Can social impact assessment contribute to social development outcomes in an

emerging economy?

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Supplementary information: Empirical findings

Introduction 1.1

This supplementary information presents and analyses the results of the empirical study.

Mixed data collection methods were used in the empirical study. The results are first

presented in separate qualitative and quantitative sections, each followed by a summary of the

findings. The key findings that emerged from the qualitative and quantitative studies are

presented in the final section of the document.

The qualitative section presents the findings obtained from participants on their current

perceptions regarding the practice of SIA in South Africa and aims to provide insight in the

current practice of SIA and whether there are any existing links to social development. This

includes the perspectives of different stakeholders in the SIA process about strengths,

weaknesses and shortcomings in the SIA field in general. The qualitative data was collected

through three World Café's and twenty-four interviews.

The following quantitative section of the study analyses the outputs of the SIA process in the

form of 15 reports taken from the public domain. The quantitative study uses Guttmann

scaling to explore the patterns of report content. The theoretical framework of the study,

embedded in social development which underpins the context of poverty, human rights,

developmental social work and a social protection floor was used as a lens for the analysis of

the data.

Qualitative study: Insights in current SIA practice

This section contains the results of the qualitative study that explored how SIA is conducted

in South Africa. It addresses two sub-research questions investigating (1) to what extent SIA

methodology as currently practiced reflects social development; and (2) whether guidelines

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for SIA could assist practitioners with achieving social development outcomes. The answers to the questions allowed the researcher to analyse SIA's current interrelatedness with social development. The data covers the views of SIA practitioners and the views of their clients. The discussions for the first two World Cafés focused around three specific topics:

- Sharing experience around SIA.
- Potential guidelines for SIA.
- Qualifications and training in the SIA field.

The three topics that were discussed in the last World Café include:

- An exploration on what SIA is and why it is conducted.
- What should be included in an SIA.
- How to get the desired outcomes of an SIA.

The data was analysed using themes to categorise the statements of the participants into appropriate categories (Creswell, 2014:199), and these categories where influenced by the theoretical framework of social development that was used in the study. The questions used in the interview schedule acted as initial themes for the data generated through the interviews. A similar process was followed for the analysis of the data that was collected in the World Cafés. The researcher recorded the data received from the table hosts on each of the questions used in the specific World Café, which constituted three different sets of data from which recurrent themes were respectively identified. The data from the respective World Cafés was then rearranged according to the common emerging themes. The researcher then compared the data from the respective World Cafés and looked for emerging themes across all the qualitative data, including the interview data. Five recurring themes in all four qualitative data sets were identified. Through this process theoretical saturation was achieved when further interrogation of the data yielded no new insights (Bryman & Bell, 2003:428).

Table 6.1 below presents the five themes and where relevant associated sub-themes that emerged from the data obtained from all the participants in the qualitative study.

Table 0.1 Themes and sub-themes that emerged from the qualitative study

Theme	Sub-theme
Motivation for SIA from the perspective of different role players	
Current challenges to SIA practice from different perspectives	 2.1. Ignorance about social science methodology amongst role players 2.2. SIA is a point-in-time assessment 2.3. Inappropriate use of SIA by some role players 2.4. Lack of capacity amongst authorities to evaluate SIA 2.5. Project versus strategic focus of SIA studies
3. Important aspects to consider when conducting SIA	 3.1. Terms of reference need to be clear 3.2. SIA process is important 3.3. Outcomes of SIA process must consider the long term management of social impacts
Ensuring more effective SIA in a number of ways	 4.1. Flow of information between different role players 4.2. Information requirements between different role players 4.3. Long term involvement of SIA practitioners in management and mitigation of social impacts
5. Improving the practice of SIA	5.1. Guidelines for SIA to ensure a consistent approach amongst all role players5.2. Professional body for SIA practitioners5.3. Capacity building amongst all role players

In this section the findings of the study in relation to each of the themes will be discussed in order to obtain insight in the practice of SIA in relation to the extent that it reflects social development, whether SIA as currently practiced is effective as a tool for social development, and to investigate whether guidelines for SIA could assist practitioners with achieving social development outcomes. To contextualise the findings, the types of projects subjected to SIA that participants mentioned should be considered. These projects included large water infrastructure projects, dams, electricity infrastructure, nuclear reactors, wind farms, roads,

airports, housing developments, golf estates, waste sites, mines, industrial development, land restitution and casinos.

1.2.1 Theme 1: Motivation for SIA from the perspective of different role players

Participants highlighted that the obvious motivation for SIA is to determine and mitigate social impacts. This was summarised by a participant as follows:

"In my opinion, the purpose of doing an SIA is to determine and then mitigate potential impacts (positive and negative) that proposed developments, or any other kind of intervention, may have on its surrounding environment. When I say surrounding environment, I wish to place emphasis on the human capital in those environments. Environmental Impact Assessment oftentimes do not distinguish between the natural and social impacts and it is therefore crucial that an independent scientist, trained in the field of social sciences, conduct an SIA."

The data indicated that the motivation to do SIA does not only stem from a concern about communities, but it also meets business requirements such as strategic planning, corporate social investment projects and risk identification. In this regard, a participant commented:

"SIA is more than a means to obtain a positive Record of Decision; it is also a planning tool to enhance social sustainability of projects and to inform the design of CSI (Corporate Social Investment) initiatives. Very often, the effectiveness of CSI projects is diminished because they do not properly address the needs of communities. By providing in-depth baseline information on communities, SIA can help address this shortcoming."

Participants pointed community relations and participation out as a primary motivation for SIA, which is in line with a human rights approach and social development. One of the participants stated:

"In line with modern development thoughts the participation process is critical, no project can be conducted without participation."

The findings indicate that it is important to understand the needs and functioning of affected communities in order to make informed decisions and act in the best interest of project proponents and communities. Participants explained this as follows:

"SIA must give a feeling for how people are living in the affected area and how the project will affect them. It must identify positive, negative and knock-on effects, and make recommendations on dealing with potential negative impacts."

"I think that, in select circumstances, a SIA can have an immense value for a client who actually takes the time to page through the report. I have seen how the recommended mitigation measures in a SIA can enhance a specific project. If the client pays note to the suggested mitigation measures and ensure that they are employed, both the client and the surrounding community can benefit from the SIA."

"SIA can impact on policy-decisions at higher levels."

Some participants observed that SIA is not always used as a decision-making tool but rather as an instrument to obtain project approval or the superficial buy-in of communities. Comments from participants in this regard were:

"SIA does provide more information, but the information is not used as it should be. SIA is nothing but a rubber-stamp for approval."

"I am not convinced that SIA adds value to decision-making, but I hope so. It is the stepchild of the process. It is sometimes airy-fairy and we must take the blame for it. It is nothing but a nuisance to constructors, they do only the easy stuff."

"SIAs are oftentimes not considered as a useful tool, but it looks good to show other people that you as the proponent cared about the people."

Despite this sense of disillusion expressed in the comments above, participants indicated that an important motivation for SIA is to represent communities and communicate their views to the decision-makers:

"SIA works for the people. It acts as the voice of the community. The SIA practitioner is the only specialist with direct access to the community."

"The SIA practitioner is the representative of the community."

"A SIA practitioner is a story-collector, the person that summarise all the stories in a compelling narrative in such a way that it give voice to affected individuals and communities in a way that protects their interest."

"The role of the SIA practitioner is to be the mouthpiece of, not just the environment, but also the people who live in it."

In summary, participants expressed that SIA is not only a tool that protects the interest of affected communities, an important consideration in human rights and social development, but also a tool that protects the interest of the project proponent. Although it is not always used in the way it is intended to be used, which is to protect the interests of affected communities, this finding indicates that SIA seeks a win-win situation by acting as a bridge between stakeholders and is as much a business tool as it is a tool for community participation.

1.2.2 Theme 2: Current challenges to SIA practice from different perspectives

Participants mentioned a number of challenges to the practice of SIA. Sub-themes that emerged include ignorance about social science methodology, the timing of conducting SIA studies, inappropriate use of SIA, the capacity amongst authorities and the lack of strategic focus. These sub-themes are discussed in more detail in the following paragraphs.

1.2.2.1 Sub-theme 2.1: Ignorance about social science methodology amongst different role players

The findings indicate that there is a lack of understanding about how social science methodology is applied, and mentioned that EIA consultants, project proponents and communities often confuse SIA with economic impact assessment. Therefore the expectation is that the SIA will produce more tangible (quantifiable) results. One of the participants expressed this view as follows:

"What do people want from a socio-economic impact? They expect figures whereas SIA practitioners usually have a social sciences background. Social and Economics should be seen as two distinct disciplines."

The data indicated that the ignorance about social sciences sometimes impact on the credibility of SIA practitioners, because SIA does not meet the scientific criteria set out by the natural sciences. From the comments of the participants, it seems that this ignorance is not only limited to EIA consultants, project proponents and communities, but that SIA practitioners are also responsible for the situation:

"Social scientists have not been successful in getting themselves accepted and acknowledged in the community of practitioners involved in many developments. Engineers dominate and amongst the social scientists, the economists are taken seriously. Social scientists are seen as idealistic and naïve. It is often true. Sadly."

"The level of SIA practitioners is not what it should be. There is a lack of skills, a lack of understanding of social science theory, lack of experience, and mediocrity is

accepted. Practitioners do not have the guts to stand up and identify issues. The level of EIA managers is not up to standard – they don't practice strategic assessment and rigour and don't have the guts to assume a position against developers. Developers do not understand the role of SIA and use it as a marketing tool. There is simply not enough guidance and expertise."

"There is ignorance about the role of social sciences, and it is not helped by the naïve idealism of ivory tower social scientists."

Participants emphasised that SIA is a social science tool using social science methodology; results are often intangible; and the data is qualitative in nature. They mentioned that environmental impact assessment is firmly entrenched in the natural sciences where quantitative data is used and tangible results are a given. SIA is conducted in this context and practitioners often find themselves having to educate or convince natural-science colleagues of the scientific value of their studies. Participants commented:

"Environmentalists do not understand what SIA is. It differs from an issues-report."

"There is a perception amongst some people that SIA is inferior to an EIA (or that the EIA team can do it at the same time)."

"The industry is not sensitive enough to understand the value of SIA."

Participants indicated that quantitative data relating to communities are not always readily available and it is expensive and time-consuming to generate this kind of data, especially on a project-level. Therefore, practitioners are forced to rely on secondary data that may be out of date or less reliable.

1.2.2.2 Sub-theme 2.2: SIA is a point-in-time assessment

Participants pointed out that as EIA is currently undertaken in South Africa, the timeframes for SIA do not allow for longitudinal or repeat studies. This is in contrast with a social development approach which would require long term involvement. A participant explained this point:

"The SIA process needs to empower people and communicate concerns. People must get adequate information, time to digest and communicate back. The specialist must have enough time to analyse and digest. The client should understand this and be prepared to pay – it all comes back to time and budget."

The participants expressed a concern about the validity and reliability of SIA studies conducted in this manner, as it is not innate to social sciences to conduct studies in a short time and not repeat it. One of the participants illustrated the point by saying:

"Developers need to understand that relationships and a sense of trust being built take time and have budget-implications. Skilled interviewers cost money and are hard to come by."

Other participants commented:

"Clients are sometimes unrealistic in terms of timeframes and try to find practitioners who are willing to do an SIA in three weeks or less."

"Time is a problem, and it involves ethics – should you accept a job if the timeframes are so tight?"

All the participants in the study have identified time and budget restraints as a significant challenge to SIA. As long as these restraints remain, it is does not bode well for SIA's potential to be used as a tool for social development.

1.2.2.3 Sub-theme 2.3: Inappropriate use of SIA by some role players

Participants indicated that there is a general lack of understanding about what SIA is. This varies from hidden agendas of the proponent and lack of understanding amongst EIA practitioners to unrealistic demands from communities. Political agendas (and here participants emphasised that the reference is not only to party-politics, but to politics in communities between different stakeholders as well) can influence the outcomes of SIA, and potentially lead to human rights infringements. Participants believed this undermines the ethos of SIA and made the following comments:

"The SIA process is meaningless if a political decision is made."

"The public needs to be educated. A concern is not necessarily an impact."

"Covert scheming and politics are some of the biggest obstacles to SIA."

"Sometimes the client has his own agenda and doesn't want to listen."

"There is a lack of appreciation of the influence of politics. Politicians and developers influence SIA. The understanding of politics and power dynamics plays a fundamental role in SIA."

The data indicated that expectations from proponents and communities influence the way in which they perceive SIA. Participants indicated that communities often have high

expectations about the outcomes of the SIA process and mentioned that if this is not managed during the process the proponent's social licence to operate can be affected in the long-term. As the participant quoted below indicates, the SIA practitioner often needs to act as mediator between the proponent and communities:

"The SIA provides an independent view of what the community says and the project promises. The community often does not know what they want. The proponent does not give them what they deserve. The SIA practitioner becomes the referee when there is conflict, and gives advice to the community. He helps the proponent to give concessions and becomes the in-between person."

Participants suggested that proponents often expect SIA to deliver aspects that are not the responsibility of the SIA practitioner, but that of the proponent, especially given the short-term involvement of SIA practitioners. The findings show that there seem to be high potential for external parties to attempt to manipulate the SIA process to meet their agenda, which contributes to the perceived lack of credibility of SIA reports.

1.2.2.4 Sub-theme 2.4: Lack of capacity amongst authorities to evaluate SIA

Participants pointed out that SIA is evaluated and delivered to government departments that deal with the physical environment, and falls under the acts related to those functions. This means that the parties that will be responsible for the implementation of mitigation such as the Department of Health are not part of the decision-making process. A participant commented:

"The Department of Environmental Affairs should refer relevant issues to other government departments, who should make recommendations to the DEA, for example AIDS issues should be referred to the Department of Health."

Participants indicated that other government departments should become involved in the SIA process. This is essential if the multi-party involvement innate to social development is considered. The other government departments include:

- Department of Water Affairs
- Department of Health
- o Department of Human Settlements (previously housing)
- o Department of Social Development
- Department of Labour

- Department of Mineral Resources
- Department of Energy
- o Departments of Education (both Basic and Higher)
- Department of Agriculture, Forestry and Fisheries
- Department of Public Works
- Department of Trade and Industry
- Department of Rural Development and Land Reform;

The participants indicated that the lack of capacity amongst authorities also refers to their technical abilities and availability of time, and the participants' view on the matter is that:

"I do not think that our government structures allow themselves the time or resources to page through SIAs that are appended to EIA reports. Therefore, I do not think that an SIA has any impact on their final decision."

"The Department of Environmental Affairs has few officials with any social background. They are intimidated and let everything pass. There is a high staff turn-over – they are overwhelmed with work."

The data indicated that budgets do not allow for social monitoring and there is very little integration with other government structures such as local municipalities – it is usually limited to the evaluation of documents such as the IDP and limited consultation. The data further indicated that there is also a lack of capacity amongst municipal structures to interact with the SIA process. Participants expressed the following opinions:

"A lot of social impacts are linked with the fact that local government do not have the capacity to deliver services. If the IDP process was of any value, all the baseline information and development opportunities would be known up front."

"Better monitoring of baseline conditions and retrospective studies will only take place if developers are forced to do so, as bigger budgets are required."

Participants concur that without suitable competence in government structures enforcing mitigation and monitoring measures is a challenge. Lack if government capacity resulting from inequality of opportunity impacts on the practice of SIA.

1.2.2.5 Sub-theme 2.5: Project versus strategic focus of SIA studies

The findings show that SIA is driven by projects and not by strategic programmes, and therefore the footprint of each study needs to take account of all the potential impacts. Participants view this as a challenge to the effectiveness of SIA, as social impacts take place on a broader level. The findings indicate that social impacts are frequently cumulative and little is done to address cumulative impacts. Participants expressed the following concerns:

"EIA processes are very project specific and very seldom consider cumulative impacts on an area or community."

"Because of its project-specific focus, SIA is not well equipped to deal with CUMULATIVE impacts (including impacts arising from different projects being implemented by the same proponent)."

Strategic planning is required to mitigate most social impacts, and because mitigation is prescribed on a project level, it often fails to address impacts in their entirety. This can contribute to poverty, inequality and a decrease in wellbeing of project affected people. Participants expressed the following views on considering SIA in a strategic manner:

"It is good for the industry if we are looking at ways to do SIA more strategic rather than just describing social phenomena."

"A good SIA must be strategic, it must say something and have clear findings. It cannot be done in isolation, and is done within a certain context."

"SIA should be more strategic and linked to the IDP-process."

"The social is going to become increasingly important. Practitioners must be willing and capable of identifying, facilitating and analysing diverse types of forms of information to pursuit the bigger picture."

To summarise, considering the challenges to SIA practice identified by participants, the need for a community of professionals where information can be shared and training opportunities can be generated is clear. Participants mentioned that many of the challenges could be addressed by clearer guidelines for SIA and changing the way in which SIA is conducted.

1.2.3 Theme 3: Important aspects to consider when conducting SIA

Participants identified sub-themes that should be considered when SIA is conducted. These sub-themes are related to the importance of the terms of reference, aspects that participants view as valuable to include in the SIA process and attributes that they deemed important as outcomes of the process, and will be discussed next.

1.2.3.1 Sub-theme 3.1: Terms of Reference need to be clear

Participants emphasised that clearly defined terms of reference should be the starting point of SIA, especially in the absence of guidelines. The terms of reference must describe the scope of the study and clarify the role of the SIA practitioner. A participant mentioned that:

"The SIA should have clear boundaries in terms of its contents (as a final report) and measure of integration into OTHER specialist reports."

The findings indicated the importance of the SIA practitioner considering relevant legislation and policies of the proponent and including reference to this in the report. In this way SIA could potentially contribute to strategic social development intitiatives. As one participant stated:

"I am becoming increasingly aware of SIA literature, and the legislation is critically important."

The data showed that the legislation requirements are related to the context of the study, therefore relevant legislation such as the National Water Act 36 of 1998 or the Mineral and Petroleum Resources Development Act 28 of 2002 should be considered in some studies, but only where relevant. Participants identified terms of reference as an important tool to assist with integration and the flow of information between different role players in the SIA process.

1.2.3.2 Sub-theme 3.2: SIA process is important

The data indicated the importance of following a process and including aspects like screening, scoping, public consultation, a proper baseline study, impact assessment, mitigation, monitoring and evaluation. SIA studies should investigate impacts in all the phases of the project cycle and present clear findings. Participants emphasised the advantages of involving SIA practitioners as early as possible in the project life cycle and including them in strategic planning processes. They were of the opinion that continuous involvement of practitioners would ensure social aspects are taken care of in all the cycles of the project, and minimise and manage social risks. In some instances social risks can cumulate into human rights infringements. Participants made the following comments about the involvement of SIA in different phases of the project:

"SIA needs to be earlier in the planning and decision-making process. It comes too late in the process – it is not a reactive tool – it should rather inform."

"SIA needs to come in earlier in the process to add to planning."

"In general SIAs do not adequately address the operation and decommissioning phases – should a Social and Labour Plan not be included across all spheres of industry in the EMP? The social issues in an EMP are at this stage normally very general."

Participants stated that it is important to consider the aim of the SIA and to reflect on aspects such as the enhancement of positive outcomes and increasing the company's social licence to operate (in other words the acceptability of their activities to the affected communities). A participant summarised this by stating:

"The SIA is not about giving in to people's demands or the platform to negotiate compensations. It should rather focus on establishing a win-win situation for both the proponent and the community – it's about giving people some social insurance, whilst at the same time trying not to disadvantage affected communities. It's not about externalising what you've done for a community, it's not a public relations exercise. It's not a sales or marketing tool."

Another participant concurred:

"Mitigation is not just about avoiding or ameliorating negative impacts, but also enhancing positive ones."

Findings indicated that reliable data, robust methodologies and scientifically structured reports with substantive content would contribute to the credibility of SIA. A participant assented with the following statement:

"There should be a clear understanding on issues relating to data accessibility. The level of information should be stipulated correctly to ensure the quality and scope of the SIA is agreed EARLY in the process."

Participants made it clear that the description of affected communities must be broader than demographic data and include intangible aspects and existing challenges. The interaction with communities must be done in a culturally sensitive manner, be representative and participatory as is innate to a human rights based approach. Local knowledge pertaining to aspects affected by the potential project must be included in all reports. Participants expressed the following views in this regard:

"Community consultation should be done based on stakeholders' literacy levels to ensure complete understanding of the project, but this takes time and creates the impression that different segments of the community are treated differently.

Still, find a way to convey the same message, but adapt the way in which it's conveyed."

"The end result must give an idea of what happens in the community. A profile of the community, background – where are they coming from, how did they develop, where are they going to."

"SIA must give a feel for how people are living in the affected area, how the project will affect them – positive and negative, knock-on effects, and make recommendations on dealing with negative impacts."

The findings show that feedback to communities about the findings and recommendations of SIA are deemed important, but does not always take place. This aspect may potentially impact on the rights of communities.

1.2.3.3 Sub-theme 3.3: Outcomes of SIA process must consider the long term management of social impacts

Participants deemed it important that mitigation, monitoring and evaluation must be discussed with the relevant stakeholders to ensure it is implemented. The data indicated that this requires long-term commitment and the involvement of multiple role-players, which is in line with a social development approach. Findings show that SIA should include a monitoring plan that contains recommendations and practical tools that will assist with monitoring and evaluation. Comments from participants indicated that the mitigation, monitoring and evaluation of social impacts is a weakness in the process:

"Most of our predictions regarding social impacts, and most of our recommendations regarding mitigation, are based on (at best) anecdotal evidence about the actual impacts of earlier, similar projects, or (at worst) simply parroting what we or others have said in earlier SIA reports. Until there is consistent monitoring to determine the TRUE social impacts of projects, and the effectiveness of mitigation measures to address these impacts, we are bluffing ourselves if we think the purpose of an SIA is anything other than to get a positive Record of Decision."

"There's a definite lack of enforcement on social mitigation/enhancement measures. It's seen as a simple matter between the proponent and the community, but there is no follow up after the implementation of change."

"How do we get good value from information obtained (good outcome)? – Through impact assessment and formulating a management plan. Management Plan must be clear, concise, practical, implementable, relevant to the client and situation (one has to know beforehand the client's reference, frameworks, business constraints, how it operates). This can be difficult for the impact assessor, who must be independent and objective."

The findings confirm that participants view sustainable and social development as an important outcome of the SIA process. The following comments from participants illustrate the point:

"How else? The problem with sustainable development is that if you do not understand and address social problems, you have no chance to solve environmental problems."

"SIA should absolutely be used as a tool for sustainable development. SIA in itself is an intervention and a collaborative process. The social development process starts when issues are addressed and develop further. Management measures can assist if it is considered carefully and developed."

"Social development should link to existing processes. It should start in the concept phase of SIA and become part of the process. Workshops could be conducted that give detailed information about implementation — it is important that the community should take ownership of the process."

"The SIA process is hinged on sustainable development. It can be the base for long-term activities. It can be a way to ensure resources are used in a sustainable way. Nobody should be left worse off as a result of development. There is enormous potential."

"Impacts should be assessed considering sustainability. This goes beyond considering issues raised by Interested and Affected Parties. Many vulnerable affected parties (and not so vulnerable) are concerned about survival today and are less concerned about long term impacts, future generations."

These quotes illustrate that SIA practitioners are sensitive to the potential SIA has as a tool for social development. Another participant highlighted the challenges of integrating social development with SIA:

"SIA could be used as a tool for social development, but implementation would be difficult – whose responsibility is it? Is it in the terms of reference? Can the proponent actually do these things – does he have the authority?" Participants were of the view that Social and Labour Plans (SLP), as currently used in the mining industry, are a potential way to ensure social development outcomes, as expressed by this participant:

"The SLP focuses on empowerment and skilling and these principles should be applied to SIA."

In summary, the important aspects identified by the participants when conducting SIA include social aspects, from the conception of the project to the conclusion of the project. It underlines the importance of involving communities throughout the process. These aspects highlight the significance of a continuous strategic approach as would be required by social development.

1.2.4 Theme 4: Ensuring more effective SIA in a number of ways

Participants suggested that SIA studies could be made more effective in several ways, including effective dissemination of information, using current information, and long-term involvement of practitioners, as will be discussed next as sub-themes:

1.2.4.1 Sub-theme 4.1: Flow of information between different role players

Participants indicated that a significant way to improve social impact studies would be to ensure that there is a proper flow of information between the SIA consultant and the project proponent. The findings show that SIA consultants often receive secondary information via EIA consultants and there is a risk that some information is not conveyed correctly. Participants commented:

"Information between the SIA consultant and the proponent gets lost via the Environmental Assessment Practitioner. Therefore the TOR [Terms of Reference] should call for more integration meetings so that there is more direct contact between proponents and 'downstream' (sub) consultants."

"There should be more transparency in terms of information flow between project proponents and consultants, but in such a fashion that it does not compromise the integrity or independency of the consultant. A balance in the study requires credible and accurate information."

Participants were of the opinion that the proper integration of the findings of different specialist studies is crucial to SIA, especially because of the social component of many environmental impacts. They indicated that workshops that integrate the findings of different

specialist studies used in the EIA process would go a long way to address this need. Participants had the following views about this aspect:

"There should be structured integration meetings with the larger project team (key specialists - together with the proponent)."

"The SIA practitioner should be afforded an opportunity to engage the various project specialists on SIA imperatives and concepts from the outset of the process to assist with aligning a social-thinking approach to project design and execution."

The data shows that SIA consultants should become more involved in the writing of the environmental management plan (EMP) and ensure that their recommendations align with those of other specialists. A participant expressed this as follows:

"The SIA consultant needs to appropriately inform the EMP. The Terms of Reference can be used here to ensure that the SIA practitioner has "sign-off" of the EMP. This will assist in ensuring the effective and tangible description and qualification of roles and responsibilities within the EMP. The description of appropriate mitigation will have more detail on the relevant action plan to implement the proposed mitigation. (e.g.: "Use local labour"..... This is meaningless unless supported by an appropriate plan to effect this solution)."

Participants pointed out that social monitoring has some issues associated with it and should be thought through and discussed within the project team. A participant commented:

"Monitoring and mitigation of social impacts during construction (and operation) should be considered. Should we not go beyond the Record of Authorisation? What about mitigation of unintended social impacts during construction? Monitoring of impacts will contribute to a strong evidence-based approach in SIA."

The data indicated that a positive flow of information in the different phases of the SIA process is required to ensure sustainable outcomes.

1.2.4.2 Sub-theme 4.2: Information requirements between different role players

Participants emphasised the importance of using relevant and up-to-date documents and triangulating the information through interviews with key stakeholders. Participants highlighted challenges associated with obtaining current information as follows:

"What is a sufficient level of baseline information and sources of baseline information (primary and/or secondary)? The cost of detailed research can be high and may not be feasible."

The data indicates that the public consultation process prescribed by the EIA process is a source of useful information, and SIA consultants should participate in this process. Participants stated:

"It is the ideal that the SIA practitioner attends public meetings during public participation in the EIA process. One should also speak to participants afterwards, especially those who actively participated in the meeting."

"There should be a closer relationship between public participation and SIA. Public participation takes what people say at face value. The social researcher is the most import tool – my own ability to interpret what is said in the field."

However, SIA consultants must approach their work in a flexible manner to allow for the variety of communities and cultures in South Africa. This is also required to ensure no human rights are affected. The need for flexibility is illustrated in the following list of considerations compiled by participants in the Eskom/IAIAsa World Café:

"Remember the following when obtaining information from communities:

- Pay attention to language needs;
- Do research on the community beforehand: language, dress, ways of doing;
- *Understand power relationships people will want to position themselves;*
- Keep in mind that you are seen as an outsider;
- Keep in mind that your agenda is unknown to the community, and
- Make use of channels such as traditional authorities."

Another participant questioned the current reporting system and inclusion of vulnerable parties in the SIA process with the following statement:

"There is a challenge in producing reports which meet requirements and are also understood by semi-literate/illiterate. Is simple translation sufficient? Do we workshop SIA results and assessments to a satisfactory level with Interested and Affected Parties? For that matter, are workshops the right approach?"

The data confirmed the challenges associated with obtaining relevant information from affected parties in a culturally diverse and socially unequal society. Participants in the study viewed good baseline data that is up to date and reliable as an important component of the SIA process.

1.2.4.3 Sub-theme 4.3: Long-term involvement of practitioners in management and monitoring of social impacts

Participants stressed that social impacts must be monitored and managed for the lifetime of a project, but SIA practitioners are only involved at a point-in-time at the beginning of a project. Participants expressed their opinions about the short-term involvement of SIA practitioners as follow:

"SIA can only add value if mechanisms are put in place to oversee the mitigation measures and the Monitoring and Evaluation Plan. In most cases it is only a compulsory exercise to comply with legislation."

"The social specialist should have the opportunity to review the EMP to ensure that social mitigation measures are addressed effectively, not only during construction but also most notably during operation as there are oftentimes ongoing social issues during operation."

The findings indicate that unless practitioners get involved in the long-term the management and mitigation of social impacts will remain a weakness, because if there is no champion for implementation it is unlikely to happen. This also mean that there will be no social development outcomes. A participant concurred:

"The SIA practitioner should be contacted as a specialist in the planning phase. You need at least a year for research, fieldwork and the report. The client that will implement the project should have a social specialist to implement the project. The same specialist that conducted the SIA should evaluate after a year whether the decisions taken are implemented."

The data show that SIA practitioners are of the opinion that in order for SIA to reach its full potential to contribute to the wellbeing of communities, practitioners need to be involved in all phases of the project cycle and stay involved in the long term. Long term involvement of social scientists are essential to ensure the social development agenda stays at the forefront of development.

1.2.5 Theme 5: Improving the practice of SIA

Participants identified three aspects that could improve the practice of SIA in their view. These aspects are discussed as sub-themes in the paragraphs below and include guidelines for SIA, a professional body and capacity building.

1.2.5.1 Sub-theme 5.1: Guidelines for SIA to ensure a consistent approach amongst all role players

The data indicated that there is a clear need for a consistent approach to SIA in South Africa and that guidelines would address this need. Participants concurred with the following statements:

"Guidelines for SIA are required to enable consistency and to assess the quality of work."

"Guidelines drawing on collective knowledge are necessary to regulate practice and set standards. It is useful to share knowledge."

Participants indicated that the need is not about how to conduct SIA, but rather about what should be included in reports. The findings showed the need to establish local best practice. Participants were of the opinion that review guidelines are also required, as the quality of SIA reports are highly variable. Participants concurred with these statements:

"SIA can be improved by a clarification of glocal (global and local) homegrown methodologies and a set of guidelines, principles and standards."

"Report quality is highly varied – from not considering people to the 'whole army'."

"I have mixed opinions on report quality, it varies, from carelessness to high quality information."

Participants stated that these guidelines should not be too prescriptive, but a standardised approach that creates a uniform body of knowledge that can be used as a basis to measure against will advance the practice of SIA. Participants were of the opinion that this will ensure a consistent approach to SIA. Although there are existing guidelines for SIA in South Africa, they are not universally applied and they are euro-centric. The importance of a standardised approached to SIA was summarised by participants as follows:

"There is definitely a need for guidance on SIA as it will create standardised assessment and a uniform body of knowledge. It will be something to measure against."

"Formalising of the industry is required. There is a lack of understanding about what it should be. Guidelines are essential, the SIA process must be standardised."

Participants agreed that the creation of guidelines should be a participatory process that involves all the key stakeholders, such as impacted communities, SIA practitioners, academics, environmental scientists/consultants, NGO's, government and industry. The data indicated that government departments other than DEA and DMR should be involved in the review of SIA and implementation of mitigation measures. Participants commented in this regard:

"Local authorities should see opportunities and do something about it."

"In integrated development projects local government must be included to ensure seamless integration."

The government department involved depends on the sector you are working in.

DEAT is not necessarily the appropriate authority, they are to bio-physically focussed."

Participants deemed guidelines a better solution than regulations, as they were of the opinion that it allows for more creativity in the approach to SIA. The data indicated that guidelines would promote independence of SIA practitioners and enhance the practice of SIA.

1.2.5.2 Sub-theme 5.2: Professional body for SIA practitioners

The findings show that ways of ensuring more effective SIA are related to the lack of a professional body. Participants indicated that aspects for which a professional body usually take responsibility are lacking in SIA practice in South Africa. These aspects include a code of practice, registration of practitioners, SIA guidelines, databases of relevant information, awareness creation and local best practice standards. Participants underpinned the need for a professional body with the following statements:

"A formal institution or board should be established to regulate all SIA practitioners. More formal and structured courses or diplomas should be developed and presented."

"At the moment everybody is just doing their own thing without any clear cut guidelines to follow. This is not due to their own inability, but due to the fact that there is no regulatory body or institution to guide them."

The findings concur that a professional body will benefit the SIA field. A professional body will ensure that minimum guidelines for best practice are prescribed. It is important to distinguish between a professional association that could advance the practice of SIA on a voluntary basis and a statutory body that could regulate SIA practice from a legal perspective. The data indicates that although practitioners identified a need for a professional body, practicalities around the nature of such a body would need to be considered in more detail.

1.2.5.3 Sub-theme 5.3: Capacity building amongst all role players

Participants pointed out that there are few training opportunities for SIA consultants in South Africa. Formal training for SIA consultants by recognised experts in the field or at credible academic institutions will contribute to developing the capacity of consultants. Participants indicated that training opportunities must be extended to authorities and EIA consultants.

"SIA can be improved if more people get a better understanding of best practice options and methodologies. General awareness must also be raised amongst the project proponent and project managers."

"Institutionalised training by experienced practitioners and registration at a national body will improve the way of doing SIA in South Africa."

Local research in the SIA field will contribute to the understanding of the challenges that SIA practitioners experience, and therefore assist with developing the skills required to ensure effective SIA.

In summary, this section identified aspects that can increase the effectiveness of SIA in general, as well as aspects to consider when investigating SIA practice with the view to use it as a tool for social development.

1.3 Quantitative study: Inclusion of social development aspects in SIA reports

This section contains the results of the quantitative research, which analyses whether SIA reports include aspects of social development. SIA reports are the outcome of SIA studies, and the researcher identified them as an appropriate dataset for this analysis. Three main themes concerning the practice of SIA were identified, and questions associated with social development outcomes were formulated under each theme, using information obtained from the literature study. The data was obtained by using a checklist to establish whether the questions were addressed in fifteen SIA reports.

First, the sample for the study will be described and this is followed with a presentation of the findings according to the three themes and the underlying questions. The answers to the

questions under each theme are then analysed by means of a Guttmann scale. The section concludes with a summary of the quantitative findings.

1.3.1 Description of the quantitative sample

SIA reports are in the public domain, and fifteen SIA reports that were done in South Africa between 2008 and 2014 were reviewed. The date filter used for selecting the reports aimed at ensuring that the data reflects the current practice. The reports were identified via an internet search and by directly approaching practitioners and requesting reports. All the reports that could be acquired in this manner were used in the study indicating that the sample represents the population of available reports. The shortest report was 63 pages and the longest 225 pages, with an average of approximately 110 pages per report. The length of the report often reflected the complexity of the project that was assessed. Eight different practitioners produced the reports that were selected for analysis. Some reports had more than one author.

In the following section the qualifications of the authors will be presented. This is followed by a presentation on the sector where the study was conducted. The section concludes with a discussion on the geography of the studies.

1.3.1.1 Qualifications of authors

The authors of the studies all have post-graduate qualifications. Six (75%) of these practitioners have a masters degree, one (12.5%) a PhD and one (12.5%) an honours degree. Four (50%) of the masters degrees were obtained in the social science field, and two (25%) in the environmental field. The PhD and honours degree are both social science degrees. Figure 1.1 indicates the authors' qualifications of the reviewed SIA studies.

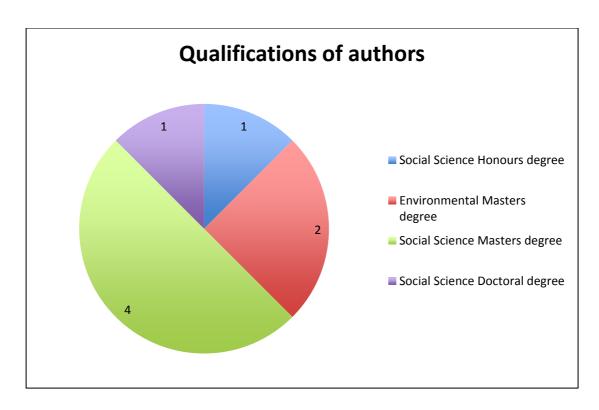


Figure 0.1: Authors' qualifications of the reviewed SIA studies

The majority of practitioners have social science qualifications, which gives them a basis to better understand social development aspects. SIA practitioners are highly qualified professional people in various disciplines and this should give credibility to the occupation, but as the findings of the qualitative study indicate the lack of a professional registration body, guidelines and specific training undermines the credibility of the SIA, despite practitioners' qualifications in their respective disciplines.

1.3.1.2 Sector in which the study was conducted

SIA is conducted in different sectors. The mining sector includes all mining related activities, including prospecting. Studies in the energy field include renewable energy, nuclear energy and coal. Infrastructure development refers to infrastructure such as power lines, dams, pipelines and factories. Commercial development consists of housing developments, shopping malls, golf courses and other commercial activities. Each of these sectors has different activities associated with the sector, and therefore different social impacts occur. Figure 1.2 represent the sectors in which the reviewed SIA reports were conducted:

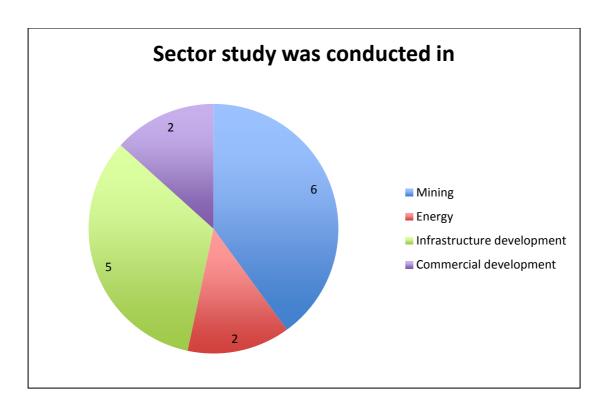


Figure 0.2: Sectors in which the reviewed SIA studies were located

Six (40%) of the reports were done in the mining industry, two (13%) in the energy sector, five (33%) was concerned with infrastructure development and two (13%) were done on commercial developments. This represents a fair sample of the industries that uses SIA.

1.3.1.3 Geography of studies

There are nine provinces in South Africa. The studies reviewed for the thesis covered four of the nine provinces. Six (40%) of the studies were conducted in the Western Cape, four (27%) in Mpumalanga, three (20%) in Limpopo, and two (13%) in KwaZulu-Natal. Figure 1.3 presents the geography of the studies that was used in the quantitative research.

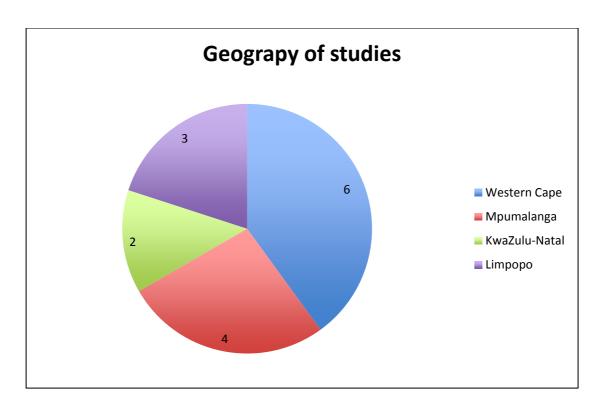


Figure 0.3: Geographic location of the reviewed SIA studies

Although all provinces in South Africa have not been covered by the studies, the four provinces include the Western Cape, which is one of the economic hubs of the country, and Limpopo, which is one of the poorest provinces. In addition, Mpumalanga is experiencing high levels of development associated with mining and energy, and KwaZulu-Natal has vast areas under traditional rule. The sample can therefore be seen as representative in terms of the socio-economic challenges associated with areas of high levels of development and poverty.

1.3.2 Presentation of findings

Three main themes for analysing the link between SIA and social development were identified through the literature review. The three themes are related to the current practice of SIA. The first theme is concerned with the legal and institutional mandate for SIA, the second theme investigates aspects in the SIA study that could promote social development and the last theme examines whether the recommendations in the report go beyond the minimum requirements for mitigation and monitoring to outcomes that will result in social development. Under each theme, a number of questions related to social development were formulated to establish to what extent social development outcomes are considered in the reports. The themes and questions are discussed in more detail in the paragraphs below.

Theme 1: Legal and institutional mandate for social development in SIA

In the literature chapters it was established that the environmental legislation in South Africa provides SIA practitioners with a mandate for social development outcomes. A number of national and international governance tools and standards support this legal mandate. Seven questions related to the legal and institutional mandate of SIA and the theoretical framework including social development practice, human rights and equality were formulated to establish whether practitioners acknowledge and include this legal and institutional mandate in their reports. The questions under Theme 1 were the following:

- o Is there background information on the relevant legislation in the report?
- o Is there reference to international standards?
- o Is there reference to local guidelines?
- Are human rights considered?
- Are there any social, environmental or restorative justice issues?
- o Does the report make use of an explicit methodology?
- Are there any equity issues? (Who pays the price versus who gets the benefits?)

Theme 2: SIA as a tool for social development

The study used social development as part of the theoretical framework. There are key aspects associated with social development, as discussed in Chapter 2. Theme 2 investigated whether these aspects are currently present in SIA practice. Fifteen questions related to key aspects associated with social development were formulated to establish whether SIA practitioners consider these aspects in their reports. The questions under Theme 2 were as follow:

- o Was a participatory process followed?
- o Was the process inclusive?
- o Is the wellbeing of the entire population considered and promoted?
- o Do mitigation measures discourage dependency on proponent?
- o Do mitigation measures promote active involvement of people?
- o Is a multi-sector approach to mitigation promoted?

- Are any partnerships between civil society, government and private sector suggested?
- o Do mitigation measures require cooperation between several role-players?
- Will mitigation increase capabilities and productivity of people?
- o Are impacts on family stability mitigated?
- o Is mitigation on social service organisations included?
- o Will the outcomes be project-neutral?
- Will mitigation contribute to poverty alleviation?
- Does mitigation address inequality issues?
- o Will there be in-migration?

Theme 3: Going beyond minimum requirements for mitigation and monitoring towards social development outcomes

The last theme investigated whether the reports made recommendations for the mitigation and monitoring of social impacts that go beyond the minimum requirements for SIA, and whether these recommendations could possibly lead to social development outcomes. The twelve questions formulated under this theme were concerned with social development outcomes in the longer term, but also touched on SIA international best practice that originated from a human rights approach, since human rights formed part of the theoretical framework and is intrinsic in social development. The questions formulated under Theme 3 were:

- o Is the mitigation specific to the South African context?
- o Is monitoring of mitigation measures suggested?
- Who is proposed as the funder of on-going monitoring?
- o Are impact benefit agreements (IBA) proposed?
- o Is there any reference to Free, Prior, Informed Consent (FPIC)?
- Are there any proposals for economic development processes?
- Will the outcomes enhance the social environment?
- Are the affected communities involved in the execution of the mitigation measures?

- O Do mitigation measures contribute to the social protection floor via suggestions regarding creation of employment?
- O Do mitigation measures contribute to the social protection floor via suggestions regarding contributing to education/skills development?
- Do mitigation measures contribute to the social protection floor via potential establishment of infrastructure?
- Are regional development issues considered in the study?

The findings under each of the themes will first be presented in Sections 1.3.2.1 to 1.3.2.3. The Guttmann scale analysis of the findings will follow and is discussed in Section 1.3.3 below.

1.3.2.1 Theme 1: Legal and institutional mandate for social development in SIA

The seven questions identified for data analysis of this theme are presented in Section 1.3.2 above and relate to relevant legislation, international standards, local guidelines, human rights, social, environmental or restorative justice, explicit methodology and equity issues. The following Figure 1.4 presents the findings of the first theme dealing with the legal and institutional mandate for SIA.

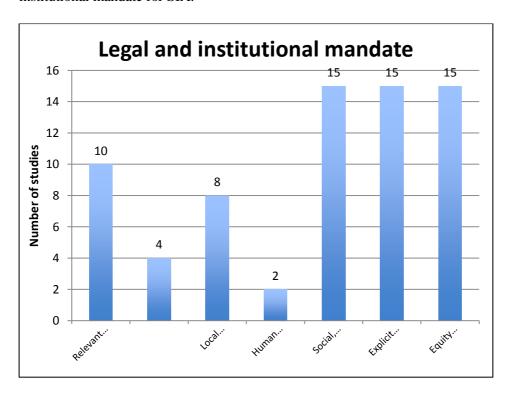


Figure 0.4: Analysis of legal and institutional mandate coverage in SIA reports

Only two (13%) reports considered human rights. This might be because the protection of human rights is a core value of SIA (Vanclay, 2003:6) and practitioners view it as an inherent part of the process. Despite the lack of mention of human rights, social, environmental and restorative justice were considered in all the reports, which indicates that practitioners work from a specific value-system, even if it is not made explicit.

The four (27%) studies that refer to international standards were all done in the mining industry, an industry that often depends on foreign funders. Funding from an organisation such as the IFC are subjected to compliance with the performance standards for environmental and social sustainability (IFC, 2012:2) and therefore it is seen as best practice to address these requirements in any project that may rely on funding from external parties or stakeholders in future.

As established in Chapter 3, there is no specific legislation that requires SIA to be conducted, except in the mining industry. All six (40%) studies conducted in the mining industry referred to relevant legislation. The remaining four (27%) studies that referred to legislation were done in the infrastructure sector (2, 13%), energy sector (1, 7%) and commercial sector (1, 7%). Where more than one report from a specific practitioner was used the data indicated that two practitioners consistently referred to legislation and two others referred to legislation in the case of mining, but not in the case of other projects. This can potentially be attributed to the clearer guidance about SIA in the mining industry.

Just more than half of the studies (8, 53%) referred to local guidelines. Half of the mining, infrastructure and commercial studies and all the energy studies referred to local guidelines. The local guidelines that are currently available in South Africa are *Socio-economic Impact Assessment: Integrated Environmental Management Series 22* (DEAT, 2006) and *Guideline for involving Social Assessment Specialists in EIA Processes* (Provincial Government Western Cape: Department of Environmental Affairs and Development Planning, 2007).

All of the studies make use of an explicit methodology. This confirms that SIA practitioners use scientific methods and produce replicable reports. Equity issues were considered in terms of who will carry the social cost of the development versus who will receive the benefits. Equity issues are addressed in all the reports, confirming SIA's role as a voice for the voiceless (Barbour, 2007:18).

1.3.2.2 Theme 2: SIA as tool for social development

This theme deals with aspects within SIA that can contribute to social development. The fifteen questions formulated to analyse this aspect are presented in Section 6.3.2 above, and are concerned with participation, inclusiveness, wellbeing of the population, dependence on

the proponent, active involvement of people, multi-sector approach, partnerships, cooperation between role-players, increase in capabilities and productivity, family stability, social service organisations, project neutral outcomes, inequality issues, in-migration and poverty alleviation. This theme aims to identify aspects in the current practice of SIA that can potentially contribute to social development outcomes, even if it is not the primary purpose of SIA. It is important to take note that the SIA reports only represent the recommendations made in the reports, as the actual outcomes of implementing the recommendations made in the SIA have not been measured for the purpose of this study. The following figure presents the results of the analysis of the reports regarding the potential contribution to social development:

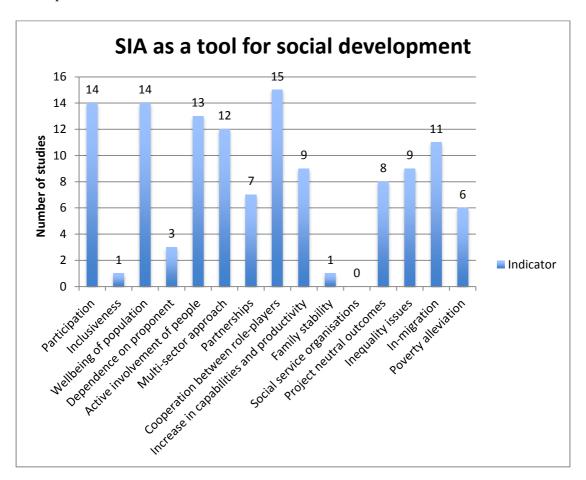


Figure 0.5: SIA reports potential to be used as a tool for social development

None of the studies took the potential impact of the project on social service organisations into consideration, and only one (7%) report suggested mitigation measures to address family stability. This may indicate that SIA practitioners do not view the mitigation of these impacts as part of the responsibility of the proponent, or simply that they do not think about the potential of the project to impact on these aspects.

Although most studies followed participatory processes, only one (7%) of the studies was clearly inclusive. Four (27%) were not inclusive, and it is unclear how inclusive the remaining studies were, as it is not made explicit. Processes were sometimes not inclusive due to external factors such as availability of participants or refusal to participate. The short timeframes allowed for SIA studies can also contribute to this, especially in the mining industry where there are strict timelines that must be followed, or when SIA is conducted late in the process.

Only three (20%) of the studies actively discourage dependence on the proponent. In one study this question was not relevant, as the nature of the development did not require mitigation measures that involve funding of the proponent in the long-term. The remaining eleven (73%) studies suggested mitigation measures that would only be successful as long as the proponent funded it.

The mitigation measures suggested in six (40%) of the reports have the potential to contribute to poverty alleviation. Nine (60%) of the studies suggest mitigation measures that will increase the capabilities and productivity of the people. Eight (53%) of the studies suggest mitigation measures with project neutral outcomes, seven (47%) of the studies suggest mitigation measures that will result in better than project neutral outcomes and fourteen (93%) of the studies considered the wellbeing of the population. Nine (60%) of the studies consider inequality issues. SIA therefore has significant potential to be used as a tool with social development outcomes, as these aspects are already considered in reports. The true impact will be the way the mitigation measures are implemented, and as can be seen from the qualitative data, this remains a challenge.

In-migration, one of the processes associated with significant community level impacts, was predicted in eleven (73%) of the studies. This indicates that when a project requires an SIA, one can expect significant long-term impacts in the surrounding communities. Given the difficulty in managing the impacts associated with in-migration, and the number of role-players required to mitigate these kind of impacts successfully, it is crucial to realise that the management of social impacts should be done in a strategic manner.

The majority (14, 93%) of the reports also consider that SIA mitigation cannot take place in a vacuum, or be the responsibility of only one party. In thirteen (87%) of the studies active involvement of people (communities) is required to ensure the successful implementation of the mitigation measures. Twelve studies (80%) encourage a multi-sector approach to mitigation. In all the studies cooperation between role-players are required for successful mitigation. However, partnerships are not universally suggested, as only seven (47%) of the studies suggest partnerships between government, civil society and the private sector as part

of the mitigation process. Participation and partnerships are key aspects of social development and it is encouraging to see that it is considered in some of the studies, as it is a potential area of overlap between social development and SIA.

1.3.2.3 Theme 3: Going beyond minimum requirements for mitigation and monitoring towards social development outcomes

This theme investigates whether the recommendations in the studies go beyond the minimum requirements that are acceptable for SIA. Twelve questions were formulated (see Section 6.3.2) and were concerned with RSA specific mitigation, monitoring, the funder for mitigation, IBA, FPIC, economic development, enhanced social development, involvement of communities, employment creation, skills development, contribution to infrastructure and regional development. In the figure below the results of the analysis of the studies related to going beyond minimum requirements are presented.

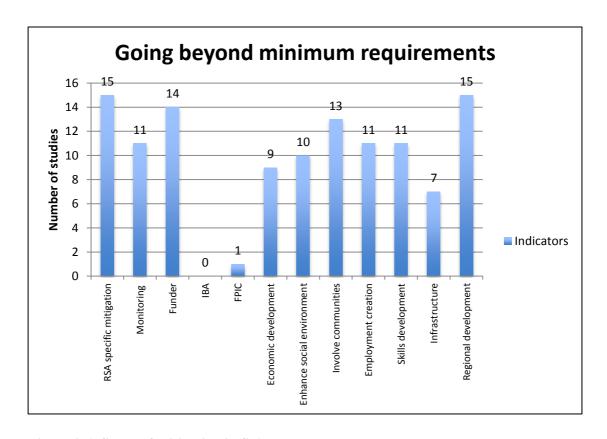


Figure 0.6: Scope of mitigation in SIA reports

None of the studies considered IBA's, and only one (7%) study considered FPIC, something currently included in international best practice. This can be attributed to the legal requirement for Social and Labour Plans in the Mining Industry, and the South African legislation that does not make provision for these practices. All the mitigation measures were specific to the South African context.

Eleven (73%) of the reports suggested monitoring of mitigation measures. One (7%) study is not clear about who should fund the monitoring. The remaining studies (14, 93%) all suggest that the proponent should fund the monitoring, and in five (33%) of the studies it is suggested that the local government should act as co-funder.

Nine (60%) of the studies propose economic development processes. The outcomes of ten (67%) of the studies will enhance the social environment. All the studies consider regional development issues.

When considering the potential of studies to contribute to the social protection floor, it seems as if SIA can potentially play a significant role. Eleven (73%) of the studies contribute to the social protection floor via employment creation, education or skills development. Seven (47%) of the studies contribute to the social protection floor via infrastructure development. Although SIA is not the right tool to contribute to cash transfers or subsidies, there is a clear role for SIA to contribute to basic services, as an improvement in such services is a mitigation of impacts in itself. Thirteen (87%) of the studies involve local communities in the execution of mitigation measures.

The data presented in this section indicate that there are clear strengths in the current SIA practice in South Africa. Many reports consider and recommend aspects that go beyond the minimum requirements for SIA. The lack of reference to some international best practice principles must be examined critically. There are two possible explanations. The first is that South African SIA practice is not on international standard. Given that the information is consistently found in South African reports, this explanation is not plausible. The second explanation is that the two international standards are not relevant in the South African context, which is more plausible when the legislative and regulatory context is considered.

1.3.3 Guttmann analysis of the findings

A Guttmann scale was used to analyse the current status of how social development outcomes are considered in SIA practice in South Africa. The objective is a two dimensional classification in which traits are listed in rows of a matrix and the columns represent a higher-level classification (Dane, 1990:334; Guest, 2000:247). The columns each represent a report. Answers to the thirty-four questions identified in the literature chapters are the criteria that are sought in each report. With the exception of two questions, dichotomous questions were used with the only response possibility being Yes (1) or No (0). The two questions that did not have dichotomous answers related to the party responsible for funding of mitigation measures and the inclusiveness of the participatory process, which could not be determined with a high level of certainty. For the purpose of the Guttmann analysis only the 32 dichotomous

questions were used. Once the matrix has been populated the order of the reports and the order of the questions was adjusted to reveal clustered patterning. The objective was to order the reports and the questions in such a way that all the yes (1) answers cluster in the top left corner of the matrix and the no (0) answers cluster in the bottom right of the matrix. The resulting ordering of the reports and questions reveal patterns in the inclusion of social development aspects in SIA. The researcher identified cut points to reveal patterns that establish which aspects are most often included in the reports. Similarly, the approach identified clusters of issues that are not addressed, or seldom addressed, and clusters the reports with these shortcomings. A cut point of 12 out of fifteen represents 80% of the time, and was used to identify aspects included most often in the report. A cut point between 8 (53%) and 11 (73%) out of 15 was used to identify aspects that were considered about half of the time, and a cut point between one (7%) and 7 (47%) out of 15 was used to identify aspects that are seldom considered. The cut points were arbitrarily assigned at the discretion of the researcher, in consultation with a research expert. The Guttmann scale presenting the responses to each question is presented in Table 6.1.

Table 0.2: Effectiveness of SIA as a development tool in South African context

	Practitioner													
	A	В	C	C	D	A	A	E	F	A	A	G	H	Н
	Mining	Mining	Mining	Mining	Energy	Energy	Commercial	Infrastructure	Infrastructure	Mining	Infrastructure	Infrastructure	Mining	Infrastructure
Questions	SIA reports used in study													
Report number	10	2	12	3	7	14	13	8	6	15	9	5	1	11
Do mitigation measures require cooperation between several role-players?	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Are there any social, environmental or restorative justice issues?	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Does the report make use of an explicit methodology?	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Are there any equity issues? (Who pays the price vs who gets the benefits)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Is regional development issues considered in the study?	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Is the mitigation specific to the South African context?	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Will the outcomes be project-neutral?	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Is the wellbeing of the entire population considered and promoted?	1	1	1	0	1	1	1	1	1	1	1	1	1	1
Was a participatory process followed?	1	1	1	1	1	1	1	1	1	1	1	0	1	1
Is a multi-sector approach to mitigation promoted?	1	1	1	1	1	1	1	1	1	1	0	1	1	0
Is monitoring of mitigation measures suggested?	1	1	1	1	1	1	0	1	0	1	1	1	1	0
Do mitigation measures promote active involvement of people?	1	1	1	1	1	1	1	1	1	1	1	1	0	0
Are the affected communities involved in the execution		1	1	1	1	1	1	1	1	1	1	1	0	0
of the mitigation measures?	1	1	1	1	1	1	1	1	1	1	1	1	0	0
Questions	SIA r					repo	orts	use	d in	dy				
Report number	10	2	12	3	7	14	13	8	6	15	9	5	1	11
Do mitigation measures contribute to the social protection floor via suggestions regarding contributing to education/skills development?		1	1	1	1	1	1	1	1	1	1	0	0	0
Do mitigation measures contribute to the social protection floor via suggestions regarding creation of	1	1	1	1	1	1	1	1	1	1	1	0	0	0

employment?														
Will the outcomes enhance the social environment?	1	1	1	1	1	1	1	1	1	1	0	0	0	0
Do mitigation measures contribute to the social														
	0	1	1	1	1	0	0	1	1	1	0	0	0	0
infrastructure?														
Will there be immigration?	1	1	1	1	1	1	0	1	1	1	0	0	1	1
Is there background information on the relevant	t 1	1	1	1	0	1	1	0	1	1	0	0	1	1
legislation in the report?	1	1	1	1		1	1		1	1			1	1
Does mitigation address inequality issues?	1	1	1	1	1	1	1	0	1	1	0	0	0	0
Will mitigation increase capabilities and productivity of	1	1	1	1	1	1	1	1	1	0	0	0	0	0
people?	1	1	1	1	1	1	1	1	1				U	O
Are there any proposals for economic development	t 1	1	1	1	1	1	1	1	0	0	0	1	0	0
processes?	1	1	1	1	1	1	1	1				1	U	U
Is there reference to local guidelines?	1	0	0	0	1	1	1	0	0	1	1	1	1	0
Are any partnerships between civil society, government,	, 1	1	1	1	1	1	1	0	0	0	0	0	0	0
private sector suggested?	1	1	1	1	1	1	1						U	O
Will mitigation contribute to poverty alleviation?	0	1	1	1	1	1	1	0	0	0	0	0	0	0
Is there reference to international standards?	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Do mitigation measures discourage dependency on	i													
proponent?	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Are human rights considered?	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Are impacts on family stability mitigated?	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	SIA reports used in study													
Questions														
Questions Report number	10	2	12	3	7	14	13	8	6	15	9	5	1	11
	10	0	12	3	7 0	14 0	13	0	6	15	0	5	0	0
Report number														

1.3.3.1 Aspects that are generally considered

A cut point of 12 (80%) or more yes (1) answers out of 15 has been identified as an indication that a certain aspect is generally considered in current SIA practice. Twelve out of the 32 questions fell in this category, namely:

- o Do mitigation measures require cooperation between several role-players?
- o Are there any social, environmental or restorative justice issues?

- o Does the report make use of an explicit methodology?
- Are there any equity issues? (Who pays the price versus who gets the benefits?)
- Are regional development issues considered in the study?
- o Is the mitigation specific to the South African context?
- o Will the outcomes be project-neutral?
- Is the wellbeing of the entire population considered and promoted?
- o Was a participatory process followed?
- o Is a multi-sector approach to mitigation promoted?
- o Do mitigation measures promote active involvement of people?
- O Are the affected communities involved in the execution of the mitigation measures?

The finding means that only 37,5 % of the 32 questions that have been identified are consistently addressed in SIA reports.

Social, environmental or restorative justice and equity issues are considered in 100% of the studies, and this indicates that there is a general awareness amongst practitioners about these issues. All the reports (100%) described an explicit methodology showing that these reports are consistently approached in a scientific manner. The three (9%) questions discussed in this paragraph refer to the legal and institutional mandate for SIA (Theme 1).

Six (19%) of the 32 questions that are generally considered refer to the ability of SIA to be used as a tool for social development (Theme 2). In 14 (93%) of the reports SIA considers the wellbeing of the entire population and follows a participatory process. Twelve (80%) of the reports indicate that mitigation of social impacts requires a multi-sector approach and cooperation between several role-players is a requirement of all the studies (100%). The active involvement of communities in the mitigation process is encouraged in 13 (87%) of the studies.

All 15 studies (100%) considered regional development issues and recommended mitigation specific to the South African context. The recommendation to involve affected communities in the execution of the mitigation measures is present in 13 (87%) of the studies. The three (9%) questions discussed in this paragraph are concerned with going beyond the minimum requirements for SIA (Theme 3).

1.3.3.2 Aspects that are considered about half of the time

The next cut point represents aspects that are addressed between 8 and 11 times out of 15 or about half of the time in current SIA practice. Ten (31%) of the 32 questions fall in this category.

Two (6%) of the ten questions are related to the legal and institutional mandate for SIA, namely reference to relevant legislation and local guidelines (Theme 1). Three (9%) questions referring to the ability of SIA to be used as a tool for social development are included in about half of the reports (Theme 2). This includes in-migration, ability of mitigation to increase capabilities and productivity of people and whether mitigation address inequality issues.

The remaining five (16%) questions that are answered about half of the time are related to the ability of SIA to go beyond the minimum requirements for mitigation and monitoring (Theme 3) and include reference to the contribution of the social protection floor via skills development, employment creation, outcomes that will enhance the social environment, proposals for economic development processes and the monitoring of mitigation measures.

Only 11 (73%) reports refers to the monitoring of mitigation measures, which confirms the findings of the qualitative part of the study that indicates that it is a shortcoming in the SIA process. Outcomes of mitigation that enhance the social environment are also only present approximately half of the time. It is significant that 11 (73%) SIA reports recommend mitigation measures that can contribute to the social protection floor, even if they may not be familiar with the concept or social development literature. Mitigation measures regarding creation of employment and measures that contribute to education/skills development are such recommendations. Proposals for economic development processes can potentially contribute to social development outcomes and it is encouraging to see this recommendation in nine (60%) of the SIA reports.

1.3.3.3 Aspects that are seldom or never considered

A cut point between 1 and 7 was used to identify aspects that are seldom considered in SIA reports. Seven questions (22%) fall within this category. International standards were considered in five (16%) reports and human rights were only considered in two (4%) reports. These two questions relate to the legal and institutional mandate for SIA (Theme 1).

Four of the questions (13%) that were seldom considered, namely impacts on family stability, discouragement of dependency, partnerships and poverty alleviation, are related to the ability of SIA to be used as a tool for social development (Theme 2). Mitigation measures that discourage dependency on the proponent fall in this category, and it was mentioned in only three (20%) of the studies. Partnerships between civil society, the government and the private

sector are recommended in seven (47%) of the studies. Mitigation that contributes to poverty alleviation was present in six (40%) of the reports and it means that there is at least some level of awareness amongst practitioners.

The question regarding recommendations of mitigation measures that involve the establishment of infrastructure was addressed in seven (47%) studies. Interestingly, all these studies were not in the mining industry as expected due to the requirements of the SLP, but included studies in the energy and infrastructure fields. FPIC was considered in only one report (3%). These are the only two questions under the "going beyond SIA" theme (Theme 3) that are seldom considered. In addition, the two (6%) questions that were not considered in any of the reports, namely the potential impact that a project may have on social service organisations and the international best practice principle of IBA, also form part of the theme related to the ability of SIA to go beyond the minimum requirements for mitigation and monitoring (Theme 3).

The percentage of all the questions considered in each report was also determined. These percentages varied from 35% to 78%. This means that none of the reports considered all the questions, and the highest score is only 78%, which means that seven (22%) of the questions are not addressed even in the most comprehensive reports. The variance between reports is one of the most significant findings that can be made from the analysis, clearly indicating the lack of standards in the SIA field as identified in the qualitative study.