 2 and 3.

- Chapter 4: Concluding remarks.
- Appendices

Appendix 1: List of EIAs used for empirical study.

Appendix 2: Collation sheet used for empirical study.

CHAPTER 1: INTRODUCTION

1. Problem statement and necessity of research

From the Western socio-political movements of the 1950s and 1960s emerged greater concern over the real and potential impacts of development projects on the economy, ecology and human society. This was the crucible which produced the concept of sustainable development (SD). Both environmental impact assessment (EIA) and social impact assessment (SIA) had their common origins in this era (Carley and Bustelo, 1984: 151) and have since then developed in tandem. EIA was first introduced in the USA as a result of the National Environmental Policy Act of 1969 (NEPA). The practice of EIA spread from America and Europe to developed countries in other parts of the world. It commenced later in developing countries. In most of Africa EIAs have been conducted mainly by donor and multilateral agencies until quite recently.

Within the broad context of EIA, SIA has evolved as a specific type of impact assessment, which features increasingly prominently in development projects, particularly in interventions that are characterised by a participatory approach. Advances in basic social research have substantially enhanced the database, practice and potentialities of SIA (Becker, 1997: 47, 48). Its historical development has been well documented (for a longer term historical perspective, see Becker, 1997: 22-51, and for a shorter timespan SIA history see Taylor, Bryan and Goodrich, 2004: 1-12; Burdge, 2004a: 4-9; Burdge, 2004b: 11-18; Barrow, 2000: 9-14). In recent times the literature on SIA has expanded tremendously and a number of standard works have been published (see e.g. Taylor, Bryan and Goodrich, 2004; Burdge and Vanclay, 1995; Becker, 1997; Barrow, 2000). SIA typologies have been compiled (Becker, 1997: 17-19, 118-141), methodologies have been refined (Finsterbusch and Wolf, 1977/1981; Finsterbusch, Llewellyn and Wolf, 1983; Wildman, 1990; Becker, 1997: 52-117), guidelines and principles for SIA have been developed (Porter, Rossini, Carpenter and Roper, 1980; Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 1994/2003; International Association for Impact Assessment, 2003; Burdge, 2004b; Barrow, 2000: 8-9, 10), and conceptual models of SIA have been designed (Burdge, 2004a; Becker, 1997: 63-67; Vanclay, 2002).

What exactly are social impacts and Social Impact Assessment? Barrow (2000: 2) defines social impact(s) as “a significant or lasting change in people’s lives brought about by a given action or actions”. The definition in the *Guidelines and Principles For Social Impact Assessment* prepared by the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994), also cited by Burdge (2004b: 1), refers to “changes to individuals and communities due to a proposed action that alters the day-to-day way in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society”. There are many categories of social impact, e.g. demographic, institutional, relocation, community cohesion, lifestyle, well-being and beliefs. Economic and health impacts are often not treated as social impacts within an SIA, because separate assessment processes have been developed for them.

Impact assessment in general refers to the process of identifying the future consequences of a current or proposed action (Becker, 1997: 2). Social impact assessment (SIA), as a major sub-field of impact assessment, focuses on demographic, social and in some cases also economic aspects, as distinct from biophysical aspects, in order to give social impacts proper attention in impact assessment. When SIA emerged as a new activity in the 1970s definitions were extremely broad to cover almost anything not covered in other types of impact assessment (Carley and Bustelo, 1984: 3). In the mid-eighties Freudenburg (1986: 452) indicated that SIA “refers to *assessing* (as in measuring and summarizing) a broad range of *impacts* (or effects, or consequences) that are likely to be experienced by an equally broad range of *social groups* as a result of some course of action”. With time the field has been narrowed down somewhat. The Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (2003) defines SIA in terms of “efforts to assess or estimate, in advance, the social consequences that are likely to follow from specific policy actions (including programs, and the adoption of new policies), and specific government actions (including buildings, large projects and leasing large tracts of land for resource extraction)”. SIA is defined by Becker (1997: 2) as “the process of identifying the future consequences of a current or proposed action which are related to individuals, organizations and social macro-systems”. In a similar vein Taylor, Bryan and Goodrich (2004: 24) define it as “a process for managing social change arising from projects, policies and programmes”. Burdge (2004b: 1) defines SIA as “a sub-field of the social sciences that is developing a

knowledge base to provide a systematic appraisal in advance of the impacts on the day-to-day quality of life of persons and communities whose environment is affected by a proposed project, plan or policy change.” Barrow (2000: 2, 4) interprets SIA to be systematic, iterative, ideally ex-ante assessment of social impacts. Its purpose is to answer the following question: “Will there be a measurable difference in the quality of life in the community as a result of the proposed action?” He emphasizes that SIA should not focus only on negative, but also on positive impacts. Vanclay (2003: 5) states: “Social Impact Assessment includes the processes of analyzing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions.”

What is the value of SIA? SIA is important, because it aims to help individuals, communities, as well as government and private sector organisations to understand and be able to anticipate the possible social consequences on human populations and communities of proposed project development or policy changes. SIA is done as part of the planning process and alerts the planner and the project proponent to the likelihood of social impacts. In the same way as other types of impacts social impacts have to be pointed out and measured in order to be understood and communicated to the impacted population and decision-makers. SIA should provide a realistic appraisal of possible social ramifications and suggestions for project alternatives and possible mitigation measures (Burdge, 2004b: 1-2). There is no doubt that the assessment of social impacts is as important, in some cases even more important, than the assessment of ecological and economic impacts of development projects. In a number of developed countries SIA is compulsory with regard to specified government actions. Funding agencies such as the World Bank also require policy-oriented research, including SIA, for large projects in developing countries (Becker, 1997: 51).

EIA and SIA have developed in tandem. In South Africa, EIA was practiced on a non-mandatory basis as part of integrated environmental management (IEM) from the mid-1970s. In terms of the Environment Conservation Act (ECA - Act no. 73 of 1989) EIA became a legal requirement for a wide range of projects in September 1997. EIA regulations were published (Department of Environmental Affairs and Tourism, 1998), which listed the categories of activities that require EIA in South Africa and provided a

detailed description of the EIA process. The competent authorities for administration of EIA are the nine provincial departments of environmental affairs, and for certain projects the national Department of Environmental Affairs and Tourism. EIAs for mining activities are required in terms of a section of the Mineral and Petroleum Resources Development Act, Act no. 28 of 2002 (see Republic of South Africa, 2004), and in this case the Department of Minerals and Energy is the competent authority. The National Environmental Management Act (NEMA – Act no. 107 of 1998), promulgated after EIA had become mandatory, makes more detailed provision for EIA (Republic of South Africa, 1998), and new regulations under the relevant sections of NEMA are in the process of being finalised. These proposed new regulations, which have been circulated for comment and will probably enter into force within a few months, will have no impact on the validity of this study, because they deal with changes in procedure rather than with the essential nature of EIAs and SIAs.

In its policies, legislation and regulations the South African government proceeds from the assumption that “the environment”, in line with the triple bottom line approach to sustainable development, ought to be defined very broadly, to include not only the biophysical environment, but also the economic and social components. In NEMA (Republic of South Africa, 1998), section 1(1)(xi), “environment” is defined as “the surroundings within which humans exist” and then further specified as not only the physical surroundings, but also their “aesthetic and cultural properties” that “influence human health and well-being”. Because of this approach SIA is often incorporated in South Africa, albeit mostly on a rather limited scale, into environmental impact assessment (EIA). Both the public consultation and reporting procedures of the typical EIA process leave room for attention to cultural and socio-economic impacts.

Empirical data suggest that in South Africa SIA is often neglected or treated as a less important aspect of an EIA. According to Sandham, Siphugu and Tshivhandekano (2005: 55-56) social baseline information is often neglected in favour of biophysical information in South African EIAs, but the situation seems to be improving “due to the emphasis placed on social issues in the South African EIA system, largely as a result of and as an attempt to redress social imbalances of the past”. It is necessary to measure perceptions of relative neglect and gradual improvement of SIA in South Africa against the theory and practice of SIA as reflected in the literature in order to assess in which

direction SIA is moving in the country. To what extent is the variety of possible social impacts of projects and policies taken into account in impact assessment or is the focus of these assessments on only a few types of impacts, such as job creation? This issue will be investigated on a limited scale in the articles comprising this dissertation. This study will provide baseline data for SIA practice. The problem which it will investigate is whether SIA is practiced at a satisfactory level of proficiency in South Africa. Therefore the focus will be on the status of SIA in South Africa, with specific reference to the situation in the North West Province.

2. Research objectives and aims

This study will investigate social aspects of impact assessment in the North West Province of South Africa, with the aim to identify shortcomings and their possible causes and to make recommendations for improvement.

This objective will be reached by realising the following specific research aims:

- To outline the significance of social impact assessment within the EIA context.
- To describe and evaluate social impact assessment as part of EIA processes in the North West Province, in order to identify shortcomings and factors which may cause these shortcomings.
- To make recommendations how these shortcomings in social impact assessment can be overcome.

3. Hypothesis/theoretical statement

The basic hypothesis is that, whereas the theory and practice of SIA has reached a sophisticated level in the developed world, the practice of SIA in South Africa is not yet on a sound footing and that it does not receive the professional attention it deserves in a country beset by enormous social challenges.

4. Format of study and research methods

The article format will be used for this study. It will comprise the following articles:

- A critical evaluation of Social Impact Assessment (SIA) as part of the Environmental Impact Assessment (EIA) process in South Africa against the background of international guidelines and best practices.
- Evaluation of and recommendations for the improvement of the practice of SIA in the North West Province.

The first article will consist of a theoretical perspective based on a literature study. The sources referred to in the problem statement will be used as a starting point for the theoretical analysis. The US guidelines (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 1994 as revised) and the models and methodologies proposed by experts (e.g. Porter, Rossini, Carpenter and Roper, 1980; Burdge, 2004a; Finsterbusch and Wolf, 1977/1981; Finsterbusch, Llewellyn and Wolf, 1983; Taylor, Bryan and Goodrich, 2004; Burdge and Vanclay, 1995; Becker, 1997; Barrow, 2000) will be scrutinised in order to determine their suitability and applicability to the South African situation. The exact legal position of SIA in South Africa will be determined by analyzing the relevant legislation and regulations. It will then be possible, by comparing the legal requirements in South Africa to international theoretical perspectives on SIA, to come to a conclusion whether, theoretically, SIA receives sufficient attention in South Africa.

An empirical study will be done for the second article. Research methodologists regard a review approach, based on sampling logic, as a better option than case study research to investigate status of current practice in terms of social assessment (see Yin, 1994), and this approach will also be followed in the current study. The first component will be an empirical investigation and quantitative analysis of the EIA archives of the North West Province. The selection of EIA files to be investigated will depend on availability, but will consist of a minimum of 20 and a maximum of 50 files, selected on the basis of a stratified sample of development projects of different nature and scale, which will cover at least two calendar years in order to determine whether any significant progress can be discerned from the time the first EIAs were done (1998) to the last year for which completed EIAs are available (c. 2003). EIA applications, reports and decisions for two selected years will first be quantitatively analysed to determine the amount of attention paid to social impacts, compared to the attention paid to ecological and economic

impacts. Descriptive techniques will be used and clear differentiation will be made between the different phases (screening, scoping, EIR, ROD, etc.) of the EIA process. The second component of the empirical study will be a thorough qualitative analysis of the EIA documentation, based on the guidelines, methods and models developed in the international literature, to determine the importance attached to SIA by practitioners and authorities. When this component has been finished an assessment will be made, in consultation with the supervisor, of the validity of the conclusions reached on the basis of the available data. Should significant gaps be identified in the collected data, the need for a third component of the empirical study will be considered, which will consist of interviews with important stakeholders (environmental officials, EIA practitioners, developers, community members, etc.).

References

- Barrow, C.J. 2000. *Social Impact Assessment: An introduction*. London: Arnold.
- Becker, H.A. 1997. *Social impact assessment: method and experience in Europe, North America and the Developing World*. London: UCL Press.
- Burdge, R.J. 2004a. *A conceptual approach to Social Impact Assessment*. Middleton: Social Ecology Press. 3rd edition.
- Burdge, R.J. 2004b. *A community guide to Social Impact Assessment*. Middleton: Social Ecology Press. 3rd edition.
- Burdge, R.J. and Vanclay, F. 1995. *Social Impact Assessment*. Chichester: John Wiley.
- Carley, M.J. and Bustelo, E.S. 1984. *Social Impact Assessment and Monitoring. A Guide to the Literature*. Boulder: Westview Press.
- Department of Environmental Affairs and Tourism. 1998. Guideline document, EIA Regulations, Implementation of sections 21, 22 and 26 of the Environment Conservation Act, Pretoria, April 1998.

Finsterbusch, K., Llewellyn, L.G. and Wolf, C.P. (eds). 1983. *Social Impact Assessment methods*. Los Angeles: Sage.

Finsterbusch, K. and Wolf, C.P. (eds). 1977 (first edition) and 1981 (second edition). *Methodology of Social Impact Assessment*. Stroudsburg: Hutchinson Ross.

Freudenburg, W.R. 1986. Social Impact Assessment, *Annual Review of Sociology*, no. 12, pp. 451-478.

International Association for Impact Assessment (IAIA), 2003. Frank Vanclay, *Social Impact Assessment: International Principles*. IAIA Special Publication Series no. 2, May. [http://www.iaia.org/Members/Publications/Guidelines Principles/SP2.pdf](http://www.iaia.org/Members/Publications/Guidelines_Principles/SP2.pdf) (accessed 3 October 2005).

Interorganizational Committee on Guidelines and Principles for Social Impact Assessment. 1994. *Guidelines and Principles for Social Impact Assessment*. Washington, DC: Department of Commerce.

Interorganizational Committee on Guidelines and Principles for Social Impact Assessment. 2003. Principles and Guidelines for Social Impact Assessment in the USA, *Impact Assessment and Project Appraisal*, 21(3), September, pp. 231-250.

Porter, A.L., Rossini, F.A., Carpenter, S.R. and Roper, A.T. (eds). 1980. *A guidebook for technology assessment and impact assessment*. New York: North Holland.

Republic of South Africa. 1998. *Government Gazette*, vol. 401, no. 19519, Cape Town, 27 November 1998. National Environmental Management Act, Act no. 107 of 1998, definitions, clause 1 and chapter 5, clause 24, pp. 8, 34-38.

Republic of South Africa. 2004. *Government Gazette*, vol, 466, no. 26275, *Regulation Gazette*, No. 7949, Pretoria, 23 April 2004. Department of Minerals and Energy, Government Notice R. 527: Mineral and Petroleum Resources Development Act (28/2002): Mineral and Petroleum Resources Development Regulations, Schedule,

chapter 2, Part III Environmental regulations for mineral development, petroleum exploration and production.

Sandham, L.A., Siphugu, M.V. and Tshivhandekano, T.R. 2005. Aspects of Environmental Impact Assessment (EIA) practice in the Limpopo Province – South Africa, *African Journal of Environmental Assessment and Management*, Vol. 10, March 2005, pp. 50-65.

Taylor, C.N., Bryan, C.H. and Goodrich, C.G. 2004. *Social assessment: theory, process and techniques*. Lincoln: Taylor Baines Associates. Third edition.

Vanclay, F. 2002. Conceptualising social impacts, *Environmental Impact Assessment Review*, 22, pp. 183-211.

Vanclay, F. 2003. International Principles for Social Impact Assessment, *Impact Assessment and Project Appraisal*, 21(1), pp. 5-11.

Wildman, P. 1990. Methodological and Social Policy Issues in Social Impact Assessment, *Environmental Impact Assessment Review*, 10, pp. 69-79.

Yin, R.K. 1994. *Case study research: design and methods*. Thousand Oaks: Sage Publications. Second edition.

CHAPTER 2: ARTICLE 1

**A CRITICAL EVALUATION OF SOCIAL IMPACT ASSESSMENT (SIA) AS
PART OF THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS IN
SOUTH AFRICA AGAINST THE BACKGROUND OF INTERNATIONAL
GUIDELINES AND BEST PRACTICES**

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American or British English usage is accepted, but not a mixture of the two. Italics are not used for expressions of Latin origin, for example, *in vivo*, *et al.*, *per se*. With numbers, use decimal points (not commas) and use a space for thousands (10 000 and above).

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Cover page

A critical evaluation of Social Impact Assessment (SIA) as part of the Environmental Impact Assessment (EIA) process in South Africa against the background of international guidelines and best practices

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Title page

A critical evaluation of Social Impact Assessment (SIA) as part of the Environmental Impact Assessment (EIA) process in South Africa against the background of international guidelines and best practices

Abstract

It is the aim of this study to determine whether, as has been suggested in some empirical studies, SIA in South Africa is indeed neglected, when measured against the theory and practice of SIA as reflected in the literature. The assumption, which is being tested, is that the practice of SIA in South Africa is not yet on a sound footing and that it does not receive the professional attention it deserves in a country beset by enormous social challenges. This article, a theoretical perspective based on a literature study, is thus a critical evaluation of SIA as part of the EIA process in South Africa against the background of international guidelines and best practices. The article includes sections on the historical background of the development of SIA in South Africa, the legal status and requirements of SIA in the country, and a critical evaluation of SIA regulation in South Africa. It has been established that the persistent problems of SIA practice, experienced in other parts of the world, are also evident in South Africa. Apart from institutional, financial and professional constraints, there are also serious problems associated with approach and methods. To conclude the article recommendations are made to improve the level of SIA practice in South Africa.

Key words

Social Impact Assessment (SIA), Environmental Impact Assessment (EIA), South Africa, North West Province.

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A CRITICAL EVALUATION OF SOCIAL IMPACT ASSESSMENT (SIA) AS PART OF THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS IN SOUTH AFRICA AGAINST THE BACKGROUND OF INTERNATIONAL GUIDELINES AND BEST PRACTICES

Introduction

In the development context “social” must be one of the hardest words to define, because it has such a broad range of meanings that it is often used in a rather fuzzy way. Development is by its nature social, because its means are social processes and institutions, its ends embody social values, and its costs and benefits are distributed across communities, social groups, and organisations (Francis and Jacobs, 1999: 341). And yet, despite the pervasiveness of the social dimension of development, the integration of this crucial dimension into development practice, and subfields such as environmental impact assessment, has not been easy.

Social impacts are those impacts, stemming from a specific action, which alter “the day-to-day way in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society” (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 2003: 231. For other definitions, see Barrow, 2000: 2; Burdge, 2004b: 1).

Social Impact Assessment (SIA) 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 (Becker, 1997: 2; Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 2003: 231; Vanclay, 2003: 5. See also Burdge, 2004b: 1; Gilpin, 1996: 172; Taylor et al., 2004: 24). Its purpose is to answer the following question: “Will there be a measurable difference in the quality of life in the community as a result of the proposed action?” (Barrow, 2000: 4). SIA is used to assess how the costs and benefits of impacts are distributed among different stakeholders and over time. It is particularly relevant for understanding the quality of impact on different groups (World Bank, 2003: 20-21). SIA has a hybrid nature, because it is linked to both scientific research and political policy and decision-making processes (Freudenburg, 1986: 452).

There is no doubt that the assessment of social impacts is as important, in some cases even more important, than the assessment of biophysical and economic impacts of development projects. "Putting people first" is at the heart of Agenda 21 and is regarded, in the broader social science community, as a non-negotiable imperative of development programmes (Cernea, 1991: xii). SIA has considerable potential to give social criteria their rightful place alongside economic and environmental criteria in decision making (Taylor et al., 2004: 22). One of its most important contributions is to move the focus of the policy debate away from the notion of a technical problem to be solved to a social issue to be managed (Baines et al., 2003: 194). The value of SIA in social development, policy-making and planning, public involvement, conflict management, and sustainable development has been described (Barrow, 2000: 24-27) and its significance in developing countries (Baines and Taylor, 2002; Becker, 1997: 192-211; Burdge, 1990; Burdge, 1998: 231-239; Henry, 1990; Momtaz, 2005) and in Africa in particular (Weaver et al., 2003: 1) emphasised.

SIA is important, because it helps planners, project proponents, the impacted population and decision-makers to understand and be able to anticipate the possible social consequences on human populations and communities of proposed project development or policy changes. SIA should provide a realistic appraisal of possible social ramifications and suggestions for project alternatives and possible mitigation measures (Burdge, 2004b: 1-2) and must generate results that are meaningful, credible, and operationally relevant (Francis and Jacobs, 1999: 351). It must, in other words, be practical and useful for all involved (Rivers and Buchan, 1995: 181). SIA makes projects more inclusive by involving key stakeholders, it makes projects more socially sound by minimising or mitigating adverse social impacts, maximising social benefits, and ensuring that projects are designed to "fit" the populations to be reached, and it is part of a democratic process in which equity, transparency and ownership are ensured through public participation (Francis and Jacobs, 1999: 348; Vanclay, 1999: 311).

Since the 1970s there have been remarkable advances in the theory and practice of SIA. Despite these advances SIA has evolved in the shadow of Environmental Impact Assessment (EIA). Dani (2003: abstract) attributes this to the fact that many practitioners regard EIA as the "mother of all impact assessments", and SIA as no more

than a subset of EIA. Compared with the assessment of biophysical impacts, SIA is a bit of an “orphan” that has not been fully adopted by the assessment process for environmental and natural resource decision-making (Burdge, 2002; Burdge, 2003a). This type of approach has led to the misconception that consideration of social effects is only necessary if these result from environmental impacts. In countries such as Canada, Australia, New Zealand, and the United States there is now a clearer distinction between EIA and SIA, because they often employ practitioners from different disciplines using different techniques. However, even in these countries the biophysical footprint is usually the overriding factor in impact assessment.

There has been a fierce debate among SIA theorists on whether SIA should be practised separate from or integrated with other impact assessments (Barrow, 2000: 65). This is linked to the discussion among SIA practitioners as to whether the approach should be “technocratic” or “participative”. According to Dani (2003: abstract, 5) “SIA has been hamstrung by its attempt to emulate or ride on the coat-tails of environment ... For SIA to realize its full potential it needs to go beyond the environmental paradigm”. Vanclay (1999: 322) and Burdge (2003b: 226) view closer integration with rather than separation from EIA as the better way to strengthen the impact of SIA on decision-making, because it will have the benefit of increased awareness of social impacts among EIA practitioners, planners, proponents and the community.

Is SIA in South Africa also an infant that has not been successfully weaned from EIA? Or is there enough scope in the South African EIA context for SIA to come into its own in impact assessment practice? In this article the legal position of SIA in South Africa will be determined by analysing the relevant legislation and regulations. It will then be possible, by comparing the legal/statutory requirements in South Africa to international theoretical perspectives on SIA, to come to a conclusion whether, theoretically, SIA receives sufficient attention in South Africa.

Historical background to the development of EIA and SIA in South Africa

In terms of the Environment Conservation Act (ECA), Act no. 73 of 1989 (Republic of South Africa, 1989), the National Environmental Management Act (NEMA), Act no. 107 of 1998 (Republic of South Africa, 1998b), and sectoral legislation such as the National

Water Act, Act no. 36 of 1998 and the Mineral and Petroleum Resources Development Act (MPRDA), Act no. 28 of 2002 (Republic of South Africa, 2002c), EIA has become a legal requirement for a wide range of activities that may have a detrimental effect on the environment in South Africa (see Glazewski, 2000: 280-293). Before the legislation, regulations and procedures pertaining to EIA and SIA in South Africa are discussed in more detail, it is necessary to sketch the historical background in which impact assessment evolved.

In the "old" (i.e. pre-1994) South Africa environmental affairs were not really a top priority. Hamann et al. (2000: 11), Sowman et al. (1995: 46) and DEAT (2005: 57) have documented the constraints to the development of proper environmental evaluation procedures in South Africa during the apartheid period and the reasons for the deep distrust among blacks to environmental conservation. Developments that had major negative impacts on the receiving environment and local communities went largely unregulated and unmitigated. In effect it meant that the poor and disenfranchised bore the heaviest burden of environmental pollution and degradation. Despite these constraints significant progress was made towards the end of the old dispensation in the direction of developing an improved system of environmental governance. EIA was practiced on a non-mandatory basis as an input to decision-making from the mid-1970s. In the early 1980s a white paper and a draft bill culminated in the first Environment Conservation Act (Act no. 100 of 1982). A statutory Council for the Environment, with a Committee for EIA, was established. By the late 1980s increasing pressure from environmental groups prompted "progressive" initiatives to address concerns around the inadequate state of environmental management. A system of Integrated Environmental Management (IEM) was officially endorsed as the appropriate form of environmental assessment for South Africa (Glazewski, 2000: 273; Sowman et al., 1995: 48-55). ECA (the new Environment Conservation Act, Act no. 73 of 1989) was adopted, which gave the Minister of Environmental Affairs the power to identify activities which may have a detrimental effect on the environment and for which an environmental impact report would be required (section 21) and to make regulations regarding environmental impact reports (section 26) (Republic of South Africa, 1989: 18, 20, 22). The promulgation of ECA coincided with the publication of an IEM procedural document, of which a revision, with a series of guideline documents and checklists, was finally published in 1992.

Since 1994 the approach to environmental management has been transformed in a positive way. In terms of the new South African Constitution environmental issues are regarded as an integral element to be addressed in the democratic transition. An environmental right is enshrined in the Bill of Rights (chapter 2, section 24), guaranteeing that everyone has the right to an environment “that is not harmful to their health or well-being”, and to “have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation; promote conservation; and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development” (Republic of South Africa, 1996: 11).

It is claimed in publications by the current Department of Environmental Affairs and Tourism (DEAT) that after 1994 there was “a paradigm shift from narrow conservation to sustainable development” (DEAT, 1997) and that “major strides have been made in addressing environmental issues as part of an overall thrust towards the achievement of social justice, democracy and sustainable development” (DEAT, 2005: 2, 57). Although DEAT’s self-evaluation may be exaggerated, the different approach of the new democratically elected government compared to that of the old government, with a particular socio-economic focus on improving the conditions in previously disadvantaged communities, has been reflected in environmental policy. In 1995 a Consultative National Environmental Policy Process (CONNEPP) was launched to democratise environmental governance in South Africa. Different stakeholders participated in drafting a framework for sustainable environmental management. In 1997 a blueprint for environmental governance was adopted by Parliament in the form of the White Paper on Environmental Management, setting out the vision, principles, strategic goals, objectives and regulatory approaches for environmental management in the country. Government appointed the national Department of Environmental Affairs and Tourism as lead agent responsible and accountable for all environmental issues, including the development and implementation of an integrated and holistic environmental management system (DEAT, 1997; DEAT, 2005: 58, 59). It is clear from the White Paper that the approach to environmental management has a sharp focus on social upliftment, which is in line with the shift in the main global development thrust during the 1990s to poverty alleviation. In South Africa DEAT recognises that “poverty alleviation and biodiversity conservation are

themes of the Government agenda that should be seen as integrated solutions, rather than working against each other” (DEAT, 2005: 52).

EIA practice in South Africa was formalised in 1997 when the first set of EIA regulations, which are currently still applicable, was published in the *Government Gazette*. Activities, which in terms of section 21 of ECA are subject to EIA procedures, were listed and amended in a series of government notices (Republic of South Africa, 1997a, 1997c, 1998a and 2002a). The categories of such activities include land use and transformation, water use and disposal, resource removal and renewal, agricultural, mining and industrial processes, transportation, energy generation and distribution, sewage disposal, chemical treatment and recreation (Republic of South Africa, 1989: 18. See also DEAT, 1998: 10-13). Regulations describing the procedure to be followed to apply for permission to conduct such activities in terms of sections 26 and 28 of ECA were also published and amended on several occasions (Republic of South Africa, 1997b, 1998c, 2002b). In April 1998 the Department of Environmental Affairs and Tourism (DEAT) published a guideline document to assist stakeholders in the implementation of the EIA regulations (DEAT, 1998). For DEAT it is a major strategic objective that the potential negative environmental impacts of all significant new developments are avoided, mitigated, managed and/or controlled (DEAT, 2005: 61).

Towards the end of the 1990s the first comprehensive environmental management legislation of the new political dispensation in South Africa evolved in the form of the National Environmental Management Act (NEMA), 1998, Act no. 107 of 1998. NEMA was promulgated on 27 November 1998 (Government Gazette 19519) and commenced on 29 January 1999 (Proclamation R8, Government Gazette 19703). This legislation reflected the spirit of the “new” South Africa, especially in terms of clearly formulating the social responsibilities of the government towards local communities. NEMA notes: “The environment is held in public trust for the people. The beneficial use of environmental resources must serve the public interest and the environment must be protected as the people’s common heritage” (Republic of South Africa, 1998b: 12). The central pillars of NEMA, according to DEAT (2005: 59-60) are quality in environmental decision-making, cooperative governance in the environmental sector, facilitating the role of civil society in environmental governance and implementing the constitutional imperative to respect, protect, promote and fulfil the environmental right in the Bill of Rights. Chapter 5 of

NEMA makes detailed provision for EIA (Republic of South Africa, 1998b: 34-38). The competent authorities for administration of EIA are the nine provincial departments of environmental affairs, and for certain projects the national Department of Environmental Affairs and Tourism. New EIA regulations under the relevant sections of NEMA are in the process of being finalised (DEAT, 2004). Until the new regulations are promulgated, EIA continues to function under the current EIA regulations.

In terms of the Mineral and Petroleum Resources Development Act, Act no. 28 of 2002 (Republic of South Africa, 2002c: 42-3, sections 37, 38 and 39. See also Republic of South Africa, 2004) mining and related activities are also subject to the environmental principles and the IEM objectives of NEMA. Every person who has applied for a mining right must conduct an EIA and for different types of mining activities either an environmental management programme or an environmental management plan (EMP) must be submitted. In the case of mining activities the Department of Minerals and Energy is the competent authority.

A comprehensive legal framework for environmental governance and management has thus been established in South Africa.

Legal status and requirements of SIA in South Africa

Where does SIA fit into the broader EIA picture in South Africa? Theoretically, in terms of environmental legislation and regulations, SIA in South Africa is fully incorporated into EIA. Since the 1980s the South African government has in its policies, legislation and regulations proceeded from the assumption that “the environment”, in line with the triple bottom line approach to sustainable development and the spirit of Agenda 21, ought to be defined very broadly, to include not only the biophysical environment, but also the economic and social components. This breadth of definition stems from the official approach that in South Africa environmental issues cannot be separated from the fundamental need for socio-economic development.

In section 1(x) of ECA (Republic of South Africa, 1989: 4), “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”. This broad and

inclusive definition of “environment” was continued in the post-1994 dispensation. In the White Paper on Environmental Management Policy, the word “environment” refers to “the conditions and influences under which any individual or thing exists, lives or develops”, and it is emphasised that “people are part of the environment and are at the centre of concerns for its sustainability” (DEAT, 1997). When NEMA was drafted, in order to make the implementation of legislation more practicable, humans were given a prominent role in terms of their interrelationship with the environment, but without making them an explicit part of the definition of “environment” in section 1(1)(xi) (Republic of South Africa, 1998b: 8).

Because of this anthropocentric approach SIA is not regarded as a separate process in South Africa, but incorporated, albeit mostly on a rather limited scale, into EIA. Social impacts have been included in all the important documents pertaining to the EIA system. It was clearly stated in section 26 (a) (iv) and (v) of ECA that environmental impact reports would not be limited to biophysical impacts, but would also include impacts in the social and economic spheres. However, neither in ECA nor in the EIA regulations and guidelines nor in the White Paper on Environmental Management Policy were “social impacts” clearly specified or a checklist supplied of possible social impacts that should receive attention in EIA procedures (see e.g. DEAT, 1998: 22, 29, 30; DEAT, 1997).

NEMA seems to have a somewhat stronger social focus than the older legislation. In NEMA the social component of environmental management is given equal status with the economic and environmental components and it is emphasised that people and their needs must be the first priority of environmental management. It is stated clearly in article 2 (4) (j) that the social impacts of activities must also be considered, assessed and evaluated. According to articles 23 (2) (b) and 24 (1) (a-c) impact assessment should focus on three aspects: (1) the environment, (2) socio-economic conditions and (3) cultural heritage. Potential impacts in these three spheres must be assessed in terms of article 24 (3) (a-b) in accordance with prescribed procedures set out in regulations and meeting the minimum requirements specified in article 24 (7). (Republic of South Africa, 1998b: 2, 34-38). In terms of the Mineral and Petroleum Resources Development Act, Act no. 28 of 2002 (Republic of South Africa, 2002c: 42-3, sections 37, 38 and 39) EIAs for mining activities should, apart from physical impacts, also assess socio-economic and heritage impacts.

It seems that the proposed new EIA regulations, circulated by DEAT for comment on 25 June 2004 in terms of section 24(5) of NEMA, with revisions in January 2005, reflect somewhat greater sensitivity to the importance of social impacts. Both site assessments in initial assessment reports and site and area assessments in environmental impact assessment reports should include an assessment of social impacts. Provision is also made for specialist reports, which could of course also deal with social impacts (DEAT, 2004: 18, 20, 22).

Critical evaluation of SIA regulation in South Africa

It was indicated above that in South Africa SIA is incorporated into EIA. Carley and Bustelo (1984: 151) warn that the inclusion of SIA as an integral part of EIA may lead to very superficial treatment of the socio-economic aspects of a project. The question is whether this has, indeed, been the case in South Africa.

In order to evaluate SIA regulation in South Africa theoretically, the persistent problems in SIA practice identified in the literature are used in this section as basis of discussion. The theoretical framework for SIA provided by the current South African legislation is measured against these persistent problems to reflect on the degree to which the problems are likely to occur in South African SIA practice. Where applicable, available empirical data on SIA practice in South Africa will be used.

Whose domain?

Clarifying the domain of SIA is a key issue for capacity building in SIA and to counter the poor representation of social scientists in planning, policy and research positions in natural resource management (Baines and Taylor, 2002: 6). SIAs can be undertaken by persons trained in a variety of social sciences (Barrow, 2000: 29), but in practice the majority of EIA consultants in South Africa have a natural science rather than a social science background (Sandham et al., 2005: 59). Because social science staffing in natural resource management agencies remains below adequate levels to provide the necessary expertise for conducting SIAs, assessment of social aspects is often done by non-specialists. Furthermore, people involved in impact assessment may become

members of regional branches of the International Association of Impact Assessment (IAIA), but there is still no formal system of registration of impact assessment practitioners in the country. As long as appropriate training programmes for SIA practitioners do not exist, qualified and experienced SIA practitioners are not required by law to register with a professional body, and more social scientists are not involved in EIAs, there will be no final answer to the problem around who is best qualified to take the lead in SIA. Professional accreditation and monitoring of practitioners would improve the practice of SIA, by establishing international standards and improving professional ethics (Barrow, 2000: 71).

Integration v. segmentation

Segmentation of different types of impact assessment and lack of integration of results remain a problem. Disciplinary, institutional, organisational, capacity and conceptual considerations may stand in the way of closer integration (Rattle and Kwiatkowski, 2003: 101-105). Suggestions have been made how SIA might be better integrated with other impact assessments (Barrow, 2000: 43-59; Slootweg et al., 2003: 56). Because SIA covers such a broad scope of social factors it may become segmented in the EIA process, especially when social scientists from different disciplines are involved. Complex societal problems, often ill-defined and multifaceted, pose a special challenge to SIA practitioners. HIV/AIDS in South Africa is identified by DeTombe (2003: 289) as a good example of such a problem. In South Africa, the application of a different set of EIA processes and requirements to mining activities may on the one hand complicate integration. On the other hand SIA is incorporated into EIA and it seldom happens that several social scientists are involved in a single EIA, therefore integration may not be such a serious problem, except in very large-scale projects.

Focus

Determining the size and focus of an SIA is the first major problem confronting SIA practitioners (Becker, 1997: 143-147). It is required of SIA as part of EIA to be done sufficiently quickly to meet the deadlines of the decision-makers and to be presented in a way that is useful to officials. A too encyclopaedic approach to SIA will take too much time and will produce unwieldy results (Taylor et al., 2004: 13), but if the focus is too

narrow and limited to a few standard variables the quality of the SIA will be prejudiced. Balance in this regard can be attained by proper use of scoping. To be useful to decision-makers, results will be limited to significant impacts and the focus will be issues oriented and not general (Taylor et al., 2004: 14, 89-105). In SIA practice in South Africa the focus tends to be too narrow rather than too broad. This is the result of the tendency among practitioners to meet only the minimum requirements of the law and of the preference among developers and authorities to appoint consultants who undertake EIAs in the shortest time and at the lowest cost (Rossouw et al., 2003: 214). No specific guidelines in this regard have been developed by South African EIA authorities, and this aspect needs to be addressed in the guidelines that will follow the new EIA regulations.

Problems of concept

Conceptualisation has been problematic in SIA. Clear conceptual frameworks are necessary for SIA, because nobody can be expected to take responsibility for social impacts which are not properly conceptualised (Gramling and Freudenburg, 1992: 231).

One area, identified by Taylor et al. (2004: 14), where conceptual frameworks can be improved, is the analysis of community structure and change. SIA practitioners should have clear notions, grounded in social theory, of community formation and change. Theories of community and consultative techniques have evolved in the literature (see e.g. Armour et al., 1977: 24-34; Burdge, 2004b; Burdge, 1998: 193-208; DeLuca, 1977: 224-234; Taylor et al., 2004: 35-56, 155-175). Proper knowledge of these theoretical aspects once again implies, in the South African context, that there should be accredited SIA training programmes to build the necessary capacity.

Another important area is selection of relevant variables for SIA. If the promise of SIA, that it can provide better information for decision-making, is to be fulfilled, that information should deal with the full range of significant social impacts and not just those that are conceptually or politically convenient (Gramling and Freudenburg, 1992: 231). Therefore, the practitioner should have a clear concept of the "social universe", before the relevant significant impacts for a particular SIA can be identified from a list of social impact variables. With the expansion of the SIA literature, several lists, categories and frameworks of social impact monitoring variables have become available (see e.g.

Barrow, 2000: 80, 81; Burdge, 1998: 37-38, 42-52; Fischer, 1999: 291; Gilpin, 1996: 50-51; Olson and Merwin, 1977: 56-63; Taylor et al., 2004: 75, 108-118; Vanclay, 1999: 305; Vanclay, 2002: 200-208; Van Schooten et al., 2003: 74-90). In South Africa these should be integrated and compiled into guidelines suitable to local conditions, to provide markers for SIA practitioners.

Does the issue "count"?

Determining the significance of impacts and the weighting of impacts in relation to one another are crucial components of meaningful impact assessment. Sciences that use numerical analysis, such as economics, are more readily used by decision-makers than those that do not, because they present quantifiable measurements. Because the social sciences are regarded as being less accurate and their results as being more difficult to interpret, social impacts are often ignored by decision-makers (Barrow, 2000: 65; Smith, 1993: 10). However, much of the data of social analysis (jobs, income, population, etc.) can be quantified in one way or another and sophisticated computer models have been developed to project trends and create scenarios (see e.g. Aidala, 1977: 167-171; Barrow, 2000: 83; Becker, 1997: 72-81, 86-98, 102-106; Miller, 1977: 202-210; Vlachos, 1977: 211-223;). In order to address the difficulty of producing results that are useful to decision-makers SIA theorists have over many years debated the question how and to what extent quantitative techniques could be incorporated into SIA (see e.g. Barrow, 2000: 65, 66; Carley and Bustelo, 1984: 1; Conopask and Reynolds, 1977: 83-90; Dani, 2003: 14, 20; Sassone, 1977: 74-82). Although it is recommended that information is summarised in numerical tables as much as possible in an SIA, the danger is that numbers may hide value judgements made in their compilation.

Some very significant social impacts, such as the social and psychological cost of changing lifestyles, cannot be easily quantified and they have to be analysed with qualitative data. For qualitative assessment survey data may be more useful than secondary data, but the SIA practitioner does not always have the luxury of enough time and money to collect primary data. In such a case the best option would be to review the available secondary data first and then fill the gaps by collecting new data (Taylor et al., 2004: 15-16. See also Barrow, 2000: 80-82). Whatever method is used, these crucial social variables are much more difficult to assess than others and this may also

cause problems with the weighting of findings (Smith, 1993: 9). SIA outcomes with regard to impacts that cannot be quantified may tend to be critical and discursive, rather than predictive and explanatory (Burdge, 1998: 268). SIA recommendations may, therefore, seem less clear, concise and straightforward than other EIA recommendations (Barrow, 2000: 66). However, Burdge (2003a: 87) argues that an indicator, either quantitative or qualitative, can be found for every social impact. Cross-checking procedures (cross validation or triangulation) should be used to establish the validity of data (see Taylor et al., 2004: 16, 94-99).

From the above it is clear that due to the complexity of social systems the whole issue of determining the significance of social impacts calls for a reasonably expert knowledge of social research methods. Empirical studies of South African EIA practice (Kruger and Chapman, 2005; Sandham, et al, 2002; Sandham, et al., 2005) have revealed that the SIA component of an EIA is often performed by non-specialists. Once again the need for sufficient training of SIA practitioners in South Africa is evident.

Problems of process

Different orientations towards the SIA process have been identified (Taylor et al., 2004: 16, 25-30), but regardless of whether a "technocratic" (product oriented) or "participatory" (process oriented) approach is followed, the SIA process usually includes basic EIA procedures, comprising phases of scoping, profiling, formulation of alternatives, projection and estimation of effects, monitoring, mitigation and management, and evaluation (For the key steps in the SIA process, see Becker, 1997: 156-158; Burdge, 1998: 106-113, 187-189; Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 2003: 244; Vanclay, 1999: 309). In the South African EIA guidelines the process is clearly explained and this may be regarded as, theoretically, one of the strengths of our EIA system. The challenge lies in the ability of SIA practitioners to tap the available literature, methods and techniques and adapt them to particular social settings. Once more the need for SIAs in South Africa to be performed by well-trained SIA specialists is evident.

SIA should not be a once off activity, producing a "snapshot" view of the social context. It should not be merely an approval mechanism to determine whether a project should

proceed and what conditions should be set, but should also be used to ensure effective monitoring, mitigation of problems and management (Barrow, 2000: 66; Burdge, 1998: 269). Therefore social analysis should extend throughout and beyond the project or policy cycle (Francis and Jacobs, 1999: 351). In terms of the World Bank's new PSIA (poverty and social impact analysis) approach, social assessment should be strengthened by including ex-ante analysis of the likely impacts of specific interventions, analysis during implementation, and ex-post analysis of completed interventions (World Bank, 2003: 1. See also Barrow, 2000: 68; Burdge, 2003b: 226; Égré and Senécal, 2003: 224). The primary goal of SIA is "to anticipate a course of events following an environmental change and to manage them accordingly" (Taylor et al., 2004: 21). Therefore SIA must adopt a strategy that can both anticipate and react to change.

In the South African context this approach would mean that SIA should not only be part of EIA, but also of the longer-term IEM, EMP and SEA processes. However, this is not the case in current EIA, mainly because of a lack of capacity in both the implementing authorities and in interested NGOs and CBOs (Rossouw et al., 2003: 215). The South African EIA process does contain the generic phases of EIA, but in practice most EIAs in South Africa do not go beyond a scoping report followed by a record of decision (ROD). Apart from a description of the project and its potential impacts, the scoping report must also include information on alternatives considered and a description of the public participation process. Only in cases where information contained in the scoping report is considered to be insufficient, may the relevant authority request that information in the scoping report be supplemented by a full environmental impact assessment, to be submitted as an Environmental Impact Report (EIR) (DEAT, 1998: 23, 24, 25). In order to short circuit a potentially drawn-out administrative procedure, many scoping reports take on the form of a "beefed-up" scoping or a "mini-EIA", which would usually also include public consultation, mitigation and environmental management steps (Sandham et al., 2005: 52). Empirical studies have suggested that because of unsatisfactory follow-up procedures the "beefed-up" scoping tends to restrict EIA to exactly the type of "snapshot" view that ought to be avoided in SIA. Post-implementation monitoring and auditing are not enforced by law (Rossouw et al., 2003: 213, 215).

Flexibility v. standardisation

The balance between flexibility and standardisation has been a constant discussion point in SIA discourse. One problem is that when a standardised format of investigation and reporting is used, it may create a bureaucratic uniformity, where the formal requirements become more important than central issues. This is a very real danger in South African EIA practice. SIA often deals with the non-standard and unexpected, and inflexible procedures may prove to be dysfunctional (Barrow, 2000: 70). SIA practitioners can overcome this problem by focusing on projecting social effects and staying issues oriented. It would be useful in the South African EIA system if methodological guidelines for the conduct of social assessments, such as those used by the US Forest Service (USDA Forest Service Collaborative Forest Restoration Program, 2005), could be formulated for South African conditions and appended to the EIA guidelines or better still, to give them mandatory power, incorporated into the EIA regulations. Such guidelines should elaborate on the tasks of the SIA practitioner in each phase of the EIA, but should be flexible.

Taylor et al. (2004: 18, 57-88) provide guidelines for the format of the SIA process, which are aimed at achieving a balance between standardisation and flexibility. The legitimacy of the contribution of SIA specialists will depend on their effectiveness in contributing to decisions. If such experts were used, instead of simply making do with the available EIA practitioners insufficiently trained for SIA, the contribution of SIA to the overall EIA process will be greatly enhanced. Unfortunately, this is not yet the case in South African EIA practice.

Decision criteria

Standards used to decide whether an environmental impact is positive or negative are called decision criteria. They are supposed to reflect basic values of what should be happening in a society, but decision-makers often shun making judgements in this regard and prefer to “let the facts speak for themselves”. Therefore “social wellbeing” may become a rather fuzzy concept, depending on what different stakeholders assume it to be. It is often believed that social good will result from some very loosely defined “development” path. Citizen values assessment is regarded as a useful tool to avoid

fuzziness (Stolp, 2003: 231. See also Barrow, 2000: 25, 53-59). Taylor et al. (2004: 19) argue that “much human reasoning is an exercise in creative rationalization to defend and promote things in which people have a vested interest”. Therefore a crucial issue is who should determine the decision criteria. The danger is that, when those far away from the assessment process set the criteria, physical or technical considerations may take precedence over social considerations. There must be a policy framework, derived from wide public involvement, in place to guide sound thinking in this regard. Hidden agendas will then be avoided more easily. Setting appropriate decision criteria at an early stage will facilitate more careful accounting of costs and benefits of a project. Full disclosure of who gains and who loses and to what extent, is necessary (Burdge, 1998: 82-83; Taylor et al., 2004: 19-20).

Moral issues come into play here. SIA is regarded as a moral obligation of decision-makers to identify the future consequences of current or proposed actions, and to take knowledge about these consequences into consideration whenever they act (Becker, 1997: 165, 221). According to Finsterbusch (1995, cited in Becker, 1997: 167) SIA shows a positive value in all seven ethical bases for evaluating public policies. The IAIA has formulated a code of ethics for EIA (cited in Becker, 1997: 169-170) and Lawrence (2003: 414-416) provides a checklist of ethical aspects in the EIA process. SIA practice should be guided by ethical rules. In the final analysis the “effectiveness of SIA rests on the integrity of the SIA practitioners” (Burdge and Vanclay, 1996: 63).

Because standard criteria of good EIA practice are not applied in South Africa, the EIA process depends to a large extent on consultants’ interpretation of the EIA guidelines (Rossouw, et al., 2003: 215). One should think that the emphasis on public participation in the South African EIA processes ought to provide the necessary checks and balances, but unfortunately the more deprived communities, who are keen for more job opportunities, are not always in a position to successfully resist development projects which may eventually have more negative than positive social impacts. The government has a special responsibility towards them. Policy frameworks should remain sensitive to basic inequalities in South African society and oriented towards genuine empowerment. To protect the vulnerable an ethical code for EIA practice should be implemented.

The role of public participation

Public participation is central to SIA and the combination of technocratic and participative approaches is often regarded as SIA's strength (Burdge, 2003b: 227). The purpose of an SIA should be to enable proponents and decision-makers to make socially responsible decisions, which would entail involving the people affected by these decisions (Taylor et al., 2004: 17. See also Becker, 1997: 151-172; Barrow, 2000: 24-27, 29-40; Burdge, 1998: 183-189; Burdge, 2003b: 226, 229). The concerns, perceptions and judgements of interested and affected parties (IAPs) should be solicited and integrated into SIA processes. Ideally public participation should be included in good faith and at an early stage as an integral part of the assessment process. Effective public participation is regarded as a key to more valid social assessment, without which it would be meaningless (Harris et al., 2003: 110; Wood, 1995: 307). Much has been written about the value of public participation for all stakeholders, particularly in bringing public values and social objectives to the decision-making process and promoting accountability, efficiency, equity and empowerment. It makes a positive contribution towards realising both process and outcome objectives (Cernea, 1991: 504; Glasson et al., 1999: 161-162, 187; Petts, 1999a: 149; Roberts, 2003: 276). According to Buchan (2003: 171) the effort of conducting a proper public participation exercise will be rewarded, because enhancing the capacity of communities to fully participate in decision-making will generate buy-in and social capital which, in the long run, will reduce costs.

Many obstacles, which may block effective public participation, have been identified (Bissett, 2000: 154; Glasson et al., 1999: 161; Hartley and Wood, 2005: 333-336; Lawrence, 2003: 308; Petts, 1999a: 170-172). Public involvement may in some cases be a genuine participatory exercise and in other cases just public manipulation, which may result in the hidden costs of projects being passed on to the affected communities (Taylor et al., 2004: 21-22. See also Burdge, 1998: 193-208; Burdge and Robertson, 1998: 183-192; Hornback, 1977: 355-363; PI student project, 1998: 219-230; Roberts, 2003: 258-277).

Different options have been mooted to facilitate more effective public participation. Webler et al. (1995) developed the idea of "cooperative discourse", involving a citizen

panel type model augmented with stakeholder group participation. Petts (1999a: 166) refers to the example of successful community advisory committees in the USA. Lawrence (2003: 314-315) recommends the establishment of public task forces, with EIA practitioners as facilitators. Harris et al. (2003: 111, 116) recommend the establishment of an interactive community forum to involve and empower local residents. All of these options thus imply the establishment of a specific public participation forum.

In developing countries, where the empowerment of the poor and weak should be a priority, SIA has the function to serve as a framework for facilitating public participation and promoting community empowerment (Gagnon et al., 1990; Ross, 1990; World Bank, 1995). However, in countries where there is not a culture of public participation, promoting meaningful participation may be difficult (Vanclay, 2000: 127). This is also the case in South Africa, especially in disadvantaged communities. "Civil society" is a problematic concept in Africa, including South Africa where many members of the public are not properly educated about their rights in terms of the Constitution and NEMA (Hamann et al., 2000: 21). On the other extreme NGOs or CBOs may use public participation to pursue other agendas and hijack the EIA processes.

Public participation is mandatory and receives much attention in South African EIA practice. Theoretically the South African EIA regulations provide an adequate framework for synchronising expert and public inputs in the SIA process. One could argue that both the public consultation and reporting procedures of the typical EIA process in South Africa leave room for attention to cultural and socio-economic impacts. One of the key principles underpinning the South African environmental management procedures is that the "social costs" of development proposals must be outweighed by the "social benefits" (Sowman et al., 1995: 56). In practice the short-circuited EIA procedure makes it very difficult to realise this objective. Social impacts are not treated as a priority issue in the EIA legislation and regulations and it is left to a large extent to the discretion of the EIA practitioners and officials whether and to what extent SIA will be included in any EIA.

Empirical data suggest that in South Africa SIA is often neglected or treated as a less important aspect of an EIA (Kruger and Chapman, 2005: 55; Sandham et al., 2002: 8, 13; Sandham et al., 2005: 55). Public participation, in particular, is a disappointing

feature of SIAs in South Africa. The response to invitations to take part in public participation activities is usually meagre and very few objections to proposed projects are raised. IAP meetings take place in a low percentage of EIAs and are usually attended by very few stakeholders apart from the applicants and consultants. Disadvantaged communities tend to be underrepresented at IAP meetings (Hamann et al., 2000: 21), which renders them voiceless in affairs which may be of crucial importance to them. Very few inputs on social impacts are made at public participation meetings, revealing the almost complete lack of public interest in the EIA process. The low interest levels in public participation can be attributed to poverty, low levels of education, and the fact that the environmental agenda is seen in some circles as an obstruction to wealth creation and poverty eradication (Kruger and Chapman, 2005: 54; Sandham et al., 2002). Rossouw et al. (2003: 214) point out that environmental consultants regard developers, by whom they are paid, as their sole clients. Therefore they seldom take the values and concerns of the affected communities into account. Appropriate engagement with poor, disadvantaged and rural communities is particularly inadequate.

The current public participation process in South Africa can therefore be seen as having serious shortcomings. It should be redesigned to make it more effective and truly participative. All relevant IAPs should be identified and adequate and appropriate representation should be introduced at an early stage in the project cycle. Attention should be paid to better means of communication and proper consultation with the IAPs in arranging public participation activities. Techniques should be employed to prepare the community for participation and to empower them to negotiate. More time for public inputs, particularly with regard to social impacts, should be allowed (Hamann et al., 2000: 21; Kruger and Chapman, 2005; Preston et al., 1992: 755). However, the most important single change that needs to be made is to institute an effective negotiating structure.

An "asocietal mentality"

Burdge (1998: 270, 271) refers to a prevailing "asocietal mentality", an attitude that humans do not count, in the ranks of the management of regulatory agencies and corporations, politicians, public officials, engineers, economists and some planners.

People with such a mindset are not sensitive to social processes. They have little understanding of the complexity and heterogeneity of society, and how the impacts of development benefit and disadvantage different sections of society in different ways. The implications of an “asocietal mentality” for SIA are that the need for SIA is overlooked, that the need for specialised expertise is not recognised, that there are very low expectations from SIA to produce only very superficial social baseline information, and a belief that only a very superficial public involvement process is all that is needed in terms of SIA. There may also be resistance to SIA among administrators and economists, who question its cost-effectiveness or who may be afraid that it will lead to delays or even the abandonment of development projects (Barrow, 2000: 69, 71).

Francis and Jacobs (1999: 345) indicate four conditions necessary for countering an asocietal mentality: enhanced awareness, well-defined procedures and guidelines, proper social assessment methods, and the allocation of sufficient resources. EIA authorities and practitioners in South Africa should engage in a joint effort to meet these conditions in impact assessment practice.

Recommendations for improvement of SIA in South Africa

From the above it is clear that SIA, internationally and in South Africa, has been plagued by a number of problems, mainly related to approach and methods. In the SIA literature there is a clear understanding of the shortcomings that affect the standing of SIA, and recommendations for improvement in a number of areas have been made (Baines and Taylor, 2002: 6-8; Barrow, 2000: 216-8; Burdge, 1998: 276-280; Peterson and Gemmell, 1977: 384-386). However, as long as social impacts are assessed by consultants who have not been properly trained in social science methods, calls for improved professional standards for SIA will remain unanswered. Higher standards of SIA practice in South Africa can only be achieved when practitioners are professionally trained, accredited and monitored by a professional body. Then professional ethics can be improved and international standards applied (Barrow, 2000: 71).

To improve the theoretical and legal framework within which SIA is practiced in South Africa, the following interventions are recommended:

- Introduce a system of mandatory registration of SIA practitioners.

- Specialised SIA training programmes should be developed and accredited by the South African Qualifications Authority (SAQA). Burdge (1998: 127-128) makes recommendations on what should be taught in a university SIA course.
- Wherever significant social impacts are identified in an EIA, these should be assessed by an SIA specialist. This is in line with the principle emphasised in the guidelines of the US Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (2003: 233) that in SIA trained social scientists employing proper social science methods will produce the best results.
- A policy framework for SIAs, including a code of ethics for SIA, should be developed by the authorities responsible for EIAs in consultation with the impact assessment profession.
- In the guidelines that will follow the new EIA regulations, specific attention should also be paid to methodological guidelines for the conduct of SIAs. Such guidelines should elaborate on the tasks of the SIA practitioner in each phase of the EIA, but should be flexible. Aspects on which guidance for SIA practitioners is needed, include the features of an issues-oriented approach to SIA, how to identify the significant social impacts of a particular project from a list of social impact variables making up the "social universe", how to combine quantitative and qualitative assessment methods, how to use cross-checking procedures to establish the validity of data, and how to combine expert data and public participation to reach socially responsible decisions.
- The public participation process in South African EIAs should be redesigned to make it more effective and truly participative. An effective statutory negotiating structure should be instituted for this purpose. Vanclay (1999: 322) notes: "Relying on volunteer interest by community members in participation processes is a sure way to achieve a non-representative or biased response." Therefore, statutory bodies on the pattern of the community forums employed in other countries should be introduced if public participation is to fulfil its purpose in South Africa. It is possible to utilise existing structures (e.g. those related to Integrated Development Plans or IDPs) to facilitate public participation. Local councillors, working in consultation with their ward committees, could be drafted into the EIA process with relative ease.

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. Some years ago Hamann et al. (2000: 20) emphasised the need for proper balance between participatory processes and the decision-making responsibility of the elected representatives of the people in the context of the South African EIA system. In terms of SIA practice, despite DEAT's claims that environmental management is "part of an overall thrust towards social justice, democracy and sustainable development" (DEAT, 2005: 57), this balance has not yet been achieved.

References

Aidala, J.V. 1977. Computer-Assisted Social Profiling: Some Uses of Computerized Data Banks in Social Impact Assessment. In: Finsterbusch and Wolf, pp. 167-171.

Armour, A., Bowron, B., Miller, E. and Miloff, M. 1977. A Framework for Community Impact Assessment. In: Finsterbusch and Wolf, pp. 24-34.

Baines, J., Morgan, B. and Buckenham, B. 2003. From technology-focused rules to socially responsible implementation: an SIA of proposed home heating rules in Christchurch, New Zealand, *Impact Assessment and Project Appraisal* 21(3): 187-194. September.

Baines, J. and Taylor, N. 2002. Institutionalising SIA in rapidly developing economies – the Malaysian case. Paper presented at the 22nd Annual Conference of the International Association for Impact Assessment, The Hague, The Netherlands, 15-21 June.

Barrow, C.J. 2000. *Social Impact Assessment: An introduction*. London: Arnold.

Becker, H.A. 1997. *Social Impact Assessment: Method and Experience in Europe, North America and the Developing World*. London: UCL Press.

Becker, H.A. and Vanclay, F. 2003. *The International Handbook of Social Impact Assessment: Conceptual and Methodological Advances*. Cheltenham: Edward Elgar.

Bissett, R. 2000. "Methods of Consultation and Public Participation". In: Lee and George, pp. 149-160.

Buchan, D. 2003. Buy-in and social capital: by-products of social impact assessment, *Impact Assessment and Project Appraisal* 21(3): 168-172. September.

Burdge, R.J. 1990. The Benefits of Social Impact Assessment in Third World Development, *Environmental Impact Assessment Review*, 10, pp. 123-134.

Burdge, R.J. 2002. Why is social impact assessment the orphan of the assessment process? *Impact Assessment and Project Appraisal*, 20(1), pp. 3-9.

Burdge, R.J. 2003a. The practice of social impact assessment - background, *Impact Assessment and Project Appraisal* 21(2): 84-88. June.

Burdge, R.J. 2003b. Benefiting from the practice of social impact assessment, *Impact Assessment and Project Appraisal* 21(3): 225-229. September.

Burdge, R.J. 2004a (1998, 1994). *The Concepts, Process and Methods of Social Impact Assessment*. Middleton: Social Ecology Press. 3rd edition. (1st edition 1994 and 2nd edition 1998, both titled *A Conceptual Approach to Social Impact Assessment*).

Burdge, R.J. 2004b (1999, 1995). *A Community Guide to Social Impact Assessment*. Middleton: Social Ecology Press. 3rd edition. (1st edition 1995; 2nd edition 1999).

Burdge, R.J. and Robertson, R.A. 1998. Social Impact Assessment and the public involvement process. In: Burdge, pp. 183-192.

Burdge, R.J. and Vanclay, F. 1996. Social Impact Assessment: a contribution to the state of the art series, *Impact Assessment* 14(1), pp. 59-86.

Carley, M.J. and Bustelo, E.S. 1984. *Social Impact Assessment and Monitoring. A Guide to the Literature*. Boulder: Westview Press.

Cernea, M.M. 1991. *Putting people first: Sociological Variables in Rural Development*. New York: Oxford University Press. 2nd revised and expanded edition.

Conopask, J.V. and Reynolds, R.R. 1977. Using Cost-Benefit Analysis in Social Impact Assessment: Hazards and Promise. In: Finsterbusch and Wolf, pp. 83-90.

Dani, A.A. 2003. From Mitigating Impacts to Improving Outcomes. Paper presented at the Conference on New Directions in Impact Assessment for Development: Methods and Practice, Manchester, 24-25 November 2003.

DEAT (Department of Environmental Affairs and Tourism). 1997. White Paper on Environmental Management Policy. <http://www.environment.gov.za/> (accessed 3 October 2005).

DEAT. 1998. Guideline document, EIA Regulations, Implementation of sections 21, 22 and 26 of the Environment Conservation Act, Pretoria, April.

DEAT. 2004. Proposed regulations under section 24(5) of the National Environmental Management Act, 1998 (Act no. 107 of 1998) as amended, Pretoria, 25 June.

DEAT. 2005. *10 year review, 1994-2004*, Pretoria. <http://www.environment.gov.za/> (accessed 3 October 2005).

DeLuca, D.R. 1977. Community Structure, Resources, and the Capacity to Respond to Environmental Problems: New Concepts for Social Impact Assessments. In: Finsterbusch and Wolf, pp. 224-234.

DeTombe, D. 2003. Handling complex societal problems. In: Becker and Vanclay, pp. 278-295.

Égré, D. and Senécal, P. 2003. Social impact assessments of large dams throughout the world: lessons learned over two decades, *Impact Assessment and Project Appraisal* 21(3): 215-224. September.

Finsterbusch, K. and Wolf, C.P. (eds). 1977 (first edition) and 1981 (second edition). *Methodology of Social Impact Assessment*. Stroudsburg: Hutchinson Ross.

Fischer, T.B. 1999. Comparative analysis of environmental and socio-economic impacts in SEA for transport-related policies, plans, and programs, *Environmental Impact Assessment Review*, no. 19, pp. 275-303.

Francis, P. and Jacobs, S. 1999. Institutionalizing social analysis at the World Bank, *Environmental Impact Assessment Review*, no. 19, pp. 341-357.

Freudenburg, W.R. 1986. Social Impact Assessment, *Annual Survey of Sociology*, vol. 12, pp. 451-478.

Fuggle, R.F. and Rabie, M. A. (eds.). 1992. *Environmental Management in South Africa*. Cape Town: Juta.

Gagnon, C., Hirsch, P. and Howitt, R. 1993. Can SIA Empower Communities?, *Environmental Impact Assessment Review*, 13, pp. 229-253.

Gilpin, A. 1996. *Environmental Impact Assessment (EIA): Cutting Edge for the Twenty-first Century*. Cambridge: Cambridge University Press. 1995 edition, 1996 printing.

Glasson, J., Therivel, R. and Chadwick, A. 1999. *Introduction to Environmental Impact Assessment: Principles and Procedures, Process, Practice, and Prospects*. London: UCL Press. 2nd edition.

Glazewski, J. 2000: *Environmental Law in South Africa*. Butterworths, Durban.

Gramling, R. and Freudenburg, W.R. 1992. "Opportunity-Threat, Development, and Adaptation: Toward a Comprehensive Framework for Social Impact Assessment", *Rural Sociology* 57(2): 216-234.

Hamann, R., Booth, L. and O'Riordan, T. 2000. South African environmental policy on the move, *South African Geographical Journal*, 82(2), pp. 11-22.

Harris, C.C., Nielsen, E.A., McLaughlin, W.J. and Becker, D.R. 2003. Community-based social impact assessment: the case of salmon-recovery on the lower Snake River, *Impact Assessment and Project Appraisal* 21(2): 109-118. June.

Hartley, N. and Wood, C. 2005. Public participation in environmental impact assessment—implementing the Aarhus Convention, *Environmental Impact Assessment Review*, 25, pp. 319–340.

Henry, R. 1990. Implementing Social Impact Assessment in Developing Countries: A Comparative Approach to the Structural Problems, *Environmental Impact Assessment Review*, 10, pp. 91-101.

Hornback, K.E. 1977. Overcoming Obstacles to Agency and Public Involvement: A Program and its Methods. In: Finsterbusch and Wolf, pp. 355-363.

International Association for Impact Assessment (IAIA), 2003. Frank Vanclay, *Social Impact Assessment: International Principles*. IAIA Special Publication Series no. 2, May. http://www.iaia.org/Members/Publications/Guidelines_Principles/SP2.pdf (accessed 3 October 2005).

Interorganizational Committee on Guidelines and Principles for Social Impact Assessment. 2003. Principles and Guidelines for Social Impact Assessment in the USA, *Impact Assessment and Project Appraisal*, 21(3): pp. 231-250. September.

Kruger, E. and Chapman, O.A. 2005. Quality Aspects of Environmental Impact Assessment Reports in the Free State Province, South Africa, *South African Geographical Journal* 87(1), pp. 52–57.

Lawrence, D.P. 2003. *Environmental Impact Assessment: Practical Solutions to Recurrent Problems*. Hoboken, N.J.: Wiley-Interscience.

Lee, N. and George, C. (eds). 2000. *Environmental Assessment in Developing and Transitional Countries: Principles, Methods, and Practice*. Chichester: John Wiley and Sons.

Miller, D.C. 1977. Methods for Estimating Societal Futures. In: Finsterbusch and Wolf, pp. 202-210.

Momtaz, S. 2005. Institutionalizing social impact assessment in Bangladesh resource management: limitations and opportunities, *Environmental Impact Assessment Review*, 25, pp. 33-45.

Olsen, M.E. and Merwin, D.J. 1977. Toward a Methodology for Conducting Social Impact Assessments Using Quality of Social Life Indicators. In: Finsterbusch and Wolf, pp. 43-73.

Peterson, G.L. and Gemmill, R.S. 1977. Social Impact Assessment: Comments on the State of the Art. In: Finsterbusch and Wolf, pp. 374-387.

Petts, J. (ed). 1999. *Handbook of Environmental Impact Assessment*, vol. 1: Environmental Impact Assessment: Process, Methods and Potential. Oxford: Blackwell Science.

Petts, J. (ed). 1999a. Public Participation and Environmental Impact Assessment. In: Petts, pp. 145-177.

PI Student Project. 1998. Making a mountain out of a mole hill: using public involvement in recreation planning. In: Burdge, pp. 219-230.

Preston, G. R., Robins, N. and Fuggle, R. F. 1992. Integrated Environmental Management. In: Fuggle and Rabie, pp. 748 – 761.

Rattle, R. and Kwiatkowski, R.E. 2003. Integrating health and social impact assessment. In: Becker and Vanclay, pp. 92-107.

Republic of South Africa. 1989. *Government Gazette*, Vol. 288, No. 11927, Cape Town, 9 June. State President's Office no. 1188: Environment Conservation Act, 1989, Act no. 73 of 1989.

Republic of South Africa. 1996. *The Constitution of the Republic of South Africa, 1996*, Act no. 108 of 1996. Pretoria: Government Printer.

Republic of South Africa. 1997a. *Government Gazette*, Vol. 387, No. 18261, Government Notice R. 1182, Pretoria, 5 September.

Republic of South Africa. 1997b. *Government Gazette*, Vol. 387, No. 18261, Government Notice R. 1183, Pretoria, 5 September.

Republic of South Africa. 1997c. *Government Gazette*, Vol. 388, No. 18362, Government Notice R. 1355, Pretoria, 17 October.

Republic of South Africa. 1998a. *Government Gazette*, Vol. 393, No. 18783, Government Notice R. 448, Pretoria, 27 March.

Republic of South Africa. 1998b. *Government Gazette*, vol. 401, no. 19519, Cape Town, 27 November 1998. National Environmental Management Act, Act no. 107 of 1998.

Republic of South Africa. 1998c. *Government Gazette*, Vol. 402, No. 19599, Government Notice R. 1645, Pretoria, 11 December.

Republic of South Africa. 2002a. *Government Gazette*, Vol. 443, No. 23401, Government Notice R. 670, Pretoria, 10 May.

Republic of South Africa. 2002b. *Government Gazette*, Vol. 443, No. 23401, Government Notice R. 672, Pretoria, 10 May.

Republic of South Africa. 2002c. *Government Gazette*, vol. 448, no. 23922, Cape Town, 10 October. The Presidency, no. 1273: Mineral and Petroleum Resources Development Act, 2002, Act no. 28 of 2002.

Republic of South Africa. 2004. *Government Gazette*, vol, 466, no. 26275, *Regulation Gazette*, No. 7949, Pretoria, 23 April 2004. Department of Minerals and Energy, Government Notice R. 527: Mineral and Petroleum Resources Development Act (28/2002): Mineral and Petroleum Resources Development Regulations, Schedule, chapter 2, Part III Environmental regulations for mineral development, petroleum exploration and production.

Rivers, M.J. and Buchan, D. 1995. Social Assessment and Consultation: New Zealand Cases, *Project Appraisal* 10(3): 181-188. September.

Roberts, R. 2003. Involving the public. In: Becker and Vanclay, pp. 258-277.

Ross, H. 1990. Community Social Impact Assessment: A Framework for Indigenous Peoples, *Environmental Impact Assessment Review*, 10, pp. 229-253.

Rossouw, N., Davies, S., Fortuin, H., Rapholo, B., and De Wit, M. 2003. "South Africa". In: Tarr, P. (comp.), *Environmental Impact Assessment in Southern Africa*. Windhoek, Southern African Institute for Environmental Assessment, pp. 201-225.

Sandham, L.A., Siphugu, M.V. and Tshivhandekano, T.R. 2005. Aspects of Environmental Impact Assessment (EIA) practice in the Limpopo Province – South Africa, *African Journal of Environmental Assessment and Management*, Vol. 10, March 2005, pp. 50-65.

Sandham, L., Van der Walt, A. and Retief, F. 2002. Aspects of EIA in the North West Province. Powerpoint presentation of paper presented at the International Conference of the Geographical Union, Durban (unpublished).

Sassone, P.G. 1977. Social Impact Assessment and Cost-Benefit Analysis. In: Finsterbusch and Wolf, pp. 74-82.90.

Smith, L.G. 1993. *Impact Assessment and Sustainable Resource Management*. Burnt Mill: Longman.

Slotweg, R., Vanclay, F. and Van Schooten, M. 2003. Integrating environmental and social impact assessment. In: Becker and Vanclay, pp. 56-73.

Sowman, M., Fuggle, R. and Preston, G. 1995. A review of the evolution of environmental evaluation procedures in South Africa, *Environmental Impact Assessment Review*, no. 15, pp. 45-67.

Stolp, A. 2003. Citizen values assessment. In: Becker and Vanclay, pp. 231-257.

Taylor, C.N., Bryan, C.H. and Goodrich, C.G. 2004. *Social assessment: theory, process and techniques*. Lincoln: Taylor Baines Associates. Third edition.

USDA Forest Service Collaborative Forest Restoration Program. 2005. *Handbook 5: Monitoring social and economic effects of forest restoration*. Flagstaff: Ecological Restoration Institute, Northern Arizona University.

Vanclay, F. 1999. "Social Impact Assessment". In: Petts, pp. 301-326.

Vanclay, F. 2000. "Social Impact Assessment". In: Lee and George, pp. 125-135.

Vanclay, F. 2002. Conceptualising social impacts, *Environmental Impact Assessment Review*, 22, pp. 183-211.

Vanclay, F. 2003. International Principles for Social Impact Assessment, *Impact Assessment and Project Appraisal*, 21(1), pp. 5-11.

Van Schooten, M., Vanclay, F. and Slotweg, R. 2003. Conceptualizing social change processes and social impacts. In: Becker and Vanclay, pp. 74-91.

Vlachos, E. 1977. The Use of Scenarios for Social Impact Assessment. In: Finsterbusch and Wolf, pp. 211-223.

Weaver, A., Chonguica, E., Rukato, H. and Tarr, P. 2003. NEPAD and Environmental Assessment, *African Journal of Environmental Assessment and Management*, vol. 7: 1-13. November.

Webler, T., Kastenholz, H. and Renn, O. 1995. Public Participation in Impact Assessment: A Social Learning Perspective, *Environmental Impact Assessment Review*, 15, pp. 443-463.

Wood, C., 1995: *Environmental Impact Assessment: A Comparative Review*. Harlow: Longman Group.

World Bank. 1995. "Social Assessment", Environment Department dissemination notes, no. 36. Washington DC: World Bank.

World Bank. 2003. World Bank Poverty Reduction Group and Social Development Department, *A User's Guide to Poverty and Social Impact Analysis*. Washington D.C.: International Bank for Reconstruction and Development.

CHAPTER 3: ARTICLE 2

EVALUATION OF AND RECOMMENDATIONS FOR THE IMPROVEMENT OF THE PRACTICE OF SIA IN THE NORTH WEST PROVINCE, SOUTH AFRICA

Journal of Environmental Planning and Management

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Title sheet

**Evaluation of and recommendations for the improvement of the practice of SIA in
the North West Province, South Africa**

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EVALUATION OF AND RECOMMENDATIONS FOR THE IMPROVEMENT OF THE PRACTICE OF SIA IN THE NORTH WEST PROVINCE, SOUTH AFRICA

Abstract

This article is the product of an empirical investigation of SIA practice in the North West Province of South Africa. Twenty-six files for the period 1999 to 2002 in the EIA archives of the province have been quantitatively and qualitatively analysed. It has been established that in only 8% of the cases the SIA component of the EIAs approached a satisfactory level. Serious shortcomings in terms of social baseline data, the rating of the significance of SIA by environmental consultants and officials, specialist studies, public participation and recommended social mitigation measures have been revealed. The quality of SIA practice needs to be raised to help introduce broad-based participatory democracy into the EIA process. A number of recommendations to achieve this aim are made with regard to a registration system for SIA practitioners, specialised SIA training programmes, the use of SIA specialists, a policy framework and code of ethics for SIA, methodological guidelines, and redesigning the public participation process. Key words: Social Impact Assessment (SIA), Environmental Impact Assessment (EIA), South Africa, North West Province.

Introduction

In the 1970s and 1980s, before legislation on EIAs existed in South Africa, the first EIAs were conducted voluntarily, particularly in the case of some large or controversial developments (Glazewski, 2000: 279). In terms of the Environment Conservation Act (ECA), Act no. 73 of 1989 (Republic of South Africa, 1989), and the subsequent EIA regulations, EIA procedures were institutionalised in the country. Through the National Environmental Management Act (NEMA), Act no. 107 of 1998 (Republic of South Africa, 1998), and the draft EIA regulations now under consideration, EIA practice is being refined further. The volume of EIAs has increased and a large number of EIAs are now being conducted annually in all the provinces.

Internationally, although significant advances have been made in EIA practice, EIA practitioners are concerned with the assessment and improvement of EIA effectiveness

(Lee, 2000: 140-142; Leu et al., 1997: 89, 90). None of the EIA systems reviewed by Gilpin (1995) approached all the essential ingredients of a successful EIA and he reached the conclusion that there was mounting evidence, from a number of countries, that the quality of a significant proportion of EIA reports was unsatisfactory. Criticism has been expressed about various aspects of EIA practice.

The urgent need to evaluate EIA practice in South Africa to assess the influence of EIA on decision-making and the formulation and application of mitigation measures for significant impacts, and to establish a baseline of EIA practice against which further practice and changes can be referenced has not been sufficiently addressed (Sandham et al., 2002: 3). Systematical empirical investigation of EIA procedure and practice in South Africa to assess compliance to regulations or performance towards achieving the objectives of legislation has been rather limited thus far, hence it is difficult to assess the effectiveness of the EIA process in South Africa (Sandham et al., 2005: 50). Some results for the Limpopo Province (Sandham, et al., 2005), North West Province (Sandham et al., 2002) and Free State Province (Kruger and Chapman, 2005) are available. A qualitative picture of EIA practice has emerged from discussions and interviews with government officials, consultants and NGOs (Rossouw et al., 2003; Wood, 1999: 52).

None of the above-mentioned empirical studies have focussed on social impact assessment (SIA) as part of the broader EIA process in South Africa. In the international SIA literature the persistent problems of SIA practice are well-documented (see e.g. Barrow, 2000: 65-72; Becker, 1997: 142-174; Burdge, 1998: 268-271; Taylor et al., 2004: 12-22). A preliminary investigation into the status of SIA in South Africa has revealed that it has not really come into its own as a recognised input into the planning of development projects, decision-making and longer term environmental management. Recommendations for the enhancement of SIA practice in the country have been made (Du Pisani, 2005: 39-40).

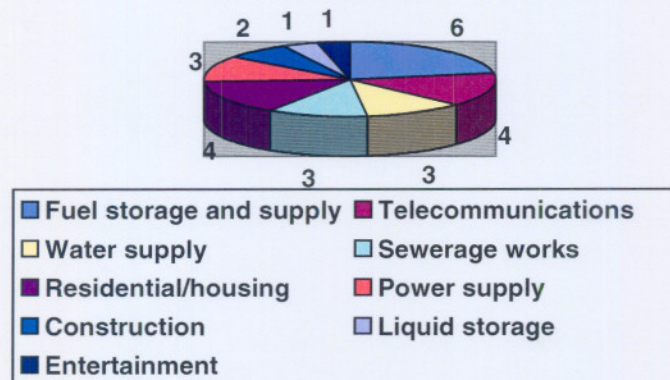
It is the objective of this empirical study to evaluate the practice of SIA as component of EIA in the North West Province and to make recommendations for its improvement.

Methodology

In this study the evaluation of SIA practice is conducted through an empirical investigation and analysis, both quantitative and qualitative, of the EIA archives of the North West Province. From the available EIA files, handled by the provincial environmental officers in Mafikeng and Rustenburg, a total number of 26 EIAs for the period 1999 to 2002 were selected. Two files from 1999 were analysed, six from 2000, seventeen from 2001 and one from 2002.

In Figure 1 a breakdown is given of the type of projects covered by the EIA files investigated for this study. These included fuel storage and/or supply (6 EIAs), telecommunications (4), residential/township development and housing (4), water supply (3), sewerage works (3), power supply (3), construction (2), liquid (non-fuel) storage tanks (1) and entertainment – a casino complex (1).

Figure 1: Types of EIAs



Four of the projects were large in terms of the area covered by the development (more than ten hectare surface area), ten were medium-sized (between one and ten hectare), and twelve were small (less than one hectare).

Kruger and Chapman (2005: 52) note that assessments may vary widely in terms of type, scope and complexity and it is therefore difficult to generalise about what constitutes an adequate report or assessment process. In general, an effective assessment is one that enables a decision-maker to weigh up the costs and benefits of

the proposal and, in so doing, reach a decision which is socially optimal. It should comply with the legal and procedural requirements for the assessment, present adequate documents, and use appropriate methods (DEA, 1992). The South African Department of Environmental Affairs and Tourism (DEAT) has published guidelines on EIA review criteria (DEAT, 2004).

For this study the relevant EIA applications, reports and decisions were first quantitatively analysed to determine the amount of attention paid to social impacts, compared to the attention paid to other categories of impacts, such as biophysical and economic impacts. Descriptive techniques were used and clear differentiation was made between the different phases (application, plan of study for scoping, scoping report, environmental impact report, record of decision) of the EIA process. A specific collation sheet was developed on which the relevant information from each EIA file was recorded. Data were collected on the following aspects: the quantity and quality of social baseline data, the identification of social impacts in EIAs, the rating of significance of social impacts by EIA practitioners in their applications and reports, compared to the amount of attention paid to social impacts by environmental officers in records of decision (RODs), specialist studies on social impacts, public participation, and proposed mitigation measures. Public participation and mitigation are both generic EIA issues, but are investigated here with the focus on SIA. It should be noted that public participation is sometimes confused with SIA or presented as the SIA.

The second component of the empirical study was a thorough qualitative analysis of the EIA documentation, based on the guidelines, methods and models developed in the international literature, to determine the importance attached to SIA by practitioners and authorities.

Social baseline data and the identification of social impacts in EIAs

In the empirical studies done thus far it has been established that sufficient baseline data on social aspects is lacking in most South African EIAs. Sandham et al. (2002: 8) found that in the sample of EIAs in the North West Province which they investigated social data was totally absent in 62% of the cases, poor in 21%, average in 11% and good in only 6% of the EIAs. They also concluded that development projects were mostly perceived

as creating potential job opportunities, and therefore positive socio-economic impacts were predicted, rather than potentially adverse biophysical impacts.

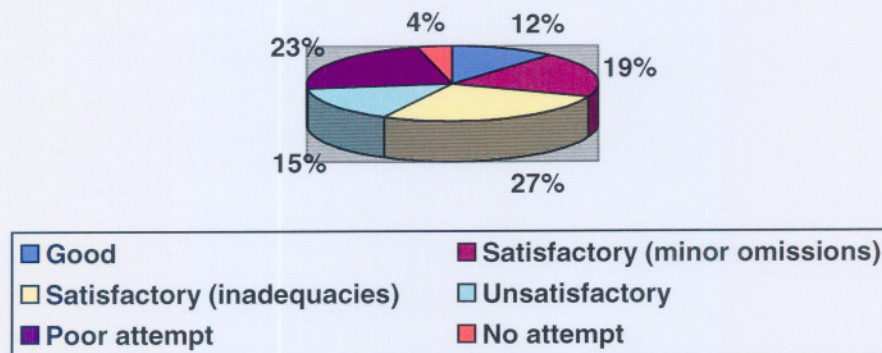
Sandham et al. (2005: 55-56, 57) found that social baseline frequency was considerably higher in the Limpopo Province than in North West (68% vs. 38%), and they attributed it to the greater emphasis placed on social issues in the South African EIA system as a result of and as an attempt to redress social imbalances of the past. The quality of social baseline information in the Limpopo case studies was generally satisfactory, but there appeared to be a weak connection between social baseline information and the prediction of social impacts in the EIA system in Limpopo Province.

Kruger and Chapman (2005: 53) found a similar inadequacy of baseline studies on socio-economic aspects in Free State EIAs. Six percent of the EIAs had no socio-economic baseline studies, 33% were of poor quality; 39% were of average quality and only 22% of the EIAs contained good quality socio-economic baselines studies. According to comments by an environmental officer in the Free State, Mr Danie Krynauw, the DEAT regards it as their responsibility to assess the biophysical environment affected by development, but not to assess socio-economic impacts (cited in Kruger and Chapman, 2005: 53). Hamann et al. (2000: 19) contend that there is not enough emphasis on assessing both biophysical and socio-economic impacts of a development due to capacity constraints and lack of institutional resources.

In the current study the quantity and quality of social baseline data were assessed in two ways.

Firstly the space in the EIA documentation devoted to social baseline information was determined and reflected as follows in the six-point scale, originally developed by Lee and Colley (1991), adapted by Sandham et al. (2004), and used in the collation sheet of this study: A (well-performed) – more than 20 sentences; B (satisfactory, minor omissions) – 16-20 sentences; C (satisfactory, omissions, inadequacies) – 11-15 sentences; D (unsatisfactory) – 6-10 sentences; E (poor attempt) – 1-5 sentences; F (no attempt) – nothing. Obviously, this is a rough but robust attempt to quantify report quality, which is open to modification. The results are reflected in figure 2:

Figure 2: Quantity of social baseline data



Thus, in terms of quantity, in only 31% of the EIAs were social baseline data adequate and inadequate in 69% of the EIAs. In 27% of the cases social baseline data were totally or almost totally lacking. These results confirm the conclusion of previous studies that social baseline data in South African EIAs are seriously lacking.

The second method was to assess the different social impacts identified in EIA applications, plans of study for scoping, scoping reports and EIRs against standard key social variable checklists available in the SIA literature. Being aware that checklists of social variables should not be used in a mechanical way and should be customised for each project (Vanclay, 2000: 129; Aucamp, 2004b: 20), Burdge's 28 item checklist was adapted by adding three more items on the collation sheet to provide for issues raised in the EIA files, but not covered in Burdge's checklist (for the checklist and explanation see Burdge, 2004: 41-52). The checklist of 31 key social variables used and the number of occurrences of specific variables in the EIA documentation, which was analysed for this study, are given in Table 1. The three additional items are identified by using the term "other" in the table.

Almost all the social impacts relevant for EIAs can be included under these 31 key categories, which may be regarded as the "social universe" for our purposes. On average 5.7 variables, representing 18.2% of this "social universe" were mentioned per EIA investigated for this study. In the respective EIAs the number of variables mentioned ranged from two out of 31 (6% of the universe) to twelve out of 31 (39%). Thus, in the EIAs analysed for this study the focus on social impacts tended to be too

narrow rather than too broad, confirming the conclusion reached by Wood (1999: 57) about the range of impacts considered in South African EIAs in general.

**Table 1: Checklist of key social variables
(Number of occurrences in brackets)**

High frequency
 Low frequency
 Absent

Population impacts	Communication/ institutional arrangements	Conflicts between local residents and newcomers	Individual and family level impacts	Community infrastructure needs
Population change (2)	Formation of attitudes toward the project (1)	Presence of an outside agency (0)	Disruption in daily living/movement patterns (4)	Change in community infrastructure (19)
Influx/outflux of temporary workers (16)	Interest group activity (0)	Inter-organizational cooperation (1)	Dissimilarity in religious and cultural practices (0)	Land acquisition and disposal (4)
Presence of seasonal/leisure residents (1)	Alteration in size and structure of local government (0)	Introduction of new social classes (1)	Alteration in family structure (0)	Effects on known cultural, historical, sacred, archaeological resources (17)
Relocation of individuals/families (2)	Presence of planning and zoning activity (7)	Change in the commercial/industrial focus of the community (1)	Disruption in social networks (1)	
Dissimilarity in age, gender, racial or ethnic composition (0)	Industrial diversification (0)	Presence of weekend residents (recreational) (1)	Perceptions of public health and safety (22)	
Other: poverty, etc. (3)	Living/family wage (0)		Change in leisure opportunities (1)	
	Enhanced economic inequities (1)		Other: attitudes, fears, values, etc. (15)	
	Change in employment equity of minority groups (0)			
	Change in occupational opportunities (15)			
	Other: stakeholders, power relations, etc. (2)			

Six types of social impacts occur more frequently in the EIA files than others. Perceptions of public health and safety are identified in 22 EIAs (85% of the total) as a

social impact, changes in community infrastructure in 19 (73%), impacts on cultural, historical, sacred or archaeological resources in 17 (65%), the influx of temporary workers in 16 (62%), better job opportunities in 15 (58%) and other impacts related to attitudes, fears and values in 15 (58%). (Note: Because more than one issue may be mentioned in one EIA, the totals for the various issues are greater than the total number of EIAs covered in the study, and therefore the percentages will also add up to more than 100%). Changes in infrastructure and improved job opportunities reflect strong positive social impacts, and the other four types mainly negative impacts, but in some cases also impacts of a more neutral nature. The attention paid to these six variables is discussed in more detail below.

Possibly the expanding literature on health and safety assessment has increased awareness of health and safety risks. Issues around perceptions of public health and safety addressed in the EIAs include: noise disturbance (reflected in 16 EIAs or 62% of the total), dust pollution (11 or 42% of EIAs), road safety (9 or 35% of EIAs), safety of workers on site (5 or 19% of EIAs), emissions/vapours (5 or 19% of EIAs). Other, less frequently mentioned issues related to health and safety, include disease, the danger of explosions, safety of property, blasting operations, and civil aviation risks.

Mention of impacts on cultural, historical, sacred or archaeological resources has become an almost standard item in South African EIAs. This phenomenon can probably be attributed to two causes. Firstly the visibility of cultural and archaeological sites make them easy to identify and quantify (count) as social-cultural impacts. Secondly the National Heritage Resources Act (NHRA), Act no. 25 of 1999 (Republic of South Africa, 1999), which came into operation around the same time as NEMA, requires another type of assessment, heritage impact assessment (HIA) in the case of the presence at a development site of specified types of heritage resources. Assessment practitioners are aware of the requirements of the NHRA and prefer to indicate when no sites of cultural or historic or archaeological significance are located near a proposed development, in which case no HIA is required. Some EIAs mention pertinently that any finds of archaeological, cultural or historical significance made during the construction phase of the project will be reported to the South African Heritage Resources Agency (SAHRA).

The influx of workers to the development site is often mentioned as a social impact, because it is related to a variety of safety and security issues, such as road safety, the safety of the workers themselves, the safety of other people in the vicinity of the site, and the safety of neighbouring property. There are often fears, expressed in 10 EIAs (38% of the total), that the presence of these workers may lead to an increase in crime and antisocial behaviour, such as drinking, vandalism, littering, gambling and soliciting.

By far the most common social impact among the category of “other” impacts, mainly related to attitudes, fears and values, is visual disturbance, which is mentioned in 15 or 58% of the 26 EIAs. This may be the case because almost any type of construction has some kind of easily foreseeable visual impact on the area surrounding the site.

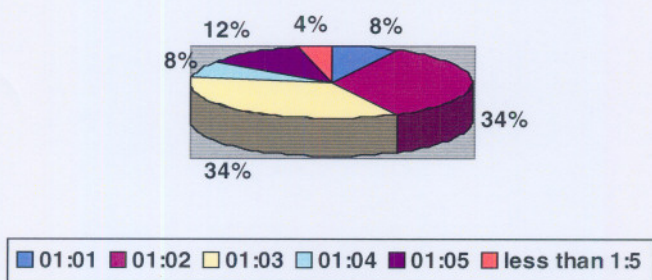
The most commonly identified positive social impacts are improvements in community infrastructure (electricity and water supply, housing, roads, etc) and the creation of jobs for the local population. The need for better infrastructure, especially in deprived communities, is almost self-evident. However, the creation of job opportunities often seems to be mentioned in EIAs in a generic rather than specific way. Generic statements used in this regard by environmental consultants are, for example, “local labour will be used”, “labour intensive construction methods will be used”, the project will “enhance the economic inflow”, “new investment will be attracted” and there will be a positive “multiplier effect for local suppliers”. A closer investigation reveals that in 12 cases in this study (46% of the total) temporary job opportunities during the construction phase would be created, and in only 6 cases (23%) longer term new jobs would possibly be created. The few extra temporary jobs will in most of the projects probably have a minimal impact on the welfare of the community. In only one EIA, the one dealing with the proposed new casino complex outside Klerksdorp, the numbers of expected new temporary and permanent jobs are exactly quantified and the multiplier effects discussed in more detail.

Crucial social impacts stated explicitly or implied in the checklist, such as disruption in social networks, changes in family structures, and issues of power relations and empowerment, are completely absent from all the EIAs. It is interesting that relocation, an issue notorious for its negative social impacts in South African history, is mentioned in

only two of the EIAs. Even in larger-scale projects developers seem to avoid relocation of people almost at all costs.

Most of the EIAs include fewer social impacts than biophysical impacts. Figure 3 shows the ratio between the number of social and the number of biophysical impacts identified in the EIAs:

Figure 3: Ratio between social and biophysical impacts



On average about one social impact is identified for every three biophysical impacts per EIA. The discussion of biophysical impacts is in most cases also much more thorough than that of social impacts.

Rating of significance of social impacts

In 8 of the 26 EIAs studied (31% of the cases) the environmental consultants rated the social impacts as of high significance, in 4 (15%) as of medium significance, and in 14 (54%) as of low significance. The low significance associated with social impacts in general, as is also evident from the other results of this study, stems from the fact that the attention given to the SIA component of EIAs in South Africa is in most cases rather superficial, because the majority of EIAs are undertaken by specialists who possess much more expertise on biophysical rather than social impacts.

Social impacts and specialist studies

Sandham et al. (2002: 9, 14) observe that there is a predominance of biophysical specialist studies and a shortage of social specialist input in EIAs in the North West

Province, which reflects the low priority of social and economic issues in EIA practice. They argue that the predominance of biophysical specialist studies is most likely due to the fact that many EIA consultants have a natural science background and are therefore more aware of the need for specialist studies in those fields. Kruger and Chapman (2005: 54) confirmed these findings and agree with this view. They found that in the majority of their case studies in the Free State no specialist studies were done, which implies that assessments of specialized components of EIAs are conducted by environmental consultants with no specialist training to do that type of assessment. They attribute the lack of specialist input to the small scale of most of the projects, and applicants' resistance to specialist studies due to the additional costs involved.

In the current study only 4 of 26 EIAs (15% of the total) included specialist reports on social impacts. Two of these were archaeological reports, one was a heritage resources assessment and the other one a visual impact assessment. This result is in line with that of Sandham et al. (2005: 59) that archaeological studies are the most common social specialist studies. They regard this pattern as an outflow of the intent in the South African EIA system to address inequalities of the past with a strong emphasis on social issues, and of the fact that archaeological studies are an accessible form of social specialist studies. To search for physical remains from the past, is certainly a more circumscribed activity than to investigate social dynamics in a living community.

Public participation

Public participation, being something that has been prized as a core value in the new democratic political dispensation, is a very important requirement in all South African EIAs. Theoretically public participation processes should provide a perfect opportunity to raise concerns in the affected community about social issues. However, in practice this potential is seldom realised. Sandham et al. (2002: 12, 15) note the inadequacy of the public participation process in the North West Province. They attribute the low interest levels in public participation to the poverty and low levels of education of the rural poor in the province. Kruger and Chapman (2005: 54-55) found a similar trend of inadequate public participation in the Free State. They speculate that it might be due to the small scale of the projects. In the literature it is mentioned that often professionals doubt the general public's ability to contribute meaningfully to project planning and seek

information from the public, rather than their opinions and views on the project (Preston et al., 1992: 760-761; Wood, 1999: 56). Hamman et al. (2000: 19, 21) argue that the lack of interest in the public participation process could possibly be related to the fact that the environmental agenda is seen in some circles as an obstruction to wealth creation and poverty eradication. They warn that insufficient public involvement holds the danger that "the environmental agenda is enacted along narrowly defined socio-political lines, to the detriment of community empowerment and environmental protection".

Public involvement in EIAs is required by law and the EIA guidelines specify what public participation ought to involve (DEAT, 1998: 24). It is therefore no surprise that all 26 EIAs in the current study include public participation activities. In 4 of the EIAs (15% of the total) one type of public participation activity was performed, in 16 EIAs (62%) two types of activities, and in 6 (23%) more than two types of activities.

Although NEMA does not stipulate that public participation should include press and on-site advertising the two most commonly performed types of activities in this study, as in the study of Kruger and Chapman (2005: 54), were on-site notices of the proposed development (21 occurrences) and newspaper advertisements about the development (23 occurrences), inviting persons and institutions to register as interested and affected parties (IAPs), make comments or raise objections about the proposed project. Kruger and Chapman (2005: 54-55) regard newspaper advertisements announcing meetings as inadequate. They point out that press advertising mostly consists of advertising in provincial and regional newspapers, with a lower percentage occurring in local newspapers. This may result in local people, who are the most likely to be affected by a development, not being aware of the proposed development. However, in the North West Province most advertisements appear in local papers.

Other forms of public participation utilised in the 26 EIAs analysed for this study were letters and telephone interviews.

However, the response to the signs, advertisements and other forms of communication, as reflected in the documentation, was disappointing and very few objections were raised. IAP meetings took place in only ten EIAs or 38% of the cases. These meetings

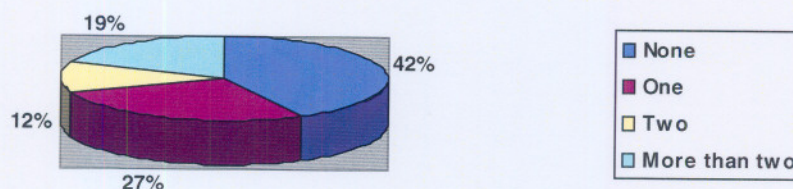
were attended by very few stakeholders apart from the applicants and consultants. Farmers/landowners and tribal representatives respectively attended such meetings in 3 cases each. Other IAPs mentioned in the minutes of public participation meetings in one case each were a mine, a water board, city councillors, a school, a newspaper and the Department of Water Affairs and Forestry (DWAF). Only two inputs on social impacts were made at the ten recorded public participation meetings, revealing the almost complete lack of public interest in the EIA process.

This is certainly a most disappointing statistic and indicates that, although theoretically the South African EIA regulations provide an adequate framework for public participation, the current public participation process has serious shortcomings. On-site notices and newspaper advertisements are not yet public participation as such, but only an invitation to IAPs to participate in the process, and yet most of the EIAs never move beyond this invitation to a truly ongoing participative exercise. In only one EIA the ongoing process of SIA was taken into account, by recommending that the communication channels with the local community should be kept open to receive and address complaints.

Proposed mitigation measures

Wood (1999: 56) regards mitigation as one of the strengths of EIA in South Africa, but the current study does not confirm this for SIA. Figure 4 provides a breakdown of the number of social mitigation measures recommended in the EIAs:

Figure 4: Number of social mitigation measures recommended



This chart shows that on average only one mitigation measure for social impacts is recommended in each EIA and in almost half the cases no social mitigation measures are mentioned at all.

The following types of social mitigation measures feature in the EIAs (number of occurrences in brackets): application of safety standards on site (8), traffic warning signs (5), restriction of working hours to mitigate noise disruption (4), mitigation of visual impacts (4), dust control (3), protection of property (3), protection of archaeological and other heritage sites (3), screening of lights at night-time (2), control of antisocial behaviour (2), speed control (1) and fire prevention measures (1). Most of these mitigation measures are of a rather simple nature and they do not address the more complex social issues.

RODs and social impacts

By analysing the number of social impacts mentioned and the social mitigation measures recommended under the heading “specific conditions” of authorisation of projects in RODs and comparing them to the impacts and mitigation measures featuring in the applications, scoping reports, EIRs and EMPs, the degree of integration of EIA findings into authorisation decisions could be investigated.

It should be noted that the environmental officers signing the RODs seem to be even less concerned about social impacts than the environmental consultants responsible for the EIAs on behalf of the applicants. In most cases it is quite obvious that officials do not make social issues part of ROD conditions. This is in line with Kruger and Chapman's (2005: 55) finding that many of the RODs in Free State EIAs ignored socio-economic issues and mainly addressed biophysical issues mentioned in the scoping reports. They established that only 52% of listed environmental issues in scoping reports were present in RODs. These results coincide with the generic criticism that EIA globally has very little impact on decision-making (Lee, 2000: 144; Sadler, 1988: 140-141; Wathern, 1988a: 28). According to Wood (1999: 55) “the decision to grant authorisation is sometimes being made by overwhelmed provincial staff on narrow nature conservation or other grounds, rather than on the full range of factors normally considered in internationally recognised good EIA practice”. In many cases, as with

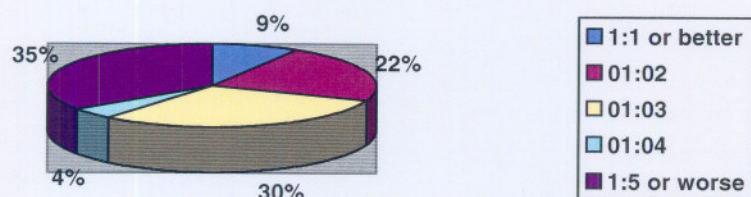
consultants, officials are biophysically trained, since EIA was initially conducted by conservation staff.

Rossouw et al. (2003: 212-213) outline the institutional context in which this seeming reluctance by environmental officers to pay sufficient attention to social impacts should be assessed. They emphasise that most provincial authorities are inadequately staffed to handle the volume of EIAs being submitted for review. In three years, between 1997 and 1999, 489 EIA applications were submitted to the responsible department in the North West Province. A total of only eight staff members, of whom five had fewer than five years' experience, were involved in processing all these applications, which left no capacity to monitor and enforce the conditions of approval.

In the RODs of the 26 EIAs reviewed for this study no social impacts were mentioned in 12 or 46% of the cases, one social impact mentioned in 5 EIAs (19%), two impacts in 5 EIAs (19%) and more than two impacts in 4 EIAs (15%). In 12 of the RODs or 46% of the cases not a single social mitigation measure was recommended, in 5 RODs (19%) only one social mitigation measure, in 6 RODs (23%) two social mitigation measures, and in 3 RODs (12%) more than two social mitigation measures.

Figure 5 indicates the ratio between social impacts identified in the EIAs and specific conditions pertaining to social impacts in the RODs:

Figure 5: Ratio between social conditions in ROD and social impacts in EIA



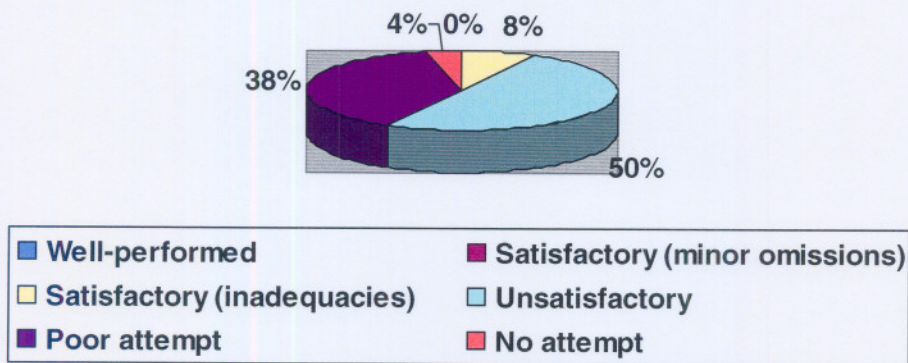
From the chart it is clear that in more than a third of the EIAs only one condition associated with social impacts was set for every five or more social impacts identified, in more than a third the ratio was one condition per three or four social impacts identified,

and in less than a third of the cases, where the ratio was 1:2 or better, there was satisfactory follow-through on social impacts in RODs.

Conclusions and recommendations

From the results of this study it is clear that SIA practice in the North West Province is far from satisfactory. The total SIA rating of the 26 EIAs, calculated from the information recorded on the collation sheets, is reflected in Figure 6:

Figure 6: Overall rating of SIA component of EIAs



This amounts to a situation where not a single EIA of the sample has been assessed as being well-performed or satisfactory with only minor omissions in terms of its SIA component, in 8% of the cases the SIA component was inadequate but satisfactory, in 50% of the cases the SIA component was unsatisfactory, in 38% of the cases the attempts to include SIA were very poor, and in 4% of the cases SIA was non-existent.

The apathetic attitude towards SIA is exemplified in the following quote from an EIA for the construction of a police station: “There are no social and cultural features that are affected by the proposed new development.” This is an amazing statement when one thinks of the social impacts that a police station most certainly will have in any community.

The results of this study in many respects confirm those in Wood (1999), Sandham et al. (2002), Rossouw et al. (2003), Sandham et al. (2005) and Kruger and Chapman (2005).

Wood (1999: 57) argues that consultants have a stranglehold over the South African EIA system, which can only be broken when the lack of financial and staff capacity in the provincial and local authorities responsible for environmental management has been addressed and increased public access to EIA processes has been assured. Sandham et al. (2002: 16) attribute the low quality of EIA practice to the current EIA regulations not being implemented as part of Integrated Environmental Management. The EIA process is seen as rubber stamping at the end of the planning life-cycle, instead of an integral part of development projects from cradle to grave. Rossouw et al. (2003: 214-215) identify several key challenges for impact assessment practice, including neglect of social and environmental factors by environmental consultants who tend to regard developers as their sole clients, a lack of institutional capacity to administer and monitor the EIA process, inadequate public participation, absence of a peer review mechanism, the non-application of standard criteria of good EIA practice, long EIA processing times, and the absence of post-EIA monitoring and auditing. In their study of the quality aspects of EIA practice in the Free State Province Kruger and Chapman (2005: 55) found that, although in the more than 50 EIAs conducted from 1997 to 2002 which they investigated, the degree of compliance with regulations was good, the EIAs showed the following shortcomings: socio-economic impacts are neglected; assessment methodology is highly subjective; there is a lack of specialist input and consideration of alternatives, public involvement is inadequate and there is a lack of integration of EIA findings into authorisation decisions as reflected in the RODs.

The shortcomings revealed by the current study are of a similar nature:

- In terms of both quantity and quality social baseline data are inadequate.
- Both environmental consultants and officials neglect social impacts because they regard them, because of their own lack of expertise in social matters, as of low significance.
- Very few social specialist studies from a very narrow range of social impacts are conducted for EIAs.
- Despite its inclusion in every single EIA public participation is, in terms of significant inputs from IAPs, seriously lacking and totally ineffective.
- Few social mitigation measures are recommended in EIAs and even fewer in RODs. When mitigation measures are recommended they are usually not addressing the more complex social impacts in communities.

More than ten years ago Barendse and Visser (1995: 178) emphasised that if SIA was to make a fruitful contribution to development planning, "the technocratic procedures currently dominating much of the social assessment work being undertaken in South Africa, need to be placed within an approach which emphasises the contextual interpretation, and ongoing strategic management of impacts and processes of social change". From the results of the current study it would seem that not much progress has been made in this direction.

Social impacts will have to be taken much more seriously, because they are crucial in empowering disadvantaged communities. If access to resources, income-generating opportunities and benefits is to be distributed more evenly in society, and not limited to a small emerging middle class, real participatory democracy must permeate every sphere of life, including those development projects for which EIAs are required. The quality of SIA practice needs to be raised to help the introduction of broad-based participatory democracy into the EIA process. The concepts of "putting people first" (Cernea, 1991) and "fitting projects to people" (Uphoff, 1991) are pertinent. In development projects people ought to be "benefited" rather than "impacted". One of the principles specific to SIA practice is to build the social and human capital of communities and to strengthen democratic processes (Aucamp, 2004a: 11).

How can the inadequacy of the SIA component of EIAs in the North West Province be addressed? The empirical results confirm the recommendations flowing from a critical evaluation of SIA based on theoretical principles (Du Pisani, 2005: 39-40). If acted upon the following recommendations may help to improve the situation:

- A system of mandatory registration of SIA practitioners in South Africa needs to be introduced.
- Specialised SIA training programmes for SIA practitioners and government officials responsible for the authorisation of EIAs should be developed by tertiary institutions and accredited by the South African Qualifications Authority (SAQA). Capacity building in the state agencies dealing with EIA authorisation should be given priority, especially in terms of assessing social impacts. The call of Hamann et al. (2000: 19) for a capacity audit of national, provincial and local

environmental authorities, which will allow for a strategic approach to capacity building, is still relevant.

- Rossouw et al. (2003: 215) also suggested a comprehensive audit of completed EIAs and a national EIA database.
- Wherever significant social impacts are identified in an EIA, these should be assessed by an SIA specialist.
- A policy framework for SIAs, including a code of ethics for SIA, should be developed by the authorities responsible for EIAs.
- In the guidelines that will follow the new EIA regulations (currently in final revision), specific attention should also be paid to methodological guidelines for the conduct of SIAs. Such guidelines should elaborate on the tasks of the SIA practitioner in each phase of the EIA, but should be flexible. Aspects on which guidance for SIA practitioners is needed, include the features of an issues-oriented approach to SIA, how to identify the significant social impacts of a particular project from a list of social impact variables making up the “social universe”, how to combine quantitative and qualitative assessment methods, how to use cross-checking procedures to establish the validity of data and how to combine expert data and public participation to reach socially responsible decisions. Kruger and Chapman (2005: 52, 56) recommended, in order to improve the quality of EIA reports and its ability to act as a tool for sustainable development, that more detailed guidelines or regulations are provided, or that the EIA process in South Africa reverts back to the “traditional” scoping report, which involves a thorough identification of issues. They argue that due to scoping reports being regarded as “mini-EIAs”, the quality of EIA practice is severely affected. This “shortened” process has resulted in poor quality baseline studies, lack of consideration of alternatives and inadequate public involvement, and has made it easier to “whitewash” some issues.
- The public participation process in EIAs should be redesigned to make it more effective and truly participative. Wood (1995: 307) notes that “without some form of real public participation EIA is meaningless”. Kruger and Chapman (2005: 56) correctly emphasise that adequate and appropriate representation should be introduced at an early stage in the project cycle, already in the planning and design phases. They recommend that NEMA should be amended to stipulate what public participation includes. Attention should be paid to better means of

communication than the current on-site notices and press advertisements. Preston et al. (1992: 755-756) suggest ways in which existing community structures can be used to keep communities informed about the EIA process. More time for public inputs should be allowed. The identification of all relevant IAPs and proper consultation with the IAPs in arranging public participation meetings should be promoted. In countries where there is not a culture of public participation, such as South Africa, promoting meaningful participation may be difficult (Vanclay, 2000: 127). As long as public participation functions on a voluntary basis it will be difficult to achieve a representative response (Vanclay, 1999: 322). Thus far no funding has been earmarked by the state as incentives for public participation. The most important single change that needs to be made is to institute an effective negotiating structure on the pattern of the community advisory committees, public task forces or interactive community forums employed in other countries. It is possible to utilise existing structures to facilitate public participation. Preston et al. (1992: 756) suggest that a locally based organisation should be appointed to inform the community and conduct meetings. Local councillors, working in consultation with their ward committees, could be drafted into the EIA process with relative ease to facilitate more effective public participation.

Concerns have been expressed by the South African chapter of the IAIA that the proposed new EIA regulations in terms of NEMA may not succeed in raising the quality of EIAs. Its position is that the draft regulations are “incorrectly focused on administrative requirements and biased towards a prescriptive process of information provision by consultants ... and not (driven) by the principles of sustainable development articulated in NEMA”. In the opinion of the IAIA the following substantive problems in EIA practice are ignored in the draft regulations: the lack of capacity of environmental authorities, the lack of clearly defined roles, responsibilities and criteria for ethical conduct of all stakeholders, the issue of quality and scientific confidence in the information used in EIAs, and the issue of the criteria used by authorities to make decisions and to resolve trade-offs (Rossouw, 2005).

These views coincide with those expressed in this article. In a fax to the IAIA the DEAT indicated that they disagreed with these viewpoints and that they intended to proceed

with replacing the current EIA regulations with the proposed new regulations (Rossouw, 2005). Should the new regulations be adopted without further attending to the substantive problems, the inadequacies in SIA practice, identified in this article, will be perpetuated.

Some years ago Hamann et al. (2000: 20) emphasised the need for proper balance between participatory processes and the decision-making responsibility of the elected representatives of the people in the context of the South African EIA system. They asked the pertinent question whether the emerging ruling class is truly capable of being responsive to civil society. In terms of SIA practice that question has not been answered decisively and it is not so evident that the new system is less “programmed to maintain inequality and powerlessness” (Hamann et al., 2000: 11) than the old dispensation.

References

Aucamp, I. 2004a. Introduction to Social Impact Assessment. Powerpoint presentation for master’s degree students. Potchefstroom: North-West University.

Aucamp, I. 2004b. Social Impact Assessment: Methods, Techniques, Sources and Checklists. Powerpoint presentation for master’s degree students. Potchefstroom: North-West University.

Barendze, E. and Visser, L. 1995. Managing the Relationship between National Interest and Local Needs: the Driekoppies Dam, *Project Appraisal* (10)3: 171-179. September.

Barrow, C.J. 2000. *Social Impact Assessment: An introduction*. London: Arnold.

Becker, H.A. 1997. *Social Impact Assessment: Method and Experience in Europe, North America and the Developing World*. London: UCL Press.

Burdge, R.J. 1998. *A Conceptual Approach to Social Impact Assessment*. Middleton: Social Ecology Press. 2nd edition.

Burdge, R.J. 2004. *The Concepts, Process and Methods of Social Impact Assessment*. Middleton: Social Ecology Press. 3rd edition.

Cernea, M.M. 1991. *Putting people first: Sociological Variables in Rural Development*. New York: Oxford University Press. 2nd revised and expanded edition.

DEA (Republic of South Africa. Department of Environment Affairs). 1992. Guidelines for Review. Integrated Environmental Management Guideline Series: Guideline Document 4. Pretoria: Government Printer.

DEAT (Republic of South Africa. Department of Environmental Affairs and Tourism). 1998. EIA Regulations: Implementation of sections 21, 22 and 26 of the Environment Conservation Act. Guideline document. Pretoria: Government Printer.

DEAT. 2004. Review in Environmental Impact Assessment, Integrated Environmental Management, Information Series 13. Pretoria: Department of Environmental Affairs and Tourism.

Du Pisani, J.A. 2005. *Social Impact Assessment: the status of practice in the North West Province of South Africa*. M. Env. Sc. dissertation. Potchefstroom: North-West University.

Fuggle, R.F. and Rabie, M. A. (eds.). 1992. *Environmental Management in South Africa*. Cape Town: Juta.

Gilpin, A. 1995: *Environmental Impact Assessment: Cutting Edge for the Twenty-first Century*. Cambridge: Cambridge University Press.

Glazewski, J. 2000: *Environmental Law in South Africa*. Durban: Butterworths.

Hamann, R., Booth, L. and O'Riordan, T. 2000. South African environmental policy on the move, *South African Geographical Journal*, 82(2), pp. 11-22.

Kruger, E. and Chapman, O.A. 2005. Quality Aspects of Environmental Impact Assessment Reports in the Free State Province, South Africa, *South African Geographical Journal* 87(1), pp. 52–57.

Lee, N. 2000. Reviewing the quality of environmental assessments. In: Lee and George, pp. 137-148.

Lee, N. and Colley, R. 1991. Reviewing the Quality of Environmental Statements. Review methods and Findings, *TPR* 62(2).

Lee, N. and George, C. (eds). 2000. *Environmental Assessment in Developing and Transitional Countries: Principles, Methods, and Practice*. Chichester: John Wiley and Sons.

Leu, W-S., Williams, W.P. and Bark, A.W. 1997. Evaluation of environmental impact assessment in three Southeast Asian nations, *Project Appraisal*, 12 (2), pp. 89-100. June.

Petts, J. (ed). 1999. *Handbook of Environmental Impact Assessment*, vol. 1: Environmental Impact Assessment: Process, Methods and Potential. Oxford: Blackwell Science.

Preston, G. R., Robins, N. and Fuggle, R. F. 1992. Integrated Environmental Management. In: Fuggle and Rabie, pp. 748 – 761.

Republic of South Africa. 1989. *Government Gazette*, Vol. 288, No. 11927, Cape Town, 9 June. State President's Office no. 1188: Environment Conservation Act, 1989, Act no. 73 of 1989.

Republic of South Africa. 1998. *Government Gazette*, vol. 401, no. 19519, Cape Town, 27 November 1998. National Environmental Management Act, Act no. 107 of 1998.

Republic of South Africa, 1999. *Government Gazette*, vol. 406, no. 19974, Cape Town, 28 April 1999. National Heritage Resources Act, Act no. 25 of 1999.

Rossouw, N. 2005. E-mail communication of the President of IAIA (SA) to IAIA members, 26 July.

Rossouw, N., Davies, S., Fortuin, H., Rapholo, B., and De Wit, M. 2003. "South Africa". In: Tarr, P. (comp.), *Environmental Impact Assessment in Southern Africa*. Windhoek: Southern African Institute for Environmental Assessment, pp. 201-225.

Sadler, B. 1988. The evaluation of assessment: post-EIS research and process development. In: Wathern 1988b, pp. 129-142.

Sandham, L.A., Pretorius, H.E. and Van der Walt, A.J. 2004. A Review Package for Assessing the Quality of Environmental Impact Reports in South Africa. 24th Annual Conference of the International Association of Impact Assessment, Vancouver, British Columbia, April 2004.

Sandham, L.A., Siphugu, M.V. and Tshivhandekano, T.R. 2005. Aspects of Environmental Impact Assessment (EIA) practice in the Limpopo Province – South Africa, *African Journal of Environmental Assessment and Management*, Vol. 10, March 2005, pp. 50-65.

Sandham, L.A., Van der Walt, A. and Retief, F. 2002. Aspects of EIA in the North West Province. Powerpoint presentation of paper presented at the regional Conference of the International Geographical Union, Durban, August 4-7 (unpublished).

Taylor, C.N., Bryan, C.H. and Goodrich, C.G. 2004. *Social assessment: theory, process and techniques*. Lincoln: Taylor Baines Associates. Third edition.

Uphoff, N. 1991. "Fitting projects to people". In: Cernea, pp. 467-511.

Vanclay, F. 1999. "Social Impact Assessment". In: Petts, pp. 301-326.

Vanclay, F. 2000. "Social Impact Assessment". In: Lee and George, pp. 125-135.

Wathern, P. 1988a. An introductory guide to EIA. In: Wathern, pp. 1-30.

Wathern, P. (ed.). 1988b. *Environmental Impact Assessment: Theory and Practice*. London: Unwin Hyman.

Wood, C. 1995: *Environmental Impact Assessment: A Comparative Review*, Harlow: Longman Group.

Wood, C. 1999. Pastiche or postiche? Environmental impact assessment in South Africa, *South African Geographical Journal*, 81(1), pp. 52-59.

CHAPTER 4: CONCLUDING REMARKS.

The articles comprising this dissertation deal with the theoretical and practical status of SIA in South Africa. Shortcomings have been identified and recommendations for improvement made.

What direction should South Africa take in its approach to social impact assessment? Different options have recently been put on the table. Alshuwaikhat (2005: 314, 315) argues that strategic environmental assessment (SEA) as an “up-front supplement” to EIA could improve public participation and the general quality of EIA in developing countries. Social scientists employed by the World Bank has taken a particular fancy in Poverty and Social Impact Analysis (PSIA), with its politically correct focus on the poor and vulnerable. In PSIA economic and social analyses are again being integrated just like in the early history of EIA, when cost-benefit analysis was so popular, but now with the aim to inform the design of pro-poor policies. It is hoped that through PSIA social impact practitioners will play a more important role in strategic developmental issues to design reforms that achieve more equitable and sustainable outcomes (Dani, 2003; World Bank, 2003).

Kirkpatrick and Lee (1999: 232) express themselves in favour of “a more interdisciplinary, integrated, and informed approach to economic, social, and environmental appraisal”. In this endeavour balance seems to be an important consideration. AtKisson (1996: 348) warns: “Special care must be given to balancing environmental, economic, and social interests in the development of community sustainability indicators”.

The problem is that such balance does not exist in the relations of power between the different stakeholders in the South African impact assessment system. Economic interests still seem to dominate, because both the environmental authorities and civil society lack the capacity to counter the financial and organisational power of big business and to effectively protect environmental and social interests.

It is hoped that the recommendations made in these articles may make a small contribution towards restoring the balance. Similar recommendations have been made

in the past by other researchers, without having much effect in setting things right in EIA practice. The proposed new EIA regulations are a case in point, where the decision-makers do not seem willing to heed the advice of impact assessment practitioners. The recommendations in this dissertation are based on the empirical result of this study and earlier studies. If they are implemented, it will undoubtedly lead to the improvement of SIA practice.

However, implementation of recommendations of this nature is not the sole responsibility of government authorities. Despite shortcomings the legislative framework for EIA does provide a relatively sound basis for EIA and SIA practice to move forward. From the side of the authorities careful consideration of comments on the proposed new EIA regulations will be required in the immediate future. The impact assessment profession, as another major stakeholder, must also get its house in order. The implementation of several of the recommendations in this study is at least partly within the scope of self-regulation by the profession. Enhancement of EIA practice in general, and SIA practice in particular, will require a concerted effort by different stakeholders.

References

Alshuwaikhat, H.M. 2005. Strategic environmental assessment can help solve environmental impact assessment failures in developing countries, *Environmental Impact Assessment Review*, 25, pp. 307–317.

AtKisson, A. 1996. Developing indicators of sustainable community: lessons from sustainable Seattle, *Environmental Impact Assessment Review*, 16, pp. 337-350.

Dani, A.A. 2003. From Mitigating Impacts to Improving Outcomes. Paper presented at the Conference on New Directions in Impact Assessment for Development: Methods and Practice, Manchester, 24-25 November 2003.

Kirkpatrick, C. and Lee, N. 1999. Special Issue: Integrated Appraisal and decision-making, *Environmental Impact Assessment Review*, 19, pp. 227-232.

World Bank. 2003. World Bank Poverty Reduction Group and Social Development Department, *A User's Guide to Poverty and Social Impact Analysis*. Washington D.C.: International Bank for Reconstruction and Development.

APPENDIX 1

List of EIAs used for empirical study

EIA number	Description of project
100/1999 NW	Temporary accommodation camp for mine labourers, Kroondal.
103/1999 NW	Establishment of proposed township, Brits.
29/2000 NW	Main outfall sewer, sewerage pump, rising main, Jouberton.
46/2000 NW	Filling station, Klerksdorp.
67/2000 NW	Upgrading waste water treatment facility, Stilfontein.
91/2000 NW	Diesel depot, Christiana.
225/2000 NW	Eskom powerline, Vaal Reefs.
240/2000 NW	Eskom powerlines, Ventersdorp area.
06/2001 NW	Casino and hotel complex, Klerksdorp.
44/2001 NW	MTN telecommunication mast, Marikana.
52/2001 NW	Water supply, Boshhoek.
60/2001 NW	Raw water supply, Borolelo.
61/2001 NW	Temporary fuel storage facility, Platinum Highway, Brits.
76/2001 NW	Underground fuel storage tank, Bourbon Street Brewery, Potchefstroom.
84/2001 NW	Vodacom base station and tower, Baillie Park, Potchefstroom.
86/2001 NW	Vodacom base station, Odi.
100/2001 NW	Underground hexane tank, Brits.
102/2001 NW	Upgrading filling station, Boikhutso.
109/2001 NW	New powerline, Caribbean Beach Holiday Resort, Hartbeespoort.
118/2001 NW	Establishment of proposed township, Boitekong.
125/2001 NW	Bulk water main and outfall sewer, Freedom Park.
137/2001 NW	Police station, Klipgat.
185/2001 NW	Cell C cellular rooftop antennas and base station, Potchefstroom.
189/2001 NW	Establishment of proposed township, Jouberton.
190/2001 NW	Construction small office Bakgatla Gate.
03/2002 NW	Integrated energy centre, Dithakong.

APPENDIX 2

Collation sheet used for empirical study

The collation sheet reproduced on the following pages was drafted by the author. Its format is based on a collation sheet drafted by Dr L.A. Sandham for empirical EIA studies.

Sub Category			Well performed	Satisfactory, minor omissions	Satisfactory, omm, inadequacies	Unsatisfactory	Poor Attempt	No Attempt	Not Applicable
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EIA number:

Description of project:

Type of project:

Applicant:

Environmental officer:

Environmental consultant:

Mafikeng or Rustenburg:

Review area 1: Social baseline data		Yes/no	A	B	C	D	E	F	N/A
Size of project									
	Large >10 hectare surface area								
	Medium 1-10 hectare								
	Small < 1 hectare								
1.1	Quantity of social baseline data								
	More than 20 sentences A; 16-20 sentences B; 11-15 sentences C; 6-10 sentences D; 1-5 sentences E; nothing F								
TOTAL									
Preliminary Grade									
1.2	Type of social key variables/impacts identified								
	Population impacts								
	Population change								
	Influx/outflux of temporary workers								
	Presence of seasonal/leisure residents								
	Relocation of individuals/families								
	Dissimilarity in age, gender, racial or ethnic composition								
	Other: poverty, etc.								
	Communication/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 of minority groups								
	Change in occupational opportunities								
	Other:stakeholders, power relationships, etc.								

	Conflicts between local residents and newcomers																			
	Presence of an outside agency																			
	Inter-organizational cooperation																			
	Introduction of new social classes																			
	Change in the commercial/industrial focus of the community																			
	Presence of weekend residents (recreational)																			
	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																			
	Other: attitudes, fears, values, etc.																			
	Community infrastructure needs																			
	Change in community infrastructure																			
	Land acquisition and disposal																			
	Effects on known cultural, historical, sacred, archaeological resources																			
TOTAL																				
Preliminary Grade																				
1.3	Number of social impacts identified in each phase																			
	5 or more A; 4 B; 3 C; 2 D; 1 E; 0 F																			
	Application																			
	Plan of study for scoping																			
	Scoping report																			
	EIR																			
	ROD																			
TOTAL																				
Preliminary Grade																				
1.4	Ration between biophysical and social impacts																			
	Number of biophysical impacts identified in each phase																			
	5 or more A; 4 B; 3 C; 2 D; 1 E; 0 F																			
	Application																			
	Plan of study for scoping																			
	Scoping report																			
	EIR																			
	ROD																			
	Ratio social:biophysical 1:1 A; 1:2 B; 1:3 C; 1:4 D; 1:5 E																			
TOTAL																				
Preliminary Grade																				

SUMMARY OF PRELIMINARY GRADES		A	B	C	D	E	F	N/A
1.1	Quantity of social baseline data							
1.2	Type of social key variables/impacts identified							
1.3	Number of social impacts identified in each phase							
1.4	Ration between biophysical and social impacts							
FINAL GRADE REVIEW AREA 1								

Review area 2: Significance and duration of social impacts		A	B	C	D	E	F	N/A
2.1	Rating of significance of social impacts							
	By environmental consultant							
	High significance							
	Medium significance							
	Low significance							
	By environmental officer							
	High significance							
	Medium significance							
	Low significance							
TOTAL								
Preliminary Grade								
2.2	Expected duration of social impacts							
	Long term							
	Medium term							
	Short term							
TOTAL								
Preliminary Grade								

SUMMARY OF PRELIMINARY GRADES		A	B	C	D	E	F	N/A
2.1	Rating of significance of social impacts							
2.2	Expected duration of social impacts							
FINAL GRADE REVIEW AREA 2								

Review area 3: Social impacts and specialist studies		A	B	C	D	E	F	N/A
3.1	Specialist studies done?							
	One							
	Two							
	More than two							
TOTAL								
Preliminary Grade								
3.2	Type of specialist study							
	Biophysical (Specify:)							
	Social (Specify:)							
	Other (Specify:)							
TOTAL								
Preliminary Grade								

SUMMARY OF PRELIMINARY GRADES		A	B	C	D	E	F	N/A
3.1	Specialist studies done							
3.2	Type of specialist study							
FINAL GRADE REVIEW AREA 3								

Review area 4: Public participation		A	B	C	D	E	F	N/A
4.1	Quantity of public participation activities							
	One activity							
	Two activities							
	More than two activities							
TOTAL								
Preliminary Grade								
4.2	Type of public participation activity							
	On-site notice							
	Newspaper advertisement(s)							
	IAP meeting(s)							
TOTAL								
Preliminary Grade								
4.3	Size and representivity of IAP meeting(s)							
TOTAL								
Preliminary Grade								
4.4	Public participation inputs on social impacts							
	One input							
	Two inputs							
	More than two inputs							
TOTAL								
Preliminary Grade								

SUMMARY OF PRELIMINARY GRADES		A	B	C	D	E	F	N/A
4.1	Quantity of public participation activities							
4.2	Type of public participation activity							
4.3	Size and representivity of IAP meeting(s)							
4.4	Public participation inputs on social impacts							
FINAL GRADE REVIEW AREA 4								

Review area 5: Proposed alternatives/mitigation measures with regard to social impacts		A	B	C	D	E	F	N/A
5.1	Alternatives considered							
	None							
	One							
	Two							
	More than two							
TOTAL								
Preliminary Grade								
5.2	Social mitigation measures recommended							
	None							
	One							
	Two							
	More than two							
TOTAL								
Preliminary Grade								

5.3 Type of recommended mitigation								
Specify:								
TOTAL								
Preliminary Grade								
SUMMARY OF PRELIMINARY GRADES		A	B	C	D	E	F	N/A
5.1	Alternatives considered							
5.2	Social mitigation measures recommended							
5.3	Type of recommended mitigation							
FINAL GRADE REVIEW AREA 5								

Review area 6: RODs and social impacts								
6.1 Social impacts mentioned in ROD								
	Once							
	Twice							
	More than twice							
TOTAL								
Preliminary Grade								
6.2 Social mitigation conditions specified								
	One							
	Two							
	More than two							
TOTAL								
Preliminary Grade								
6.3 Ratio social impacts in EIA: social conditions in ROD								
	1:1 or better							
	01:02							
	01:03							
	01:04							
	1:5 or worse							
TOTAL								
Preliminary Grade								

SUMMARY OF PRELIMINARY GRADES		A	B	C	D	E	F	N/A
6.1	Social impacts mentioned in ROD							
6.2	Social mitigation conditions specified							
6.3	Ratio social impacts in EIA: social conditions in ROD							
FINAL GRADE REVIEW AREA 6								

SUMMARY OF ALL REVIEW AREAS		A	B	C	D	E	F	N/A
1	Social baseline data							
2	Significance and duration of social impacts							
3	Social impacts and specialist studies							
4	Public participation							
5	Proposed alternatives/mitigation measures (soc. imp.B209)							
6	RODs and social impacts							
TOTAL								
FINAL GRADE REVIEW FOR EIA								

Comments:

[Redacted content]