

## Social Impact Assessment: The lesser sibling in the South African EIA process?



L. Hildebrandt <sup>a,1</sup>, L.A. Sandham <sup>b,2</sup>

<sup>a</sup> African Centre for Disaster Studies, Research Focus Area: Social Transformation, North-West University, Private Bag X6001, Potchefstroom, 2520, South Africa

<sup>b</sup> Environmental Assessment Research Group, School of Geo and Spatial Sciences, North-West University, Private Bag X6001, Potchefstroom, 2520, South Africa

### ARTICLE INFO

#### Article history:

Received 20 November 2013

Received in revised form 7 April 2014

Accepted 10 April 2014

Available online xxxx

#### Keywords:

Social Impact Assessment

EIA

Effectiveness

Report quality review

Lesser sibling

South Africa

### ABSTRACT

Social Impact Assessment has developed as an integral but neglected component of EIA in South Africa since it became mandatory in 1997, and has therefore been referred to as the “orphan” or “lesser sibling” of EIA, as has SIA in the UK and the US. The aim of this paper is to test this claim by reviewing the quality of a sample of SIA reports, and also to establish whether there has been any improvement in quality following the introduction of revised EIA regulations in 2006. The results confirm that SIA can be called “the lesser sibling” due to the weak grades achieved in the quality review, but also reveal that there has been a slight and consistent improvement in quality, most likely driven by best practice considerations in the absence of prescriptive regulations for SIA. Suggestions and recommendations for addressing observed weakness in SIA performance are advanced.

© 2013 Elsevier Inc. All rights reserved.

### Introduction

Social Impact Assessment (SIA) has evolved as a specific type of impact assessment within the broader context of EIA since the inception of EIA in the USA following NEPA in 1969. Initially SIA was focused on predicting impacts in advance and proposing mitigation measures, thus limiting SIA to being a project-planning tool delivering a snapshot of the social environment, usually due to a too narrow understanding of the concept “social”. This resulted in vigorous debate about the role and place of SIA *vis-à-vis* EIA (Burdge, 2002; Chadwick, 2002; Glasson and Heaney, 1993; Vanclay and Esteves, 2011) and resulted in attempts to formalize the status of SIA by the publication of international principles and guidelines (IOCGP, 2003; Vanclay, 2003).

Part of the SIA discourse was the view of SIA as the “orphan” or “lesser sibling” of the environmental assessment process in the US and the UK (Burdge, 2002, 2003; Chadwick, 2002; Glasson and Heaney, 1993). Burdge based his view of SIA as an orphan on the appearance of SIA in research publications, while Glasson and Heaney in 1993 and Chadwick in 2002 based their view of SIA as the poor relation on a scrutiny of the treatment of socio-economic<sup>1</sup> impacts in a large sample of

110 UK Environmental Impact Statements (Burdge, 2002:3; Chadwick, 2002; Glasson and Heaney, 1993). Fisher (2011) revisited the status of treatment of socio-economic impacts in 110 UK Environmental Impact Statements (EIAs) in order to investigate whether this was still true almost 10 years later, and found that while many aspects of SIA had improved, there was still a tendency to emphasize direct positive economic impacts, and there was still room for considerable improvement in the treatment of social-economic impacts, but she was unable to state unequivocally that they are still the poor relations.

By 2012, in their review of the state of the art of SIA, Esteves et al. (2012) presented a more positive view of SIA as an ongoing process of not only predicting and mitigating social impacts, but of managing them to the advantage and development of communities. This view of SIA is supported in various other contributions to the SIA international discourse (Aucamp et al., 2011; Esteves and Vanclay, 2009; Franks and Vanclay, 2013; Pope et al., 2013; Vanclay, 2006; Vanclay, 2014; Vanclay and Esteves, 2011), and represents considerable development since the early days of SIA. Along with the institutionalization of EIA, SIA has become a legal requirement in policy design and project planning to varying degrees, around the world, as nations increasingly embed SIA requirements in their legislation (Pope et al., 2013), and as the business case for SIA becomes increasing well established and accepted in the corporate sector (Esteves et al., 2012; Franks and Vanclay, 2013; Vanclay, 2014).

However, Esteves et al. (2012) warn that these positive developments should not be overstated since SIA largely still has only a minor role compared to assessment of biophysical impacts in EIA. This

E-mail addresses: [Leandri.hildebrandt@nwu.ac.za](mailto:Leandri.hildebrandt@nwu.ac.za) (L. Hildebrandt),

[luke.sandham@nwu.ac.za](mailto:luke.sandham@nwu.ac.za) (L.A. Sandham).

<sup>1</sup> Tel.: +27 18 299 1632.

<sup>2</sup> Tel.: +27 18 299 1585; fax: +27 86 622 0152.

<sup>1</sup> We acknowledge that socio-economic impacts do not equate *per se* to SIA, but there is sufficient commonality for the purpose of this argument.

warning is apposite for the current state of SIA in South Africa, and raises the question of the effectiveness of SIA.

### Effectiveness of SIA

Along with ongoing debates about the effectiveness of environmental assessment (e.g. Cashmore et al., 2004; Chanchitpricha and Bond, 2013; Sadler, 1996), the effectiveness of SIA has also been critiqued. O'Faircheallaigh (2009) points out that in order to understand the nature of SIA effectiveness, and due to the paucity of writings on SIA, the wider literature on EIA effectiveness needs to be consulted. One aspect of effectiveness of the impact assessment processes is their influence on decision-making processes (see Chanchitpricha and Bond, 2013 for a debate on effectiveness using a number of case studies including SIA).

In line with the information processing model for decision making in EIA (Bartlett and Kurian, 1999) the quality of EIR has been widely recognized as an important component of EIA effectiveness, and EIA review checklists or packages have been developed to assist in the assessment of the quality of environmental reports (Badr et al., 2011; Barker and Jones, 2013; Bonde and Cherp, 2000; Lee and George, 2000; Sadler, 1996). O'Faircheallaigh (2009) also points out that effectiveness often deals with only one aspect of SIA, for example report quality, which is the focus of our paper, with explicit acknowledgement that this is only one dimension of SIA effectiveness.

### EIA and SIA in South Africa

The history of EIA (and SIA) in South Africa is well described (Aucamp et al., 2011; Du Pisani and Sandham, 2006; Kidd and Retief, 2009; Wood, 1999). The key events regarding the legal mandate are the commencement of mandatory EIA in September 1997 with the promulgation of EIA regulations in terms of the Environment Conservation Act (ECA) of 1989 (South-Africa, 1997). In April 2006, the second phase of mandatory EIA commenced with the promulgation of a new set of more detailed EIA regulations, in terms of the National Environmental Management Act of 1998 (NEMA) section 1 (South Africa, 1998:8) which defines the environment very broadly to include the surroundings within which humans exist and that are made up of "the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being". On the second of August 2010, the third phase of mandatory EIA started when the third set of EIA regulations came into effect with the aim of improving the efficiency and effectiveness of EIA.

During these three mandatory EIA regimes SIA evolved as an integral part of the EIA and not as an assessment in its own right, partly because of the very wide definition of the environment in NEMA (Aucamp et al., 2011; Du Pisani and Sandham, 2006). Paradoxically, while the approach to environmental management embodied in NEMA has a very strong social focus in terms of equity, participation, and empowerment of disadvantaged communities, the EIA system is heavily weighted towards the biophysical environment in terms of regulations, guidance and practice (Aucamp et al., 2011; Du Pisani and Sandham, 2006), resonating with the *orphan* status reported by Burdge and Chadwick.

Du Pisani and Sandham (2006) attempted to answer the question of whether SIA in South Africa was still an infant yet to be weaned, by means of an evaluation of SIA in South Africa from a theoretical perspective. Their conclusion was similar to that of Glasson and Heaney (1993), Burdge (2003), Chadwick (2002), and Fisher (2011) that SIA was (still) the poor relation of EIA. Two other areas of weakness of SIA in South Africa are the lack of an explicit requirement in legislation and the lack of adequate guidance (Du Pisani and Sandham, 2006), which was confirmed for the UK by Fisher (2011).

However, since then, considerable progress has been made in the availability of guidance, including the *Social Impact Assessment Guideline* commissioned by the Department of Water Affairs (Barbour, 2005), the *Guideline for involving social assessment specialists in EIA processes*

commissioned by the Western Cape provincial environmental department (Barbour, 2007) and the *Guideline for submission of Social and Labour Plans (SLPs) for mining applications*, commissioned by the Department of Mineral Resources<sup>2</sup> (SADMR, 2010).

The effectiveness of EIA in South Africa has been investigated in recent years, mainly by means of report quality review (Sandham and Pretorius, 2008; Sandham et al., 2008a, 2008b, 2010, 2013a, 2013b), along with investigation of report quality for SEA and EMF (Kidd and Retief, 2009; Marais et al., in press; Retief, 2007). Sandham et al. (2013a) compared the report quality for the first two EIA regimes (under ECA from 1997 to 2006, and under NEMA since 2006) and found that while the quality was generally satisfactory, a slight decline in report quality after 2006 was evident, most likely due to a "minimum compliance" mindset prevalent amongst developers and consultants, and possibly an example of the spirit of impact assessment becoming "neutered" by excessive regulation (Pope et al., 2013). However, very little has been done on SIA report quality apart from the work of Du Pisani (2005) who conducted a qualitative appraisal of the quality of a sample of SIA reports under ECA and NEMA, using a relatively crude scale based on the amount of space devoted to social aspects (similar to one of the criteria used by Glasson and Heaney (1993) and Chadwick (2002)), and concluded that quality was relatively poor. Since the SIA report makes an important contribution to decision-making by environmental authorities, with significant consequences for communities, and forms an important component of the ongoing management of social impacts, it is the aim of this paper to review the quality of a sample of SIA reports as part of their value in contributing to social sustainability. More specifically, this paper investigates the quality of a sample of SIA reports (SIARs) in South Africa to provide evidence that SIA is indeed the *lesser sibling* of EIA in South Africa, and also to establish whether there has been any improvement in report quality following the promulgation of new "improved" EIA regulations in 2006.

## Materials and methods

### Development of review package

The Lee and Colley review package was first developed in 1989 to assess the quality of environmental statements in the UK (Lee et al., 1999:1), and has been adapted and widely used internationally (Barker and Jones, 2013; Barker and Wood, 1999; European Commission, 1996; Glasson et al., 2005; Lee, 2000; Lee and Dancey, 1993; Mwalyosie and Hughes, 1998; Pölonen et al., 2010; Sandham et al., 2013a, 2013b; Simpson, 2001; Weston, 2000; Wood et al., 1996). No review package that focuses on the quality of only social aspects has been developed yet, although Fisher (2011) used a checklist of 11 criteria with 44 sub-criteria, and a grading system based on the Lee and Colley package. Therefore, in order to provide a more comprehensive review of SIA report quality, and to allow for comparison with EIA report quality findings in South Africa, the Lee and Colley package was adapted to review the quality of Social Impact Assessment reports. Since SIA is included in the EIA report in different formats, e.g. as a separate specialist report, or as discrete social aspects within an Environmental Impact Assessment Report (EIAR), the review package was adapted to review the quality of the social aspects in whatever form they appeared. The presentation of these social aspects is referred to in this paper as the SIA report.

The Lee and Colley Review package consists of four review areas (RAs), 17 categories and 53 sub-categories. After adaptations to ensure that the SIA review package stays focused on the SIAR, the review areas were retained, the review categories reduced to 14 and the sub-

<sup>2</sup> SLPs are mandated under separate EIA regulations applicable only to mining activities, and approvals and authorizations are managed by the Department of Mineral Resources. See Sandham et al. (2008b) for a discussion of the dichotomy regarding mining EIA in South Africa.

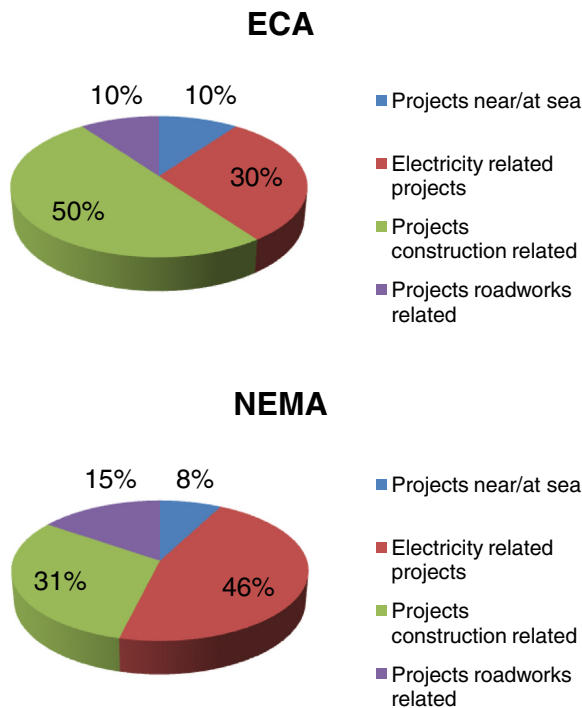


Fig. 1. Composition of project types under ECA and NEMA.

categories to 40 (hereafter referred to as the SIA package). The four review areas of the SIA package are broadly similar to the EIA as follows:

1. Review Area 1: description of the development, local environment and social baseline conditions;
2. Review Area 2: identification of key social impacts; the relationship between social and biophysical impacts; estimation of expected significance of impacts for society; time duration and public participation;
3. Review Area 3: alternatives and mitigation; and
4. Review Area 4: communication of results.

Selection of sample

A sample of 23 EIA projects from various sectors that were conducted in different provinces of South Africa was obtained from the National Department of Environmental Affairs, since this Department generally is the authority for larger projects, therefore increasing the likelihood of sampling projects with SIA reports. In order to explore the changes in report quality of the SIAs done under ECA, i.e. from 1997 to 2006, and NEMA (after 2006) – 10 of the SIARs were selected from the ECA regime and 13 from the NEMA regime.

Fig. 1 illustrates the composition of the 23 case studies, which were dominated by construction and electricity projects. Fifty per cent (50%) of the projects conducted under the ECA regulations were construction related, mostly aimed at infrastructure development, 30% were related

Table 1 Assessment symbols (Lee et al., 1999:12).

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

to the construction of power lines, and 10% to each of road works and coastal activities. Six of the 13 NEMA files (46%) were electricity related and four (31%) were construction related. Given the spatial distribution and sector diversity of these project types, a representative range of social impacts can therefore be expected.

Review methodology

The package consists of a four-level hierarchical structure within which a number of criteria are cascaded from an overall report grade at the highest level, followed by review areas and review categories with review sub-categories at the lowest level (Fig. 2). The review process evaluates how well a number of assessment tasks have been performed, for which six grades ranging from A to F are awarded in accordance with the scale in Table 1. In line with standard practice recommended for the use of the package, letters of the alphabet rather than numbers were used as grading symbols to discourage the reviewer from crude numerical aggregation to obtain assessments (Lee et al., 1999:6). The reviewer commences at the lowest level, i.e. the sub-category, evaluating simple tasks and procedures (Table 2, Figs. 3–5). Using these assessments the reviewer then moves progressively to the higher levels, applying more complex criteria to broader tasks and procedures in the process until the overall assessment of the SIAR has been completed.

The review package was initially applied by two reviewers who each independently analysed five of the SIARs, recording the review results on a collation sheet using the assessment symbols shown in Table 1. The independent reviews were followed by a comparison and discussion of the results until consensus grades were allocated. The degree

Table 2 Summary of results: overall grades, review areas and review categories.

| Regulatory era | ECA [n = 10] |      |      | NEMA [n = 13] |      |      |
|----------------|--------------|------|------|---------------|------|------|
|                | %A-C         | %A-B | %E-F | %A-C          | %A-B | %E-F |
| Overall grade  | 40           | 20   | 10   | 54            | 15   | 0    |
| RA 1           | 70           | 30   | 0    | 70            | 15   | 0    |
| 1.1            | 90           | 20   | 0    | 77            | 39   | 0    |
| 1.2            | 60           | 30   | 10   | 54            | 15   | 0    |
| RA 2           | 40           | 20   | 40   | 54            | 8    | 39   |
| 2.1            | 40           | 20   | 30   | 39            | 8    | 39   |
| 2.2            | 50           | 30   | 30   | 70            | 15   | 23   |
| 2.3            | 40           | 10   | 50   | 54            | 15   | 39   |
| 2.4            | 40           | 30   | 40   | 62            | 46   | 23   |
| 2.5            | 80           | 30   | 20   | 62            | 15   | 30   |
| RA 3           | 40           | 10   | 40   | 54            | 15   | 46   |
| 3.1            | 40           | 10   | 50   | 39            | 15   | 46   |
| 3.2            | 30           | 10   | 40   | 47            | 15   | 46   |
| 3.3            | 50           | 0    | 40   | 39            | 15   | 46   |
| RA 4           | 80           | 20   | 0    | 77            | 46   | 0    |
| 4.1            | 80           | 40   | 0    | 92            | 54   | 0    |
| 4.2            | 100          | 70   | 0    | 100           | 85   | 0    |
| 4.3            | 60           | 20   | 10   | 62            | 23   | 8    |
| 4.4            | 50           | 20   | 0    | 69            | 23   | 0    |

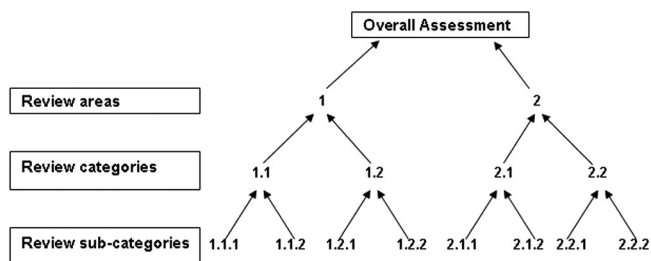


Fig. 2. A schematic representation of the review topic hierarchy (Lee and Colley, 1992).

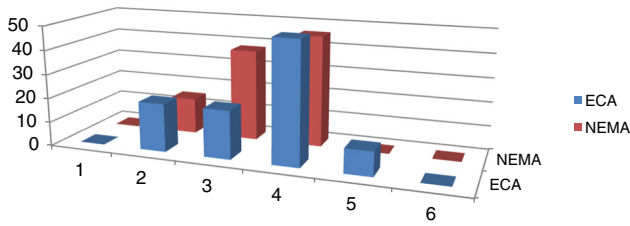


Fig. 3. Comparison of overall SIA report quality.

of similarity in the reviews was such that it was adequate to continue the review process with only one reviewer, similar to the approach followed by Sandham et al. (2013a). The Lee and Colley assessment symbols, given below in Table 1, were used during the review process to evaluate the reports.

This research study closely followed the Lee and Colley approach to the review process, except for the adaptations made in the SIA review package.

## Results and discussion

In order to ease interpretation of the findings, the grades are grouped to represent the following broad classes of performance:

- A to C reflects generally satisfactory performance from well performed to just satisfactory, while D to F reflects generally unsatisfactory performance from just unsatisfactory to poor or not attempted.
- A–B grades are regarded as good performance and E–F grades as weak performance.
- N represents a review topic irrelevant in the context of the EIR.

These classes of performance are presented in Table 2 for the ECA and NEMA reports to allow for comparison and detect any changes in quality performance.

### SIA report quality of the sample

The overall quality of the reports is relatively poor with 40% to 53% of reports that are acceptable (A–C), and only 15% to 20% of reports that can be described as well done (B). Moreover, the most frequent grade is D, i.e. just unsatisfactory. A comparison of the quality of the SIAR as a whole (Fig. 3) shows distinct improvement in the percentage of acceptable quality (A–C) from 40% under ECA to well over 50% under NEMA, a small reduction in the number of just unsatisfactory reports (D) as well as the virtual disappearance of weak reports (E). This is somewhat offset by the slight decrease in the percentage of reports with B grades.

Figs. 4 and 5 show the distribution of grades for the review areas.

It is evident that there is a higher occurrence of D, E and F scores under ECA than for NEMA, as well as a slight decrease in frequency of weak scores and some increase in frequency of strong scores. For the final grade of the report as a whole, the percentage of C grades has almost doubled.

However, at the lower levels more weakness is evident, which is explored in the next section

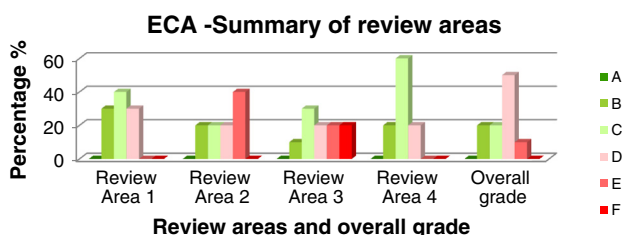


Fig. 4. Overall and review area grades – ECA.

### Review Area 1 – description of the development, local environment and social baseline conditions

For both ECA and NEMA, better performances are observed for the description of the development (in line with the findings of Sandham et al., 2013a) than for the social baseline. The best grades were related to the size of the development and the likely area to be affected, while the weakest grades were observed for estimates of the duration of the project, although there was a decrease of E–F grades from ECA to NEMA. Clearly, this is significant for social impacts.

### Review Area 2 – identification and evaluation of key impacts, and public participation

In both systems, this is an area of weak performance, with less than half of reports graded as satisfactory in ECA, and just over half of the NEMA reports satisfactory. Good grades (A–B) are infrequent, with the exception of duration of social impacts in NEMA reports. The main problem areas for both systems were related to the definition and identification of impacts (2.2),<sup>3</sup> and the prediction of impact significance (2.3), where these categories had the worst grades. The sub-categories dealing with community arrangements (2.1.2) were particularly weak with only 40% and 46% respectively acceptable (A–C) in ECA and NEMA, and 20% and 38% respectively very poor (E–F). By contrast, public participation was the best performed category. This can be ascribed to the comprehensive regulatory requirement and guidance for public in EIA.

### Review Area 3 – alternatives and mitigation

In both systems this was the review area with weakest performance. In both ECA and NEMA all of the categories had 40%–50% weak grades (E–F), acceptable quality (A–C) never exceeded 50%, and good grades were achieved in only 10%–15% of reports. These values reflect the “poor relation” status of SIA in South Africa, and it is disconcerting that despite some better performance from ECA to NEMA by the increase in the percentage of good (A–B) grades, a concomitant increase in weak grades (E–F) is also observed. Given the purpose of SIA to not only prevent or minimise adverse social impacts, but to improve sustainability, it is disturbing that this fundamental aspect of SIA is so poorly addressed.

### Review Area 4 – communication of results

This was the best performed review area in both systems with the highest frequency of good reports (A–B), the lowest frequency of weak reports, as well as the most consistent improvement from ECA to NEMA. The best performance was for accessibility of information in the reports (4.2), while the weakest performance, with more than 10% weak grades (E–F), was observed in the two sub-categories relating to prominence and emphasis (4.3.1), and to the non-technical summary (4.4.1). However, despite being the best performed review area, there is still a significant shortage of well-performed (A–B) categories and sub-categories.

### Key findings

The results show weak performance, but with a modest increase in the quality of SIA reports, from a situation where 60% of reports were unsatisfactory under ECA to 53% of reports being rated as satisfactory under NEMA. Within this improvement scenario, the weakest performance is observed in Review Areas 2 and 3, which is in line with widespread and consistently reported weak performance in these two technically more demanding areas of EIA reporting (Barker and Jones,

<sup>3</sup> The number in parentheses refers to number of the topic in the review package.

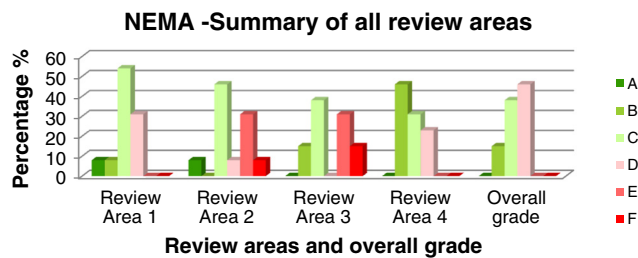


Fig. 5. Overall and review area grades – NEMA.

2013; Barker and Wood, 1999; European Commission, 1996; Lee, 2000; Pölonen et al., 2010; Sandham et al., 2013a), despite ample methodological guidance for EIA. It is therefore unlikely that the poor performance in the SIA reports could be attributed entirely to the lack of clear methodological guidance for predicting and evaluating social impacts, although it might have exacerbated the weakness.

Review Areas 1 and 4 are the areas of better performance. These two areas occur in many reports as standard procedures, and therefore can be seen as generic EIA skills of Environmental Assessment Practitioners (EAPs), and suggest that while EAPs with a biophysical background would be able to conduct the SIA activities in Review Areas 1 and 4 satisfactorily, they will not be adequately equipped for the tasks in Review Areas 2 and 3.

#### What are the reasons for poor performance?

The poor performance can most likely be ascribed to a combination of the historical dominance of EIA by practitioners with a bio-physical background, the lack of understanding of the need for SIA by developers, practitioners and authorities, and a shortage of skill for conducting and reviewing SIA. All of these are indicative of orphanhood or “lesser sibling” status.

#### What are the reasons for improvement?

It is not possible to deduce this answer from the report quality review process alone, but based on anecdotal evidence, the following scenario is advanced. SIA reports are usually compiled by the specialist SIA community, who see themselves to a certain extent as “independent” of the EIA community and therefore aspire to good practice, whereas EIA practice (apart from SIA) is more likely driven by minimum requirements, hence the slight decrease in EIA report quality observed by Sandham et al. (2013a). The lack of regulatory prescriptions for SIA therefore compels SIA practitioners towards continual improvement by following international good practice. The fact that performance has improved despite the absence of explicit regulatory requirements, suggests an example of excessive regulation *not stifling or neutering* (Pope et al., 2013) the creativity required for SIA good practice.

#### SIA good practice and the way forward in South Africa

The international SIA discourse has resulted in a well-established, generally accepted and comprehensively documented outline of what constitutes SIA good practice, including participatory processes, understanding of communities, scoping and acquisition of baseline data, forecasting social impacts and their significance, alternatives and mitigation, monitoring and managing impacts, ensuring free, prior and informed consent (FPIC) and that human rights are not affected, and the development and implementation of social impact management plans (SIMPs) and impact and benefit agreements (IBAs) (Esteves et al., 2012; IAIA, 2009; Vanclay, 2003; Vanclay, 2006; Vanclay and Esteves, 2011). Some of these elements are recent trends in the SIA

discourse, i.e. FPIC, SIMPs, IBAs, and the consideration of human rights. Along with consideration of ethics in SIA, these trends constitute important and valuable opportunities for SIA to engage more effectively in moving closer to sustainability (Baines et al., 2013; Franks and Vanclay, 2013; Hanna and Vanclay, 2013; Kemp and Vanclay, 2013).

While these elements of good practice are certainly relevant to the South African SIA scenario, due to their generic nature it is necessary that more context specific measures are suggested. What then is the best approach to improving SIA practice in South Africa? Aucamp et al. (2011) provide a “road map” towards more sustainable SIA, and by implication, improved practice, consisting of a number of interventions including:

- mainstreaming SIA into EIA by better integration of SIA into EIA project activities through early involvement of SIA in the planning context;
- building sustainable partnerships with other processes and institutions (NGOs, CBOs and government departments);
- moving beyond point-in-time assessment and minimum requirements towards obtaining a social licence to operate;
- finding and sustaining an institutional home for SIA to allow for better training and accreditation of SIA practitioners, also suggested by Du Pisani and Sandham (2006);
- consideration and implementation of negative comments raised by communities in the decision-making process; and
- improved regulatory frameworks via legal processes or good practice.

The results of this study suggest that the route of good practice is already being followed with some success, and should be encouraged. In addition, consideration should also be given to stronger awareness of the business case for SIA (Franks and Vanclay, 2013; Vanclay, 2014) and enhancing positive social impacts (João, et al., 2011).

In order to optimise implementation of the road map, some suggestions for specific interventions are advanced.

Wider implementation in the rest of the EIA sector of the requirement for Social and Labour plans (SLPs) in the mining sector, which functions in terms of a different set of EIA regulations in South Africa (Aucamp et al., 2011; SADMR, 2010). While several areas of weakness in the provisions and implementation of the SLPs have been pointed out (Franks and Vanclay, 2013), their wider implementation is nevertheless likely to contribute positively to improved SIA practice.

Regarding an institutional home for SIA, progress has been made by the education and training programmes for practitioners and government officials in terms of the South African national Environmental Impact Assessment and Management Strategy (EIAMS) (Loubser and Freeman, 2011). Moreover, accreditation of EIA practitioners with the Environmental Assessment Practitioners Association of South Africa (EAPASA) is also progressing, in terms of which environmental assessment will only be allowed by practitioners accredited with EAPASA. Both of these measures apply equally to SIA, since the South African EIA regime includes SIA.

Good practice includes methodology, where a novel framework has been suggested by Bezuidenhout (2009) for incorporating elements of SIA into EIA for housing developments, an activity with particular and obvious relevance for improved SIA. The framework is aimed at assisting environmental assessment practitioners without a social science background in incorporating SIA into EIA without having to resort to SIA specialists in every case. The framework suggests four categories of social impacts i.e. Employment, Delivery and accessibility of services, Sense of community and identity, and the Characteristics of the development and environment. Within each of these social impact categories, a further 20 impact sub-categories are listed. The framework is applied through identifying potential social impacts using the 20 sub-categories as a checklist, and then by applying significance criteria to each impact, i.e. duration, likelihood, value and benefit to society, and the potential for reversing or mitigating impacts. This delivers a significantly more comprehensive social impact scenario than is currently the case, particularly in the large numbers of EIA for activities of limited

<sup>5</sup> The number in parentheses refers to number of the topic in the review package.

scope, known in South Africa as Basic Assessments, that make up the bulk of EIA applications, but for which SIA is seldom formally conducted. The value of this framework in improving SIA practice, performance and effectiveness can be regarded at two levels i.e. the methodological level by improving the identification and significance of social impacts, and hence providing better quality reports and therefore information for decision making (Information processing model (Bartlett and Kurian, 1999)), and at the *informal* policy making level by improving knowledge and awareness of SIA amongst biophysically oriented practitioners, developers and decision makers (pluralist politics model (Bartlett and Kurian, 1999)).

Successful implementation of these interventions should result in an increased focus on the holistic concept of social sustainable development and bring about a mind-set change on SIA for proponents, regulators and practitioners.

## Conclusion

The objective of this paper was to investigate the state of SIA practice in South Africa after 16 years of mandatory EIA under two legislative regimes, by evaluating the quality of a sample of SIARs in South Africa.

The Lee and Colley review package was adapted to review SIA report quality. The quality review findings reveal that SIA can still be regarded as the “lesser sibling” of EIA, with most SIA reports of a generally only just satisfactory quality, with a distinct but modest improvement from the ECA to the NEMA regulations. These results suggest that SIA report quality is driven more strongly by good practice considerations in the South African SIA practitioner community, which bodes well for future SIA practice in South Africa, and supports the contention of Aucamp et al. (2011) that SIA should go beyond minimum requirements, to obtaining a social license to operate. When that has been achieved, perhaps SIA will no longer be the lesser sibling of EIA in South Africa.

## Acknowledgements

The assistance of the following is gratefully acknowledged: The Impact Assessment Directorate of the South African Department of Environmental Affairs for allowing access to EIA files, Prof. Dewald van Niekerk, Prof. Gerrit van der Walt and Dr. Clara Bocchino for their helpful suggestions and input in conducting the research and writing this article.

## References

- Aucamp I, Woodborne S, Perold J, Bron A, Aucamp S-M. Looking beyond impact assessment to social sustainability. In: Vanclay F, Esteves AM, editors. *New directions in social impact assessment: conceptual and methodological advances*. Cheltenham: Edward Elgar; 2011.
- Badr EA, Zahran AA, Cashmore M. Benchmarking performance: environmental impact statements in Egypt. *Environ Impact Assess Rev* 2011;2011(31):279–85.
- Baines JT, Taylor CN, Vanclay F. Social impact assessment and ethical research principles: ethical professional practice in impact assessment Part II. *Impact Assess Proj Apprais* 2013;31(4):254–60.
- Barbour T. Social impact assessment guidelines. Prepared for the Department of Water Affairs and Forestry. Environmental Evaluation Unit, University of Cape Town; 2005.
- Barbour T. Guideline for involving social assessment specialists in EIA processes. Prepared for the Department of Environmental Affairs and Development Planning, Western Cape province, South Africa; 2007 [Available at: <http://www.westerncape.gov.za/general-publication/guidelines-involving-specialists-eia-processes>].
- Barker A, Jones CE. A critique of the performance of EIA within the offshore oil and gas sector. *Environ Impact Assess Rev* 2013;43:31–9.
- Barker A, Wood C. An evaluation of EIA system performance in eight EU countries. *Environ Impact Assess Rev* 1999;19:387–404.
- Bartlett R, Kurian P. The theory of environmental impact assessment: implicit models for policy making. *Policy Polit*. 1999;24(4):415–33.
- Bezuidenhout H. An improved social impact evaluation framework for the completion of SIA section during the environmental impact assessment process for residential developments in South Africa. Pretoria: University of Pretoria; 2009. [(Dissertation presented in partial fulfilment of the degree Master of Arts – Env. And Society)].
- Bonde J, Cherp A. Quality review package for strategic environmental assessment of land-use plans. *Impact Assess Proj Apprais* 2000;18(2):99–110.
- Burdge RJ. Why is social impact assessment the orphan of the assessment process? *Impact Assess Proj Apprais* 2002;20(1):3–9.
- Burdge RJ. Benefiting from the practice of social impact assessment. *Impact Assess Proj Apprais* 2003;21(3):225–9.
- Cashmore M, Gwilliam R, Morgan R, Cobb D, Bond A. The interminable issue of effectiveness: substantive purposes, outcomes and research challenges in the advancement of environmental impact assessment theory. *Impact Assess Proj Apprais* 2004;22(4):295–310.
- Chadwick A. Socio-economic impacts: are they still the poor relations in UK environmental statements? *J Environ Plan Manag* 2002;45(1):3–24.
- Chanchitpricha C, Bond AJ. Conceptualising the effectiveness of impact assessment processes. *Environ Impact Assess Rev* 2013;43:65–72.
- Du Pisani JA. Social impact assessment: the status of practice in the North-West Province of South Africa. Potchefstroom: NWU; 2005 [Dissertation – M. Env. Sci].
- Du Pisani JA, Sandham LA. Assessing the performance of SIA in the EIA context: a case study of South Africa. *Environ Impact Assess Rev* 2006;26:707–24.
- Esteves AM, Vanclay F. Social development needs analysis as a tool for SIA to guide corporate-community investment: applications in the minerals industry. *Environ Impact Assess Rev* 2009;29(2009):137–45.
- Esteves AM, Franks D, Vanclay F. Social impact assessment: the state of the art. *Impact Assess Proj Apprais* 2012;30(1):34–42.
- European Commission. Evaluation of the performance of the EIA process. In: Wood C, Barker A, Jones C, Hughes J, editors. *Main report, Volume 1*. Brussels: European Commission; 1996. [Available at: <http://ec.europa.eu/environment/eia/eia-support.htm>].
- Fisher L. The treatment of socio economic impact in environmental impact statements. University of East Anglia Thesis presented in partial fulfilment of the degree of Master of Science School of Environmental Sciences; 2011 [Available at: [http://www.uea.ac.uk/env/all/teaching/eiaams/pdf\\_dissertations/2011/Fisher\\_Laura\\_2011.pdf](http://www.uea.ac.uk/env/all/teaching/eiaams/pdf_dissertations/2011/Fisher_Laura_2011.pdf)].
- Franks DM, Vanclay F. Social impact management plans: innovation in corporate and public policy. *Environ Impact Assess Rev* 2013;2013(43):40–8.
- Glasson J, Heaney D. Socio-economic impacts: the poor relations in British Environmental Impact Statements. *J Environ Plan Manag* 1993;36(3):335–43.
- Glasson J, Therivel R, Chadwick A. *Introduction to environmental impact assessment*. 3rd ed. London: Routledge; 2005.
- Hanna P, Vanclay F. Human rights, indigenous peoples and the concept of free, prior and informed consent. *Environ Impact Assess Rev* 2013;31(2):146–57.
- International Association for Impact Assessment (IAIA). *Social impact assessment international principles*; 2009 [Available at: <http://www.iaia.org>].
- Interorganisational Committee on Principles and Guidelines for Social Impact Assessment (IOCGP). *Guidelines and principles for social impact assessment in the USA*. *Impact Assess Proj Apprais* 2003;21(3):231–50.
- João E, Vanclay F, Den Broeder L. Emphasising enhancement in all forms of impact assessment: introduction to a special issue. *Impact Assess Proj Apprais* 2011;29(3):170–80.
- Kemp S, Vanclay F. Human rights and impact assessment: clarifying the connections in practice. *Environ Impact Assess Rev* 2013;31(2):86–97.
- Kidd M, Retief FP. Environmental assessment. In: Strydom HA, King ND, editors. *Environ Management in South Africa*. Cape Town: Juta; 2009.
- Lee N. Reviewing the quality of environmental assessments. In: Lee N, George C, editors. *Environ Assess in Developing and Transitional Cities*. Chichester: John Wiley & Sons; 2000. p. 137–47.
- Lee N, Colley R. Review of the quality of environmental statements. Manchester EIA Centre: University of Manchester; 1992. Occasional paper 24.
- Lee N, Dancy R. The quality of environmental impact statements in Ireland and the United Kingdom: a comparative analysis. *Proj Apprais* 1993;8(1):31–6.
- Lee N, George C. Environmental assessment in developing and transitional countries. Chichester: Wiley; 2000.
- Lee N, Colley R, Bonde J, Simpson J. Reviewing the quality of environmental statements and environmental appraisals. Manchester EIA Centre: University of Manchester; 1999. Occasional paper 55.
- Loubser L, Freeman M. Environmental impact assessment and management strategy? Sub-theme 8: skills of EAPs and government officials. Pretoria: Government Printer; 2011.
- Marais M, Retief FP, Sandham LA, Cilliers DP. A critical evaluation of environmental management framework (EMF) report quality in South Africa. *S Afr Geogr J* 96 (2), 2014. [in Press].
- Mwalyosie R, Hughes R. The performance of EIA in Tanzania: an assessment. London: International Institute for Environment and Development; 1998.
- O’Faircheallaigh C. Effectiveness in social impact assessment: aboriginal peoples and resource development in Australia. *Impact Assess Proj Apprais* 2009;27:95–110.
- Pölonen I, Hokkanen P, Jalava K. The effectiveness of the Finnish EIA system – what works, what doesn’t and what could be improved? *Environ Impact Assess Rev* 2010;31(2):120–8.
- Pope J, Bond AJ, Morrison-Saunders A, Retief FP. Advancing the theory and practice of impact assessment: setting the research agenda. *Environ Impact Assess Rev* 2013;41:1–9.
- Retief F. Quality and effectiveness review protocol for strategic environmental assessment (SEA) in developing countries. *J Environ Assess Policy Manag* 2007;9(4):443–71.
- Sadler B. Environmental assessment in a changing world: evaluating practice to improve performance. Ottawa: Ministry of Supply and Services; 1996.
- SADMR. Revised guideline for the submission of a social and labour plan. South African Department of Mineral Resources: Republic of South Africa; 2010.
- Sandham LA, Pretorius HM. A review of EIA report quality in the North West Province of South Africa. *Environ Impact Assess Rev* 2008;28(2008):229–40.
- Sandham LA, Moloto MJ, Retief FP. The quality of environmental impact reports for projects with the potential of affecting wetlands in South Africa. *Water SA* 2008a;34(2):155–63.
- Sandham LA, Hoffmann AR, Retief FP. Reflections on the quality of mining EIA reports in South-Africa. *J S Afr Inst Min Metall* 2008b;108(11):701–6.

- Sandham LA, Carroll TH, Retief FP. The contribution of Environmental Impact Assessment (EIA) to decision making for biological pest control in South Africa — the case of *Lantana camara*. *Biol Control* 2010;55(2):141–9.
- Sandham LA, Van Heerden AJ, Jones CE, Retief FP, Morrison-Saunders AN. Does enhanced regulation improve EIA report quality? Lessons from South Africa. *Environ Impact Assess Rev* 2013a;38:155–62.
- Sandham LA, Van der Vyver F, Retief FP. The performance of Environmental Impact Assessment in the explosives manufacturing industry in South Africa. *J Environ Assess Policy Manag* 2013b;15(3):1350013. [1–18].
- Simpson J. Developing a review package to assess the quality of EA reports of local authority structure and local plans in the UK. *Environ Impact Assess Rev* 2001;21:83–95.
- South-Africa. *Environment Conservation Act, no. 73 of 1989*. Pretoria: Government Printer; 1997.
- Vanclay F. International principles for social impact assessment. *Impact Assess Proj Apprais* 2003;21(1):5–11.
- Vanclay F. Principles for social impact assessment: a critical comparison between the international and US documents. *Environ Impact Assess Rev* 2006;26(1):3–14.
- Vanclay F. Integration and focus from the perspective of social impact assessment: a response to Morrison–Saunders et al. *Impact Assess Proj Apprais* 2014;32(1):11–3.
- Vanclay F, Esteves AM. Current issues and trends in social impact assessment. In: Vanclay F, Esteves AM, editors. *New directions in social impact assessment: conceptual and methodological advances*. Cheltenham: Edward Elgar; 2011. p. 3–19.
- Weston J. Reviewing environmental statements: new demand for the UK's EIA procedures. *Plan Pract Res* 2000;15(1):135–7.
- Wood C. Pastiche or postiche? Environmental impact assessment in South Africa. *S Afr Geogr J* 1999;81(1):52–9.
- Wood C, Barker A, Jones C, Hughes J. *Evaluation of the performance of the EIA process. Volume 1: Main report Luxembourg: Commission of the European Communities; 1996.*

**Leandri Hildebrandt** is a masters graduate in Geography and Environmental Management. This article flows from her master's dissertation focusing on the significance and the status of Social Impact Assessments (SIA) in a South African context. She is currently working as a researcher at the African Centre for Disaster Studies.

**Luke Sandham** is an associate professor in Geography and Environmental Management in the School of Geo and Spatial Sciences of the North-West University, Potchefstroom, South Africa. He holds a PhD from the University of Johannesburg and is a Council member of the Society of South African Geographers. His research interests are focused on the effectiveness of environmental assessment, including EIA and SIA report quality.