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Molewa, Ntebaleng

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MSC ENVIRONMENTAL SCIENCE RESEARCH REPORT	
Name:	Ntebaleng Molewa
Student number:	0615163M
Degree:	MSc Environmental Science (Part Time)
Year of registration:	2013
Faculty and School:	Faculty of Science: School of Animal, Plant & Environmental Sciences
Research title:	The effectiveness of the public participation process in Environmental Assessments (EA): A South African Perspective
Supervisor:	Ingrid Watson

DECLARATION

I declare that this research report is my own, unaided work. It is submitted for the Degree of Maters of Science in Environmental Science at the University of the Witwatersrand, Johannesburg. It has not been submitted before any degree or examination at any other University.

_____

Signature of candidate

31st day of May 2017.

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LIST OF ACRONYMS

BA: Basic Assessment

EA: Environmental Assessment

EAP: Environmental impact assessment practitioner

ECA: Environmental Conservation Act

EMP: Environmental Management Plan

EIA: Environmental Impact Assessments

EIR: Environmental impact reports

DEA: Department of Environmental Affairs

I&AP: Interested and affected parties

NEMA: National Environmental Management Act

NIMBY: Not in my back yard

NGO: Non-governmental organisation

ABSTRACT

Public participation in environmental impact assessments has been the subject of many studies around the world. The effectiveness of the public participation process in a South African context has however not been tackled by many authours. A study was conducted in order to assess the effectiveness of the public participation for environmental impact assessments in South Africa. In order to achieve this, 20 environmental impact reports were scrutinised, key informant interviews were conducted and analysis of legislation, regulation as well as applicable Guidelines was carried out. Results indicated that public participation in environmental impact assessment regulation fall short of addressing what the principles of the law states. Consequently, there is a need for the review of regulation to prescribe the involvement of marginalised groups through additional participation such as public meetings in the appropriate language as well as ensuring skills development to aid in effective participation. The inclusion of the monitoring of the implementation of the environmental management programmes as well as the inclusion of public participation in this process and therefore the life cycle of the project will aid in ensuring that the public has access to decision making.

1. INTRODUCTION

The Environmental Impact Assessment (EIA) process was formally developed in the United States of America in the 1960s. It was introduced as a tool to deal with the rapid development and economic growth of nations and the possible associated environmental degradation. It emphasised the importance of including environmental considerations in proposed developments and decision making processes (El-Fadl and El-Fadel, 2004). EIAs predict and manage the environmental consequences of development activities (Kakonge, 1998) and are therefore regarded as tools for sustainable development (Patel, 2000; Morrison-Saunders and Retief, 2012). Environmental assessments are also considered to be tools of good governance as, in theory, they resemble attributes of good governance such as transparency, adequate flows of information and stakeholder participation amoungst others (Kakonge, 1998, Enserink and Koppenjan, 2007). However, these tools are only as useful as the nation's capacity to implement them (Kakonge, 1998). A vast amount of literature regarding EIAs and the success thereof deals with the problems associated with stakeholder engagement, also known as public participation.

When discussing EIAs, public participation is the involvement of a variety of stakeholders namely the public, government officials and corporate actors which are involved in the EIA process (O'Faircheallaigh, 2010). By definition, public participation is the inclusion of people, groups or organisations that may be positively or negatively affected by a proposed development in the decision making process (Clark, 1978; Enserink and Koppenjan, 2007; Glucker *et al*., 2013) for the proposed development, plan or policy (Glucker *et al*., 2013). Public participation is believed to be one of the most important aspects of environmental assessments (Enserink and Koppenjan, 2007) however the effectiveness of this process has been questioned and criticised by many authors.

In South Africa, the environment is environmental impact assessment are enforced by the National Environmental Management Act (1998). The principles of effective participation are mentioned in the Act, however are not translated in the regulations supporting the Act. This poses as one of the challenges associated with effective participation in a South African context. Although there is a vast amount of literature on the effectiveness of EIAs and the public participation process, there is a lack of recent literature where this topic is concerned. In addition to this. very few studies have been conducted on the appropriateness of the public participation as set out in South African environmental legislation. This gap in the literature forms the basis of this research.

2. LITERATURE REVIEW

2.1 Public Participation:

Public participation is the involvement of the public in processes such as policy making, urban planning and general development (Rowe and Frewer, 2000). Public participation cannot be excluded in economic as well as political processes. Public participation is based on the notion that the public must be included in decisions that affect them (King *et al*., 1998). The purpose for public participation is for decision makers to ascertain what the public's views are in order to know which way to sway their decision and improving the decision made by including lay knowledge systems. Public participation has also been seen to improve fairness and overall justice as well as legitimising any process (Innes and Booher, 2005) and is viewed by many as the social licence to operate (Mitchell, 2013; Colvin *et al*., 2016).

The involvement of the public in various processes has increased over the years which is said to be linked to the increased in democracy worldwide (King *et al*., 1998 ;Rowe and Frewer, 2000; Mauerhofer, 2016). Also, the increase in public participation has been due to demands for the increase in participation by the public due to the rise of mistrust in the government and administrators and consequently the request for accountability from public officials (King *et al*., 1998).

The details and levels of public participation necessary for different process varies as it is dependent on the objectives of the processes (Hurlbert and Gupta, 2015). There are therefore different levels of public participation. At a lower level, public hearings may be held in order to provide information to the public about certain risks that exist and may have an impact on them. At a higher level, the public may be engaged in focus group meetings and consultative exercises in order to improve general decisions made (Rowe and Frewer, 2000).

Arnstein (1969) developed a theory on the ladder of citizen participation. In this theory, Arnstein states that the ladder of public participation is made up of eight rungs that fall into three categories. The bottom two rungs are made up of manipulation and therapy which fall into the non-participation category. This is the level where experts are seen as having all of the knowledge and are therefore considered as those that should be imparting knowledge on other stakeholders. Rung three and four are informing and consultation which fall under the category referred to as degrees of tokenism. This category allows the marginalised to have a voice and be heard however it does not give them the power to make any changes. Rung five, placation, is considered as a higher level of tokenism as it provides the platform for the marginalised to play an advisory role but still leave the decision making to the powerholders and experts. As one moves up the ladder, there is an increase in the power to impact on

decision making. The last category is degrees of citizen power. This category is comprised of rung six, partnership, allows for negotiation and trade offs between the haves and the have nots. The last two rungs in this category are delegated power and citizen control. This is where the marginalised have the majority or all of the decision making powers (Arnstein, 1969).

The World Bank recognises three types of public engagement (Clark, 1978):

- *Informal disclosure:* The provision of relevant and sufficient information by the developer to the public. This information should be readily available to members of the public and should be presented in a manner that is easily understandable and accurate. The World Bank states that public participation is not a 'one size fits all' process and that methods that are appropriate in developed nations will not necessarily work in developing nations such as putting environmental impact assessment reports in libraries. This may be appropriate in the First World but may not work in the Third World. The Bank recommends that public participation practises that are appropriate to the country and the affected people are put into place in order for meaningful participation to occur (Clark, 1978).
- *Consultation:* The two way communication between the developer, state and the public. This hinges on the fact that being informed, being involved and being able to participate in the process are not the same. This consultation can be in the form of workshops, visual presentation or written material (Clark, 1978).
- *Participation:* The public should have the power to infiltrate decision making processes. The main focus would be on affected people or people that would undergo resettlement (Clark, 1978). It makes sense that the Bank would want to ensure that these groups of people are able to influence decision making as they are the most affected by the proposed development. It is not mandatory that these groups of people are able to have an effect on decision making, however it is mandatory that these people are consulted (Clark, 1978).

The United Nations Environment Program (UNEP) identifies some steps that aid in effective public participation. The first is the identification of the group of people that may be affected by the proposed development. The next step is called *outreach* where the identified members of public are provided with sufficient, relevant and understandable information. *Dialogue* is the next step where the developer ensures communication with the public through workshops, public meetings and other platforms. The public's views and input are accounted for in the following step called *assimilation*. The last step is called *feedback*, this is where the members of the public are able to influence decision making (Clark, 1978).

As evident in the theory of the ladder of citizen participation, UNEP and World Bank requirements, regardless of the process whereby public participation is required, the involvement of the public is considered to be in vain if it is not effective and does not have the power to impact on the overall decision made (Arnstein, 1969; Clark, 1978; King *et al*., 1998). As mentioned above, public participation is often required in processes such as urban planning, policy development as well as environmental impact studies which is the focus of this research report.

2.2 Public Participation in Environmental Impact Assessments (EIAs):

In many countries, the process of environmental impact assessments is legislated and includes a method of screening of the environmental impacts. This is done for smaller project whereas scoping and environmental impact assessments are conducted for larger projects. Public participation is usually involved in all processes.

When discussing Environmental Impact Assessments, public participation is the involvement of a variety of stakeholders namely the public, government officials and corporate actors which are involved in the EIA process (O'Faircheallaigh, 2010). Public participation was introduced in many international conferences as being vital to the EIA process. For example, at the 1992 United Nations Rio conference, public participation was stated as one of its principles. Public participation was also highlighted at the Aarhus Convention in 1998 where the minimum requirements for public consultation were determined (Glucker *et al*., 2013). It is believed to be one of the most important aspects of environmental assessments (Enserink and Koppenjan, 2007). One of the aims of public participation as part of the EIA process is to identify the impact that proposed developments have on the quality of life of people (Lawal *et al*., 2013; Colvin *et al*., 2016).

Public participation is beneficial to EIAs as it (Department of Environmental Affairs, 2010):

- Provides the public the opportunity and platform to raise any concerns, questions or opinions about the proposed development.
- Gives the public insight and alternatives to the project that may reduce the negative impacts and/or increasing positive impacts.
- Resolve conflict between stakeholders.
- Promotion of a healthy democracy.
- Ensuring transparency and accountability.

- Provides all stakeholders (including the competent authority) with the relevant information regarding the environmental impacts of the proposed development thereby also giving the authority insight into the consequences of their overall decision.

Many authors agree that the theory of public participation is one that benefits the overall EIA process and an effective application of the public participation process needs to be adopted. The benefits of public participation are generally accepted worldwide however the implementation and the design of various public participation processes still remains questionable (O'Faircheallaigh, 2010). Prior to the discussing the implementation of the process, one would need to define what constitutes as effective participation.

2.2.1 Effective public participation:

Diduck and Mitchell (2003) state that the recipe for perfect public participation would be social learning, early involvement as well as access to decision making, however there are other documented factors which are considered to be crucial for effective public engagement. Many authors have documented what constitutes effective public participation and most agree that it involves the following:

a. *Early public involvement:*

Involving the public early on the EIA process has many benefits. When people are involved in the planning stages of a project, they are able to assist in the identification of impacts that the proposed development may have. It aids in an understanding and identification of the social impacts of the project. Social matters will be raised and this may also lead to resolution (Mitchell, 2013).

The public needs to be involved in the details of the project in order to make a substantial contribution. When this contribution is included in the early phases of the project, it improves the quality and efficiency of the decision making process. Communities are also more willing to accept the development if they were involved in the process, especially earlier on in the planning phase (Enserink and Koppenjan, 2007). Early involvement also decreases any suspicion and lack of trust that the public may have in the proponent or government due to the lack of transparency. All of these factors contribute to the improvement of decision making (Mitchell, 2013).

b. Access to decision making:

Access to decision making processes is referred to by many authors as being the main objective of public participation (Kakonge, 1998; Glucker *et al*., 2013). Public involvement should include the power to impact the overall decision made as, if the public is only informed and not included in the decision making, the participation is performed in vain (O'Faircheallaigh, 2010). Public participation may also play a role of empowerment by giving those that historically did not have any power and were thus excluded from political processes, the power to be included in decisions regarding their future (Glucker *et al*., 2013). This is one of the reasons that public participation is synonymous with democracy (Rowe and Frewer, 2000). In order for public participation to be effective, it doesn't only have to create a platform for the public to engage with other stakeholders but it needs to encourage it. One of the ways to encourage public participation is to give the public the confidence that their views matter and will be considered when the overall decision is being made (Clark, 1978).

c. Aiding in social learning:

It is through public participation that all the stakeholders involved in the project are able to interact and information can be obtained about the impacts that the proposed project will have and also give people the opportunity to provide information that may not have been documented (O'Faircheallaigh, 2010). Public participation aids in social learning (Diduck and Mitchell, 2003) as the public is exposed to and interact with legal, political and administrative procedures involved in the process (Diduck and Mitchell, 2003). Public participation also aids in educating all stakeholders on the status of their surroundings. It provides a platform and opportunity for all stakeholders to engage as well as understand each other whilst reaching an outcome that suits all parties (Webler *et al*., 1995; Cundill, 2010; O'Faircheallaigh, 2010; Glucker *et al*., 2013). Public participation is not just about educating members of the public, it also aids in sensitising environmental assessment practitioners responsible for the compilation of the EIA and consequently the facilitation of the public participation process, about the social values and the interests of civil society (Diduck and Mitchell, 2003) whether they are affected directly by the project or not.

d. Access to adequate information and the inclusion of all stakeholders:

In order for public participation to occur, the public needs to be informed (Clark, 1978) and therefore the onus should be on the developer and assigned environmental assessment practitioner to ensure that the public has access to information regarding the proposed project (Clark, 1978; Morrison-Saunders and Bailey, 1999). The information needs to be adequate and also relevant for the public to make any meaningful contribution (Clark, 1978). At public

meetings, as with information shared during the assessment process, information should be communicated in a language understood by all and stakeholders should be able to discuss any matters pertaining to the proposed development prior to a conclusion being reached (Kakonge, 1998). In order for public participation to be effective it needs to ensure that the maximum number of peoples' voices are heard and the outcome of the environmental assessment benefits the majority of people (Patel, 2006).

According to Clark (1978) effective public participation needs to include identification of the relevant stakeholders, provision of adequate and relevant information, two-way dialogue between all the stakeholders, assimilation of views and concerns of the public and feedback on how the public comments have filters into the final decision made (Clark, 1978).

e. The need for different stakeholder's

One of the goals of public participation is improved decision making and it therefore makes sense that all the available knowledge is incorporated into the decision making process (Glucker *et al*., 2013). Technical experts often disagree with each other (Rowe and Frewer, 2000) and it would therefore be inaccurate to consider only expert knowledge systems when dealing with the natural environment, bearing in mind that this is the same natural environment that people have been living in and interacting with for decades. There are many benefits associated with combining the use of lay or local knowledge systems with expert and technical knowledge systems (Patel, 2000, Parnell *et al*., 2007). By including local knowledge in the environmental assessment process, an opportunity for local people to contribute and engage with the process is created, which may affect the success or failure of the project (Kakonge, 1998) as well as promote harmony between all stakeholders (Hunsberger *et al*., 2005). The inclusion of local knowledge can enhance the decision making process by increasing the knowledge base used for the study (Webler *et al*., 1995; O'Faircheallaigh, 2010) whereas the absence of information may lead to the failure of the assessment to identify all the challenges that may be encountered during the project life cycle (Kakonge, 1998).

2.2.2 Public participation challenges

There are numerous benefits to involving the public in environmental assessments. These are not only experienced by the public, but also by the applicant. They include (amoungst others) efficient planning, increased quality of the overall decision made as well as avoiding public dispute (Del Furia and Wallace-Jones, 2000). Public participation makes local knowledge accessible, contributes to community empowerment, promotes social learning of all

stakeholders involved and provides them with project alternatives that they may not have been aware of (Kakonge, 1998; O'Faircheallaigh, 2010). Regardless of these and many other documented benefits, there is still a perception, especially amoungst developers that are hesitant in involving the public in the EA process, that public involvement will lengthen the already lengthy EIA administrative process (King *et al*., 1998 ; Del Furia and Wallace-Jones, 2000). Developers tend to have the perception that public participation is time consuming and results in the delay of receiving the environmental authorisation as well as starting with the construction of the project. They are therefore reluctant to spend additional time on the process than required by legislation. This leads to public participation being conducted as an administrative duty to obtain the environmental authorisation instead of being conducted to benefit the project and effectively engage the public (Clark, 1978). Other than these challenges, there are other challenges to public participation.

a. Inclusion of marginalised people

Marginalised groups are groups of people that are least able to participate and impact on decision making even though they are often those that are most affected by developments (O'Faircheallaigh, 2010). One of the main challenges with the public participation process is that it is a very formalised process that entails the interested and affected parties having to read through various documents and attend public meetings (Patel, 2006). This puts the illiterate and marginalised individuals at a disadvantage and also makes it difficult for child headed households and people with multiple jobs to find the time to attend the public meetings, which are usually held in the evenings after normal working hours. O'Faircheallaigh, (2010) states that this is not acceptable and practises need to be changed in order to achieve the goal of public participation which is the equal distribution of political power and altering decision making structures. One of the roles of impact assessments should be to empower the marginalised people and not further marginalise them by conforming to a very technical process that they are unable to interact with and benefit from (O'Faircheallaigh, 2010).

Although the empowerment of marginalised groups sounds theoretically attainable, there may be difficulties in achieving this in reality as the poor often do not have the resources such as time and education levels necessary to participate and are alienated by the technical nature of the process, which will result in them being marginalised even further (O'Faircheallaigh, 2010). Therefore the adequate empowerment of the marginalised will go beyond the scope of public participation in the EIA process and should perhaps be tackled by other public participation initiatives that may not be for specific development projects.

b. Access to relevant information

Having information that is adequate and easy to understand by all as well as readily available about the natural environment, proposed development and the applicable legislation is crucial to the environmental assessment process. This information should be made available to all interested and affected parties in order for them to be informed. (Kakonge,1998). In many cases (especially in regions where there is more than one language that is spoken) this means that the information must be available in the languages understood by all and the information must be presented in a manner that is it easy to understand by people who may not be subject matter experts (Clark, 1978; Kakonge, 1998, Enserink and Koppenjan, 2007). If the law states that a notice is to be placed in the local newspaper informing the public about the project but the majority of the public in that area are illiterate or the cannot understand the language in which the article is written, then the notification may not as well have been published. Effective inclusion would be to translate the article into a few languages that are spoken in the area as well as alternative methods of notification such as have the local radio stations advertise the proposed development and the details of the public meetings. Translators must also be provided during the public meetings in order to ensure that all stakeholders understand the language being spoken and the content displayed and communicated. Having the information available in a language and in a manner that is understood by all will make it easy for people to ascertain how the proposed development will impact their quality of life as well as be able to participate in the environmental assessment process (Kakonge, 1998, Enserink and Koppenjan, 2007). The information must be in a manner which is cannot be misinterpreted, misunderstood or misleading. When information is presented in this manner, it improves the levels of transparency between all stakeholders (Kakonge, 1998).

c. Participation of various stakeholders

Success of public participation may also be reliant on the type of stakeholders that participate. Some stakeholders may be well informed and contribute to the process (Chess and Purcell, 1999) and others may not be part of the process at all due to many factors such as being unable to attend stakeholder meetings, having no interest in the development or just having immediate needs (job security) that outweigh the future proposed development. These may also be a consequence of historical events such as Apartheid and associated poverty as the poor have more labour intensive jobs that require more of their time and physical energy and then need to attend to their family duties. For these groups of people, attending a public meeting for an EIA may not be considered as a priority.

Due to the fact that stakeholders engage in the public participation process for different reason, it may not always be possible to reach a consensus (Innes and Booher, 2005). Many

engage in the process just to ensure that the proposed development does not occur on their property, something that is also known as 'not in my back yard (NIMBY)' (Innes and Booher, 2005). Public participation in the EIA process is not aimed at making all the stakeholders involved happy but rather to inform them of the process and ensure that the objectives of public participation are achieved.

d. Balancing social, economic and environmental considerations

Decision making in EIA is a complex task that is reliant on balancing social, economic and environmental considerations. This decision is left to the state and often political aspects also need to be considered in the balancing act. This decision making process happens behind closed doors and only the results of the process are communicated to all stakeholders, thus making the decision making process open to being misunderstood by the public (Morrison-Saunders and Bailey, 1999). There are ways in which the state can improve the public's confidence in the decision making process, such as opening up communication (Clark, 1978; Morrison-Saunders and Bailey, 1999) and transparency where decision making is concerned (Morrison-Saunders and Bailey, 1999). Transparency ensures that the state can be held accountable for the decisions made as well as promotes stakeholder confidence in the process (Morrison-Saunders and Bailey, 1999).

Much of the literature dealing with public participation mentions numerous goals of participation and therefore the challenge with determining the success or failure of public participation is not an easy task (Chess and Purcell, 1999; Glucker *et al*., 2013). Seeing that public participation is not a one size fits all model, one would have to define the goals applicable in that scenario and then judge the success of the process based on those goals (Chess and Purcell, 1999). Public participation in a South African context will be discussed in order ascertain its goals and possible successes.

2.3 Public Participation in South Africa

The notion that knowledge is power is very applicable in where public participation is concerned. Often people participate to gain information, and once they are informed mind sets can be altered and better decisions can be made. The absence of sufficient and relevant information hinders the public's ability to participate unless they already have access to information such as the internet which is rare when dealing with marginalised groups as they usually lack formal knowledge as well as access to it. The solution to the lack of technical knowledge by members of the public may not be the provision of the knowledge from someone

who is considered a technical expert or subject matter expert (Eden and Bear, 2012). Oftentimes there are people in the community such as teachers and perhaps even children who grew up in the community, have attained a higher level of education that may be able to relay the information in a manner that the public is able to understand. The application of public participation in South Africa is largely dependent on the history of the country.

2.4 South African history:

Even though environmental impact assessments may be applied worldwide, there are various approaches to the application of the tool in various nations as there are not only differences between First World and Third World countries, but there are also major variations within the Third World. These differences are not only between the poor and more affluent societies but even amoungst the poor. Power struggles exist within poorer communities and therefore the fight for the greater good may not be as straightforward as thought out to be (Patel, 2000). Different individuals in communities may view environmental matters in different ways and also have different levels of power that will influence how they will engage in the public participation process (Patel, 2006). Due to these differences, a homogenous approach cannot be applied when dealing with communities or the public at large (Patel, 2000; Patel, 2006).

In a paper written in 2006, Patel states that Africa is the only region that has become poorer in the last decade. This is due to stagnant economies, high levels of HIV/AIDS, no capacity to design appropriate policies and low levels of state accountability to its people, amongst others (Patel, 2006). There is therefore a need for the African continent to create conditions for development. Realising the challenges facing the continent, emphasis needs to put on designing development tools that are appropriate and sustainable (Patel, 2007) to an African context. Context specific issues such as political, social and economic must be fully understood before adopting an originally western EIA tool in southern Africa (Kakonge, 1998).

The South African Apartheid era approached planning in a manner where it was not holistically done for the country but rather followed a separate approach of improvement for some racial groups and segregation of others which happened to be the majority. This has brought about spatial and physical problems that are still evident in the new South Africa such as high rates of unemployment, an urban rural divide, lack in the provision of basic services and various social problems, amongst others. The scars of the era are evident today (Patel, 2000) and shape the manner in which people interact and relate to the environment. The Apartheid regime resulted in environmental conflict as two thirds of the country's people were forced to live on less than a third of the land which was typically degraded. Many of these people had

to fight for their survival on this small portion of land and environmental degradation was the consequence (Kakonge, 1998; Patel, 2006). The history of South Africa's environmental policies has resulted in environmental injustice and at the end of the Apartheid era, policies were developed in an attempt to address past inequalities (Patel, 2006).

The challenge with development and planning after the South African Apartheid Era is it needs to address the defects of that oppressive era (Patel, 2000) which did not include equal participation of all people (whether affected or not). Challenges such as economic empowerment and ensuring that previously disadvantaged groups had access to democratic power had to be dealt with in the new South Africa (O'Riordan, 1998).

For the above stated reasons, public participation must be context specific and must take historical, cultural, political as well as social differences into account. Efforts should be made to include women, children, indigenous people, the poor as well as the elderly (Enserink and Koppenjan, 2007). Having mentioned all of the challenges facing South Africans as a consequence of the country's history, one would expect that the public participation as part of the EIA process would be robust in order to address that. This report aims at assessing whether or not that is the reality.

2.5 South African EIA and public participation requirements

2.5.1 South African environmental legislation:

During the South African Apartheid era, the environment was regulated by the Environmental Conservation Act (ECA). This Act was the first of its kind aimed at providing effective protection of the environment. The Act was inadequate as the listed activities triggering Environmental Assessments (EAs) were not extensive and it made no provision for public consultation during the EA process (Environmental Conservation Act No 73 of 1989). After the demise of the Apartheid era, the right to a safe environment as included as a human right (Patel, 2006). 1998 saw the improvement of environmental legislation when the Minister of Environment and Tourism passed the National Environmental Management Act (NEMA) which was the first environmental act that incorporated public consultation in both the Environmental Impact Assessment (EIA) and Basic Assessment (BA) processes in South Africa (National Environmental Management Act No. 107 of 1998). EIAs and BAs differ as BAs are environmental studies conducted for developments that are smaller in scale and therefore have a lower impact on the receiving environment. NEMA (1998) makes provision for extensive public participation (Patel, 2006) in both of these processes but a more detailed

public participation process is conducted in the EIA process. The EIA process is broken down into two phases namely the scoping phase and the EIA phase. Both of these phases require a round of public participation. EIAs in NEMA (1998) is extensive making for more regulation of more activities that impacted the receiving environment in comparison to EIAs conducted for larger projects (National Environmental Management Act: Environmental Impact Assessment Regulation, 2014).

Environmental matters were not only included in the National Environmental Management Act but also in the Constitution of South Africa. Section 24 of the Bill of Rights which forms part of the South African Constitution (No. 208 of 1996) sets the scene for detailed environmental legislation (Constitution of the Republic of South Africa No. 108 of 1996). It states *that "everyone has the right:*

a) *to an environment that is not harmful to their health and wellbeing*
b) *to have the environment protected, for the benefit of present and future generations through reasonable legislative and other measures that:*
    (i) prevent pollution and ecological degradation
    (ii) promote conservation and
    (iii) secure ecologically sustainable development and the use of natural resources while promoting justifiable economic and social development".

In terms of public participation, there are three levels of that are recognised as part of this research report namely the intent of the National Environmental Management Act as outlined its principles, the EIA Regulations which from part of the Act and detail how to conduct public participation for environmental impact assessments as well as the Publication Participation Guideline.

The intent of NEMA (1998) where public participation is concerned is documented in the principles what state (National Environmental Management Act No. 107 of 1998):

- The promotion of the participation of all interested and affected parties
- All people shall have the opportunity to develop the skills, understanding and capacity necessary for achieving effective participation.
- Ensuring participation of vulnerable and disadvantaged groups
- Decisions that take into account the interests, needs and values of interested and affected parties.
- Recognition of all forms of knowledge (traditional and ordinary).

As already mentioned, the National Environmental Management Act makes for provision for public participation for all environmental assessments (regardless of scale). NEMA (1998) as the national legislation, states how interested and affected parties should be identified and contacted in Regulation 982, Chapter 6 of the Act (National Environmental Management Act: Environmental Impact Assessment Regulation, 2014). The process of informing the public includes newspaper (one local or any official Gazette as well as one provincial or national newspaper) advertisement, site notices at a conspicuous place on the boundary or fence of the sites (20 cm by 42cm in size) and written notice. The legislation also states that the notification of interested and affected parties should be in a manner that they are able to understand as well as stating that an advertisement in a newspaper that is accessible to them (National Environmental Management Act No. 107 of 1998).

Together with the requirements for public participation as stipulated in the Act, the Department of Environmental Affairs (DEA) also published a Public Participation Guideline which makes reference to various levels of participation that may be required for certain projects (Department of Environmental Affairs, 2010). The Guideline is based on the notion that public participation for one group maybe not be sufficient participation for another. Also the Public Participation Guideline states that that the Environmental Assessment Practitioner should find reasonable alternative methods to ensure that interested and affected parties are accommodated by dealing with issues of low literacy levels, disability and any disadvantages. The Guideline acknowledges that there are different levels of participation and that not all projects will require the same amount of public consultation. Some projects may require additional participation based on the scale of the impacts, sensitivity of the receiving environment, degree of controversy of the proposed development as well as the characteristic of the affected parties (Department of Environmental Affairs, 2010). This is detailed in Table 1 below.

Table 1: Triggers for additional public participation as set out by the Public Participation Guideline (Department of Environmental Affairs, 2010)

Scale of the anticipated impacts:
Are the impacts of the project likely to extend beyond the boundariefs of the local municipality?
Are the impacts of the project likely to extend beyond the boundaries of the province?
Is the project a greenfields development (a new development in a previously undisturbed area)?
Does the area already suffer from socio-economic problems (e.g. job losses) or environmental problems (e.g. pollution), and is the project likely to exacerbate these?
Is the project expected to have a wide variety of impacts (e.g. socio-economic and ecological)?
Public and environmental sensitivity of the project:

Are there widespread public concerns about the potential negative impacts of the project?
Is there a high degree of conflict amongst interested and affected parties?
Will the project impact on private land other than that of the applicant?
Does the project have a potential to create unrealistic expectations (e.g. that a new factory would create a large number of jobs)?
Potentially affected parties:
Has very little public participation taken place in this area?
Did previous public participation in the area result in conflict?
Are there existing organisational structures (e.g. local forums) that can represent interested and affected parties?
What is the literacy level of the community in terms of their ability to participate meaningfully within the public participation process?
Is the area characterised by high social diversity (in terms of socio-economic status, language or culture)?
Where people in the area victims of unfair expropriations or relocation in the past?
Is there a high level of unemployment in the area?
Do the interested and affected parties have special needs (e.g. a lack of skills to read or write, disability etc)?

The table above details the triggers that should prompt additional participation as mentioned in the Public Participation Guideline (Department of Environmental Affairs, 2010). The Public Participation Guideline also states that additional platforms may be used for vulnerable interested and affected parties such as open days, press conferences, press releases, information desks and helplines, amongst others. Where additional public participation is required due to rural communities, historically disadvantaged groups, low literacy levels, disability and other disadvantages, the following shall be considered in order to aid in the public participation process (Department of Environmental Affairs, 2010):

- The announcement of the project on a local radio station in a language understood by the affected parties. This shall be done at an appropriate time, such as peak time.
- Using social learning approaches as capacity building to aid in participation.
- Having public meetings in venues and at times that suit the parties.
- Having separate meeting for those groups that may be vulnerable and marginalised.
- Ensuring that there is appropriate access to information
- Providing reasonable assistance to parties with special needs.

2.5.2 Stakeholders that participate:

According to the South African environmental legislation, stakeholders are those individuals or groups that may be interested or affected by the proposed development. These people may include those that are made aware of the development and choose register as interested and affected parties as a response to advertisements published as part of the NEMA (1998) legal process. The Department of Environmental Affairs recognises the following as interested and affected parties (Department of Environmental Affairs, 2010).

Interested and affected parties include (National Environmental Management Act No. 107 of 1998):

- Owners and occupiers of the site and adjacent sites where the proposed development will take place
- Owners and occupiers of the land and land adjacent to the alternative sites stated in the environmental impact report
- Municipal ward councillor of the area (preferred and alternative sites)
- Municipal manager and environmental services of the office (of the preferred and alternative sites)
- Municipality which has jurisdiction over the area where the proposed development will occur
- Any organ of state having jurisdiction in respect of any aspect of the activity
- Any other party that may requested to be included by the authority
- People that have requested in writing to be registered as an interested and affected party
- People that have submitted comments during the environmental impact assessment process
- Ratepayers association
- Local and district municipality

As mentioned above, the EIA Regulation 982 details the manner in which public participation must be conducted in terms of the notification of interested and affected parties, the timeframes as well as the content of communication with stakeholders. The Public Participation Guideline is not legislation but rather a guide on how to effectively conduct public participation.

With all of the extensive legislation around public participation as well as the challenges facing South Africans due to past laws, this report analyses whether or not the implementation of the legislation works well on the ground in South Africa.

3. RESEARCH AIMS AND OBJECTIVES

The aim of this research is to assess the effectiveness of the public participation process in a South African context.

The objectives of this research are as follows:

- Investigate the extent to which the public participation process has an influence on the outcome of the project.
- Assess the manner in which public participation is conducted.
- Draw conclusions and provide recommendations on the public participation process in South Africa.

4. RESEARCH QUESTIONS

In this report, the term ‘Environmental Assessments (EAs)’ includes Environmental Impact Assessments (EIAs) and Basic Assessments (BAs).

This research project is based on the hypotheses that in South Africa, public participation in EAs is not likely to influence the outcome of the project and therefore is not able to influence overall decision making.

The questions that set the scene for this research project are as follows:

4.1 Who are the public members that participate?
4.2 How is public participation conducted?
4.3 Can the public influence decision making?

The above questions will assist in assessing the effectiveness of public participation by studying the people that are able to participate which could be due to various reasons. The second question will assess whether the public participation is conducted according to the requirements of the National Environmental Management Act and whether or not the Environmental Assessment Practitioner (EAP) went beyond what the law requires by involving more people affected by the development. The last question is arguably the most important as the public participation can be conducted in accordance to legislation and the public are able to participate however it is all meaningless if the concerns and opinions of the public are not considered in the overall decision made.

5 METHODOLOGY

Both qualitative and quantitative methodologies were used in order to answer all the research questions as well as meet research objectives. The combination of these methods was considered as it has been stated that using both methods are complementary to research (Jick, 1979). Qualitative methodologies are considered to be those that are more open minded and provide new angles and insight into the problem that may not have been predicted. Quantitative methodologies are vital in that they include the application of a technique that may enhance understanding (Bryman, 2006). When multiple and differing methods are used in conjunction and reach the same conclusion, they make they strengthen the support for a particular argument (Jick, 1979). The combination of these methods in research verifies the results obtained by using sources of information that are independent of one another (Jick, 1979, Bryman, 2006). Often, using one method whether it be qualitative or quantitative, may be restricted due to the limitation of the chosen method. However, the use of both methods will results in the weakness in each method being compensated by the strengths in the other (Jick, 1979).

The quantitative methods were used were the analysis of EIAs and environmental authorisations and measuring certain criteria that answer the research questions. The qualitative methods were used are the use of key informant interviews to gain insight into the results that were may be revealed.

5.1 Data sources

5.1.1 EIAs

A total of 20 EIAs and associated environmental authorisations were sourced from DEA as well as the websites of environmental consulting companies. The EIAs were sourced from the national department and not provincial offices as the researcher did not want to focus on one specific province but rather make conclusions about public participation in the South African context. Of the 20 EIAs sourced, 6 environmental consultants were responsible for the compilation of the reports. Efforts were made to get a large representative of project types as well as consultants. This would aid in making general statements of the public participation process rather than just referring to one company and one type of project. Variety in consulting companies was somewhat limited as the projects supplied by DEA were from the same consulting companies. Environmental consulting company websites were consulted in order to gain access to the projects completed. In addition to DEA providing some EIAs, they

provided a list on consulting companies that usually submit EIAs for approval to the Department. Of the twenty three company websites consulted, only six companies published the environmental impact reports for projects completed. The project types varied from mining, renewable energy, industrial development (the construction, expansion and modification of industrial plants and processes), waste storage or disposal facilities, housing developments and infrastructure development (road constructions and airport expansions). Below is a summary of the project types analysed.

Table 2: Details of the 20 EIRs analysed.

Project Type	No. of projects	Consultant	Province	Urban/ Rural	Year
Mining	2	Mining 1: Consultant A	Mpumalanga	Urban	2015
		Mining 2: Consultant A	Limpopo	Rural	2015
Renewable energy	5	Renewable 1: Consultant B	Eastern Cape	Rural	2016
		Renewable 2: Consultant C	North West	Rural	2016
		Renewable 3: Consultant D	Gauteng	Urban	2016
		Renewable 4: Consultant D	Gauteng	Urban	2016
		Renewable 5: Consultant C	Western Cape	Rural	2016
Industrial development	5	Industrial 1: Consultant B	Western Cape	Rural	2016
		Industrial 2: Consultant B	Kwazulu Natal	Urban	2015
		Industrial 3: Consultant C	Northern Cape	Rural	2016
		Industrial 4: Consultant E	Kwazulu Natal	Urban	2016
		Industrial 5: Consultant B	Western Cape	Urban	2016
Waste storage & management	2	Waste 1: Consultant F	Gauteng	Urban	2015
		Waste 2: Consultant A	Gauteng	Urban	2015
Housing development	1	Housing 1: Consultant E	Kwazulu Natal	Rural	2016
Infrastructure development	4	Infrastructure 1: Consultant E	Gauteng	Urban	2015
		Infrastructure 2: Consultant B	Western Cape	Urban	2016
		Infrastructure 3: Consultant B	Western Cape	Urban	2016
		Infrastructure 4: Consultant E	Western Cape	Urban	2016
Agriculture	1	Agriculture 1: Consultant B	Western Cape	Urban	2016

5.1.2 Checklist

A checklist (Annexure A) was structured around the research questions and includes a set of criteria that group the EIAs and authorisations. The criteria consider the condition of the receiving environment, whether the minimum requirements of the public participation process were adhered to and the manner in which the process was conducted. The main focus of the checklist was assessing the manner in which public participation was handled in terms of the concerns of the public (if any) in the overall decision made.

5.1.3 Key informant interviews

Ethics clearance (Annexure B) was obtained to conduct key informant interviews (questionnaire on Annexure C). Key informant interviews with three individuals of the following groups: government officials, environmental lawyers, environmental assessment practitioners as well as environmental rights organisations were conducted in order to determine perceptions around various aspects of public consultation in the EIA process. By interviewing environmental assessment practitioners working on the projects, the researcher was able to ascertain the problems experienced on the ground when trying to implement the rules of public participation as stipulated by NEMA. Speaking to environmental government officials that make the final decision and grant the environmental authorisations gave insight into their perceptions of the public participation process from the perspective of law enforcers. Interviews with environmental lawyers provided insight into perceptions of the process from role players that are usually the middle man between the law enforcers and the public.

5.2 Data analysis

The following specific research methodologies applied for each research question:

5.2.1 Who are the public members that are able to participate?

In order to ascertain who the public members that are able to participate in the process are, the list of interested and affected parties was consulted. All stakeholders were grouped into categories such as government officials, interested parties, affected parties, business and job seekers as well as media representatives. This was graphed and conclusions were made regarding the type of stakeholders that engage in the public participation process for the various projects and what the possible reasons for these stakeholders participating may be. Literature, as well as results from key informant interviews was consulted to ascertain which stakeholders should be participating and whether or not this was evident in the data collected.

5.2.2 How is public participation conducted?

The principles of NEMA (1998) as well as the Regulations and Public Participation Guidelines were consulted in order to answer this question. The checklist was used in order to ascertain whether or not the EIAs followed the legislated requirements and went a step further by conducted any additional participation as stated in the Guideline. Also an analysis was conducted to see if the intent of the NEMA (1998) was translated into legislation that would be practised on the ground.

5.2.3 Can the public influence decision making?

The comments and response report as well as the approved environmental management programme and environmental authorisation was analysed. This was done in order to ascertain whether the issues raised where incorporated into the overall decision made and therefore give an indication of the public access to decision making. This EIA documentation together with results from key informant interviews will give insight into where or stakeholders can influence decision making.

6 RESULTS AND DISCUSSION:

6.1 Research question 1: Who are the members of the public that participate?

The register of interested and affected parties (I&APs) from the EIRs that were assessed was consulted in order to ascertain the members of the public that typically engage in the environmental impact assessment's public participation process. The stakeholders were grouped into the following categories:

- Affected parties:
    - People residing on or owning the land and adjacent land where the proposed development would occur (including adjacent sites).
    - Groups representing the interests of affected parties such as consultants and external parties.
    - Non governmental organisations and community groups.
- Government officials at a local, provincial and national level (usually commenting authority) as well as parastatals and state owned enterprises.
- Media
- Businesses and job seekers
- Interested parties: these are individual were didn't fit into any other group but most importantly were not affected (landowners or residents) by the proposed development.

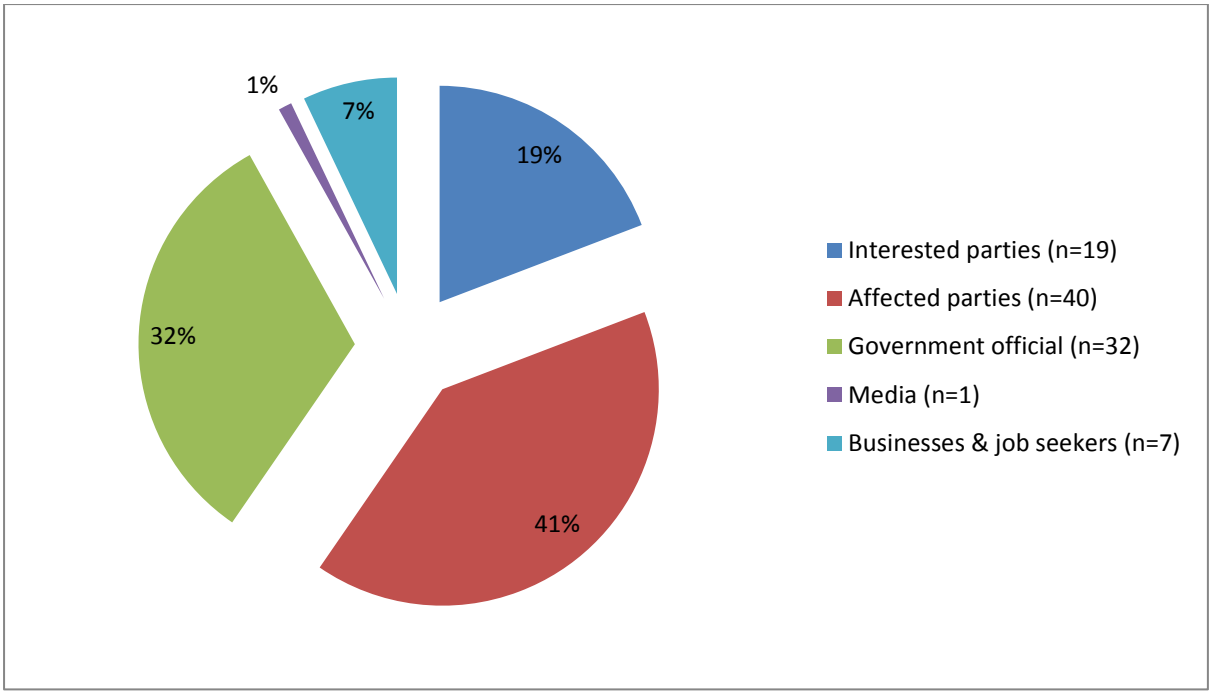


Figure 1: Stakeholder map indicating the interested and affected parties for the 20 EIAs analysed

The above figure (Figure 1) is a visual representation of the stakeholders that engaged in the public participation process for the 20 projects analysed. As indicated in the figure, the majority of the parties that engage in the public participation process are affected parties. This is a positive indication as it shows that the process is targeting the correct people who will be affected by the proposed development. It is therefore vital that these are the people who should represent the majority of those participating in the process. The high percentage of government officials participating in the process does not come as a surprise. The National Environmental Management Act stipulates that certain government authorities are commenting authorities and therefore need to be registered as I&APs and participate in the process (National Environmental Management Act No. 107 of 1998). Interested parties also made up a large percentage of representatives with the lowest being media and business owners and job seekers.

As part of the key informant interviews, interviewees were asked which stakeholders typically engage in the process. Most of the interviews stated that the answer to this question was dependant on the type of development. For this reason, a stakeholder map was graphed for the different project types as indicated below.

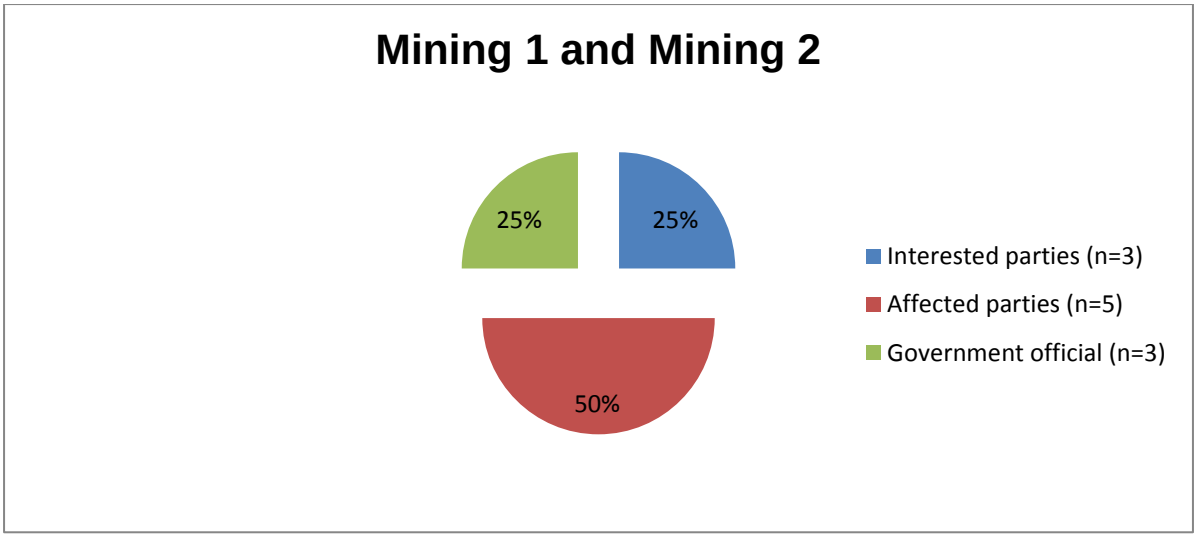


Figure 2: Stakeholder map indicating the interested and affected parties for the two mining projects.

The analysis of the stakeholders that engaged in the mining projects shows that half of the participants that engaged in the process where affected parties with the other half being split evenly between government officials and interested parties. The Mining Two project took place in a rural area, below are the results from the stakeholders that engaged in that specific project:

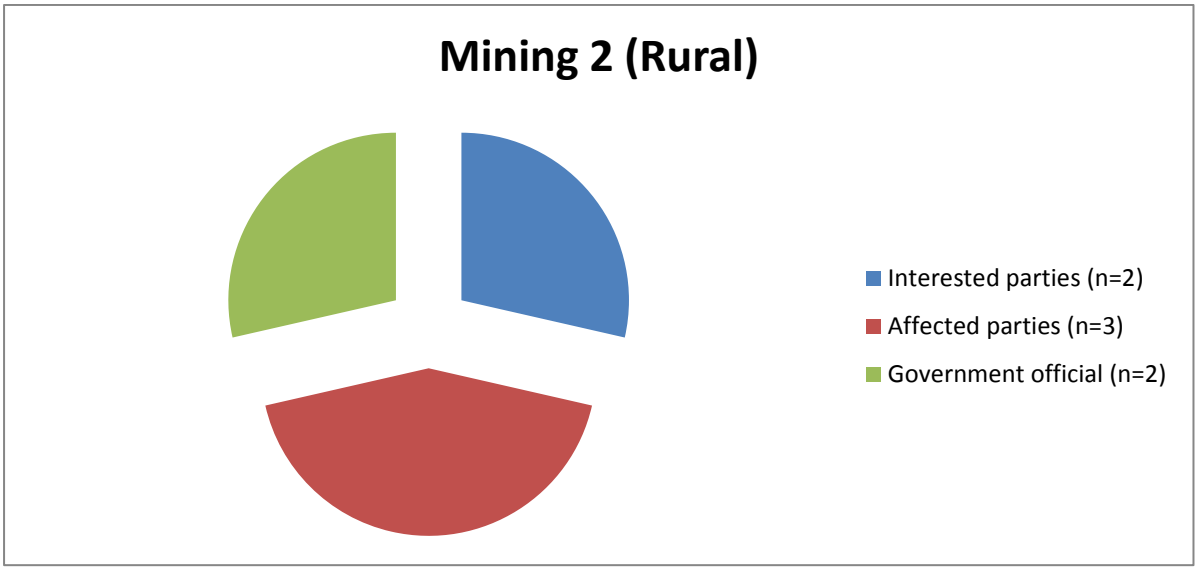


Figure 3: Stakeholder map indicating the interested and affected parties for the Mining Two projects.

When looking at the Mining Two project in isolation, the results are still similar to those of the two mining projects combined. The majority of the stakeholders that participated are the affected parties, even in the rural area. You would expect that the affected parties that

participated in rural mining project (Mining Two) would be higher than the 50% average depicted in Figure 2 which considers the participation of both mining projects. Seeing that Mining Project Two was conducted in a rural area, there may have been challenges of language and literacy that may have prevented the rural communities from interacting in the process and registering as I&APs. The available literature states that the marginalised are often those that are least able to participate due to not having the resources such as time and education levels required by the formal EIA process (Patel, 2006; O'Faircheallaigh, 2010). These challenges would justify the low participation levels of affected parties in the rural area.

Many people affected people such as landowners attend public meeting and engage in the process in order to voice their opinions which usually have to do with NIMBY (Innes and Booher, 2005). This was the case where all of the infrastructure development projects occurred in urban areas and affected people wanted to influence which alternative routes should be considered. An assumption was made by the researcher that this new route was suggested in order to ensure that the affected party's property was no longer impacted. Other issues that were raised by the affected parties include the construction of the projects such as noise, dust and traffic. It is expected that affected parties will represent their own views (Innes and Booher, 2005).

There were instances where the affected parties did not represent the majority of the interested and affected parties as indicated in the figure below.

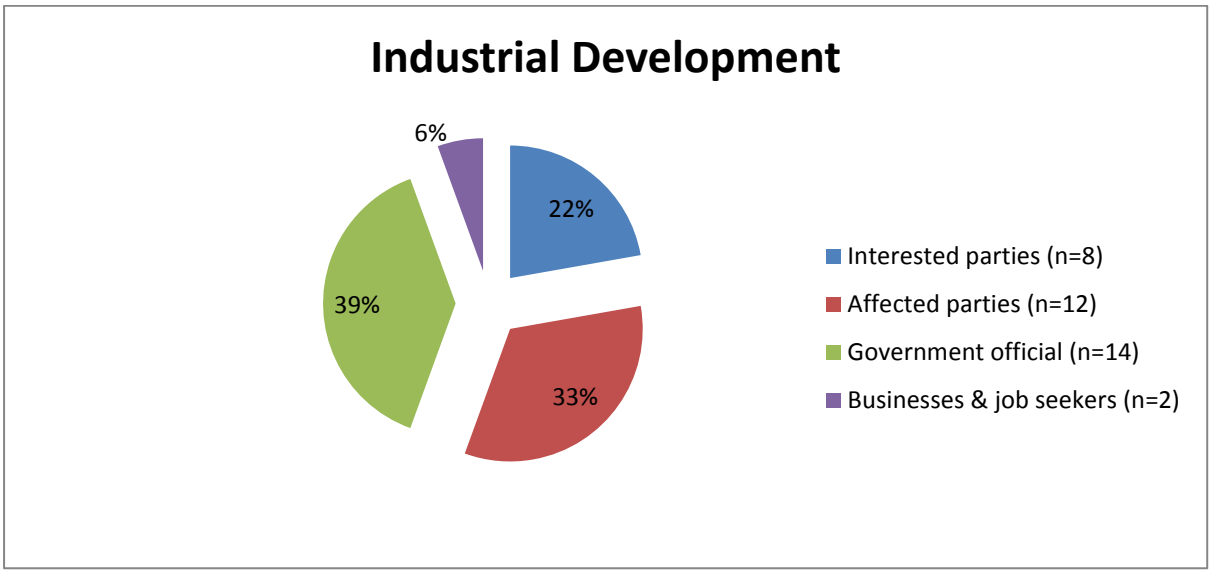
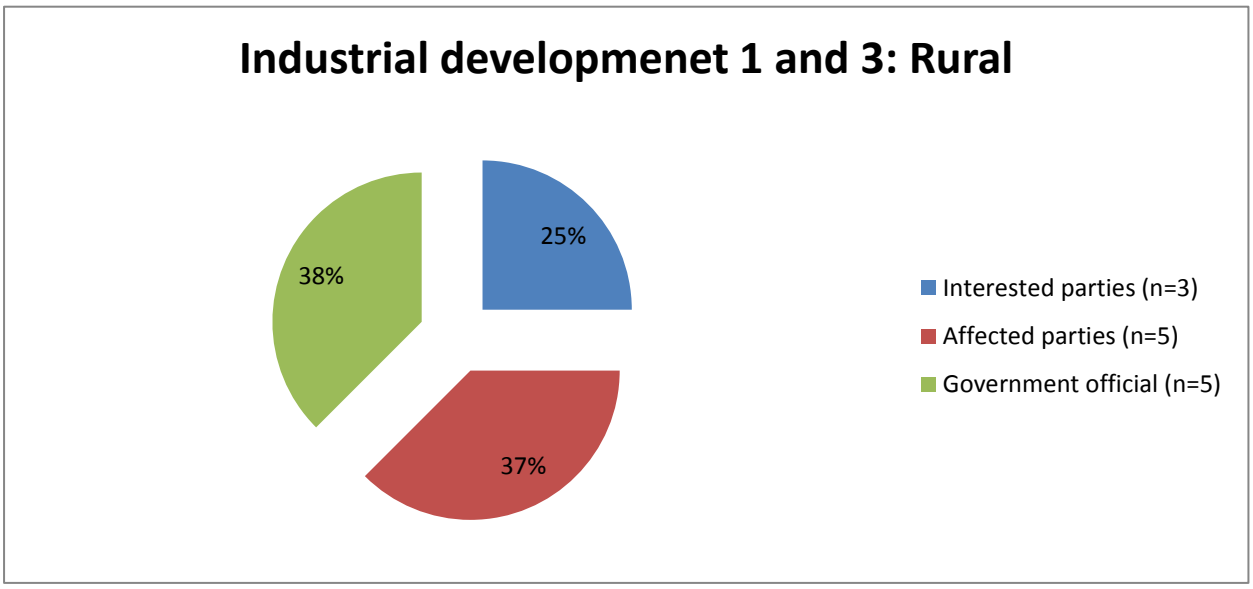


Figure 4: Stakeholder map indicating the interested and affected parties for the industrial development projects.

The five industrial development projects are the only projects that were assessed where the affected parties did not represent the majority of the participants that engaged in the EIA

process. The representation from government officials outweighed representation from affected parties. In the case on the industrial development projects, there wasn't a higher prevalence of government officials but rather a lower representation of affected parties, in comparison to the other project types. This may be due to the fact that three of the five of these projects took place in an urban area where the area of concerns is already industrialised and may not have an impact on many residents. The figures below make a comparison between the industrial development projects conducted in urban and rural areas.

5a)



5b)

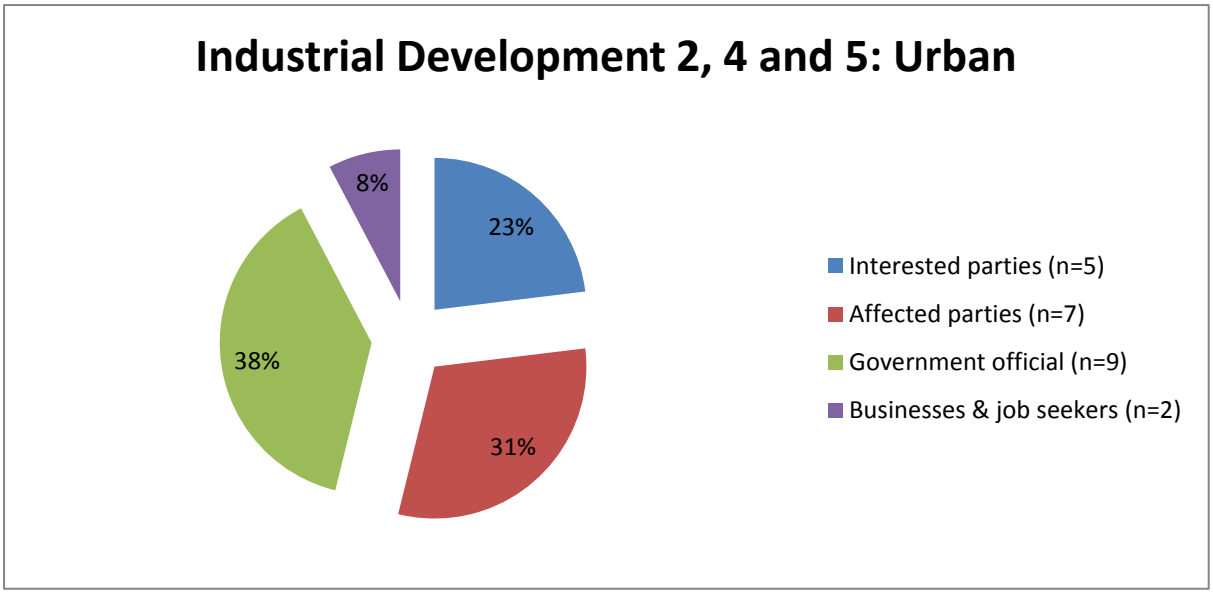
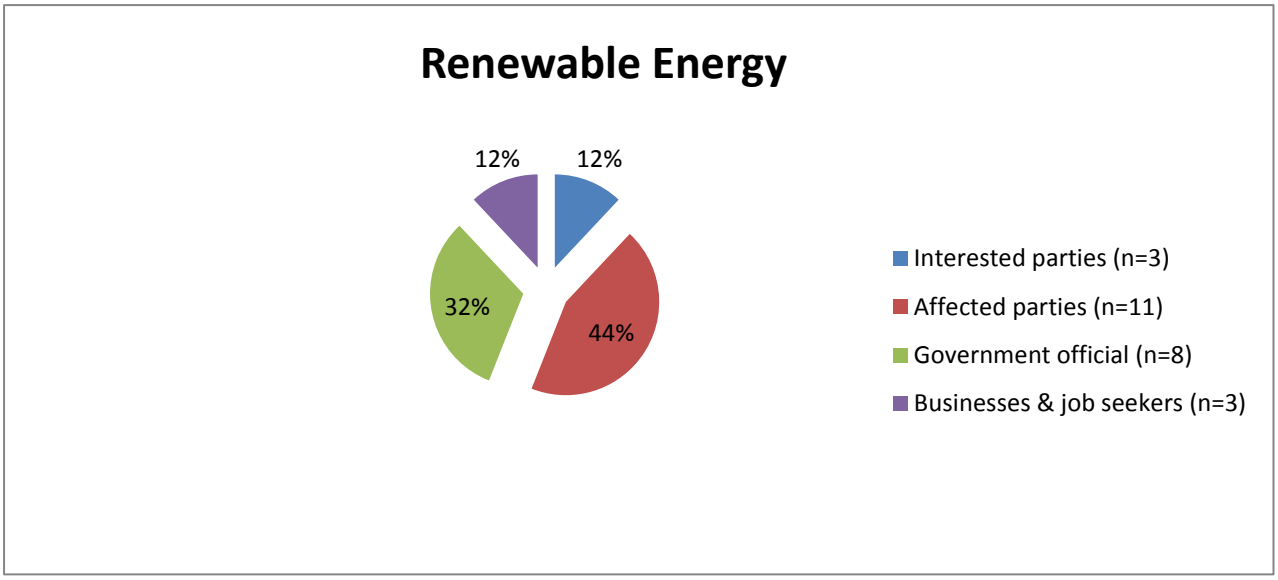


Figure 5: Stakeholder map indicating the interested and affected parties for industrial development projects in a) rural and b) urban areas.

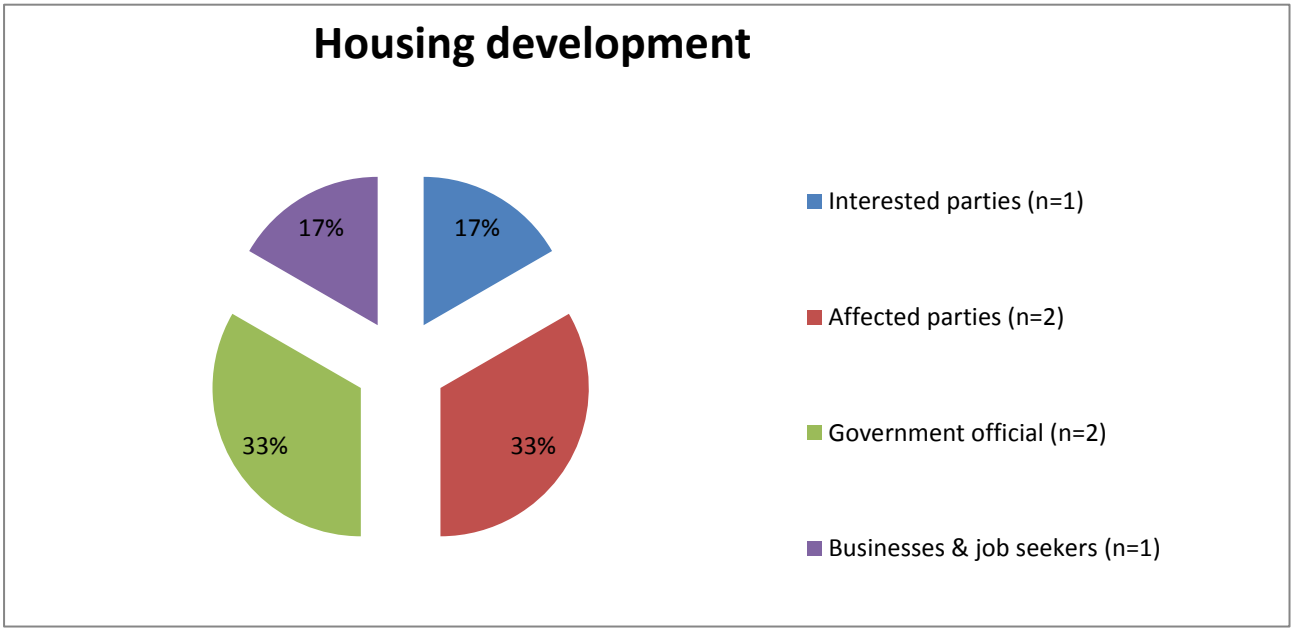
As indicated in figure 5a and b above, there is a higher prevalence of affected parties being registered as interested and affected parties as well as participating in the process in rural areas than in urban areas. In this case, as compared to the mining projects analysed, there was a higher prevalence of marginalised affected parties being represented as I&APs. This may be due to the fact that urban areas are already heavily industrialised and some of the proposed projects in the urban area were upgrades to existing industrial areas and not constructing new plants in rural settings. Therefore the urban communities may not interested in participating as the environment is already impacted on.

An EAP that was interviewed stated that there is a growing prevalence of business owners and job seekers that requested to be registered as interested and affected parties as well as engage in the process. This is indicated in Figure 5b as well as the figures below.

6a)



6b)



6c)

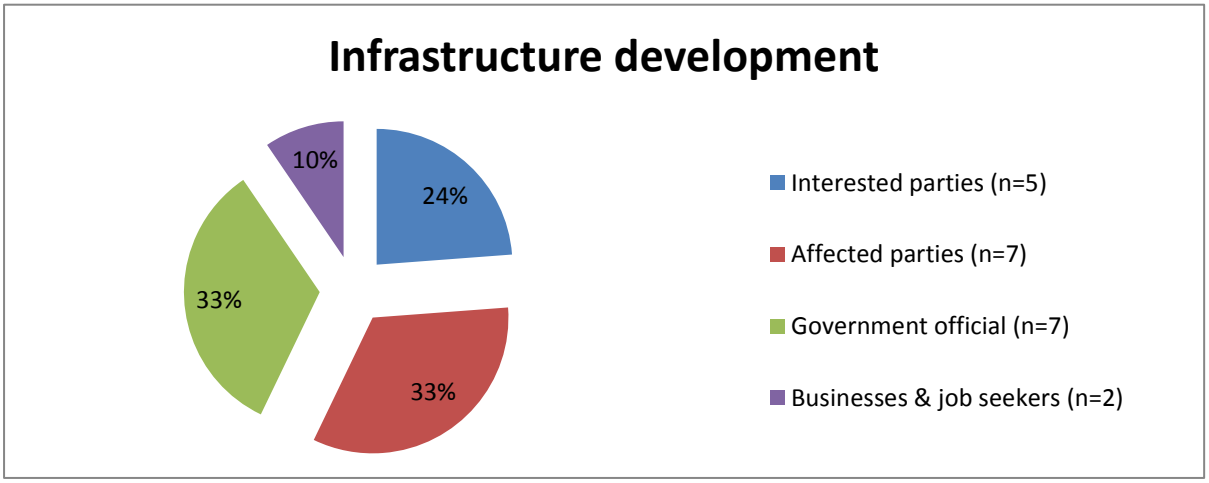


Figure 6: Stakeholder map indicating the interested and affected parties for the a) renewable energy, b) housing development and c) infrastructure development projects.

The prevalence of businesses and job seekers in the above mentioned project types and not in the mining projects could be attributed to the fact that mining is a very specialised field therefore the provision of services to these projects would be lower than that related to housing, renewable energy and infrastructure development which require a more common skill set.

The public participation guidelines makes mention that additional participation should be conducted if there is any media coverage around the project. The one agriculture project that was analysed had some media representation (Figure 7 below).

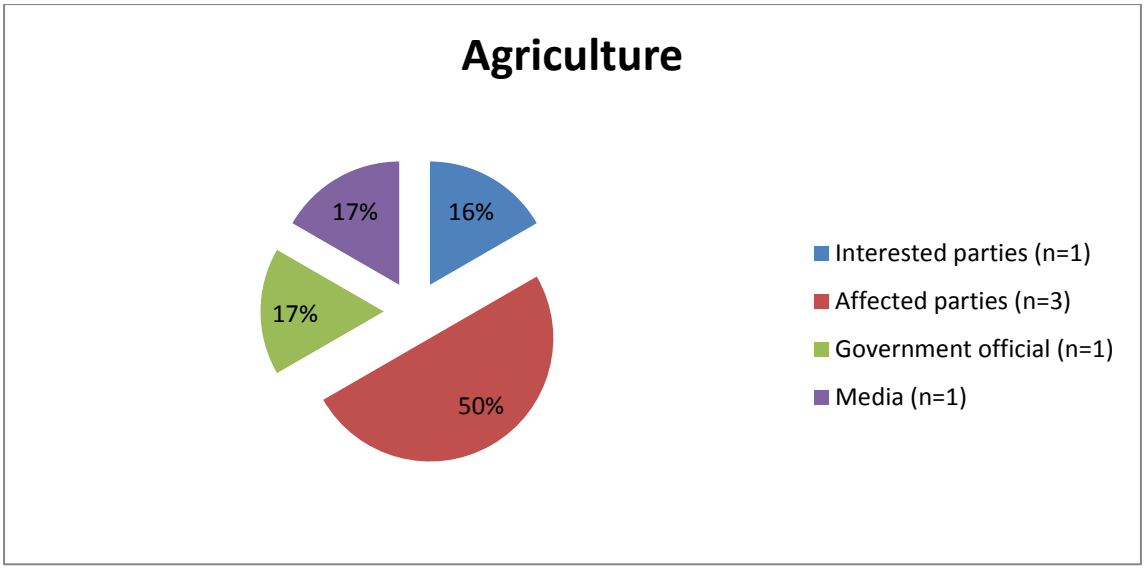


Figure 7: Stakeholder map indicating the interested and affected for the agriculture project.

Even though there was a representative from the media involved in the EIA process for this project, there was no mention of the project or the subject matter in that media publication during or after the period that the EIA was conducted.

The figures mentioned above indicate that the stakeholders that usually engage in the public participation process of EIAs are affected parties. It is not alarming that there is a high number of affected parties engaging in the public participation process as it known that many people attend meetings when the proposed development will impact them (Innes and Booher, 2005). There is a difference between the participation of the affected marginalised groups in rural areas and those that are affected in urban areas. For the mining projects, the marginalised rural groups showed a lower percentage of participation in comparison to the affected groups in the urban mining project. This can be attributed to the challenges that the marginalised face such as literacy and education that are required by the formalised EIA process (Patel, 2006; O'Faircheallaigh, 2010). The opposite was encountered in industrial development projects where there was higher representation of affected parties participating in rural areas than the affected parties in the urban area. This may be due to the nature of the projects in the urban areas (upgrade of existing facilities) and the already industrialised nature of the urban areas.

The number of affected parties that participate is followed by government officials who mandated by NEMA (1998) to participate as the commenting authority and interested parties. Albeit low, there is a number of business owners and job seekers that engage in the process. A clear cut conclusion about the stakeholders that participate in the public participation process cannot be made as indicated above, when dealing with marginalised groups, participation may be project specific as well as dependant on the receiving environment. The

type of stakeholders that participate is also dependant on the manner in public participation is conducted which will be explored in the next section of this research report.

6.2 Research question 2: How is public participation conducted?

Where public participation is concerned, this research report considers the principles and intent of NEMA (1998) , the Regulations which should echo the principles of NEMA (1998) by stipulating the process to follow when conducting EIAs and the Public Participation Guideline. This Guideline, unlike the Regulations is not legislated and serves as a tool to assist in conducting public participation. These three approaches (intent of NEMA, Regulation and Guideline) form the basis for answering the research question.

During the key informant interviews, an environmental lawyer stated that *"effective participation is about adding knowledge but that can only be achieved if it is conducted in a language understood by all".* Of the two projects that impacted rural communities and informal settlements, only one of the projects had site notices translated in a language other than English (the advert was translated into Zulu). A member of an environmental rights organisation mentioned that participation would be more effective if efforts were made to involve local leaders such as chiefs in rural areas and community leaders. Various appropriate forms of communication should be conducted in order to reach out to people, not just written notices but also adverts on local radio stations. The exclusion of jargon and simplification of the project would assist in ensuring that marginalised are included and do not feel alienated. The issues of additional participation and social learning are addressed in the Guidelines for public participation as well as in the legislation.

Table 3: The analysis of the manner in which public participation was conducted for the different project types.

	Mining	Renewable energy	Industrial development	Waste storage & management	Housing	Infrastructure development	Agriculture
Does the environmental impact report meet the minimum requirements where public participation is concerned?							
Were the issues raised adequately addressed?							
Did the environmental assessment practitioner do anything additional to the minimum requirements pertaining to public participation?							
Was additional public participation conducted e.g. press conferences, public meetings, open days etc?							
Does the project impact on rural communities or informal settlements?							
Were additional platforms used to notify the public e.g. announcement on local radio station?							

The table above was taken from the checklist drawn up in order to analyse the 20 EIRs. The questions stated in Table 3 give insight into the manner in which public participation was conducted for these projects. Even though there may be numerous projects under one project description for example two mining projects, they were grouped as one in the table above but will be discussed separately if the need arises. The red blocks represent a negative answer where the green block represents a positive answer.

The minimum requirements for public participation for EIA projects are stipulated in the Regulations. These include site notices, newspaper advertisements, determining and notification of I&APs, amongst other things (National Environmental Management Act: Environmental Impact Assessment Regulation, 2014). For all of the projects analysed in this report, the letter of the law in terms of the Regulations was followed.

NEMA (1998) states that the issues raised by the I&AP should be adequately addressed (National Environmental Management Act No. 107 of 1998) and this was not the case for one of the renewable energy projects. In fact, due to the issues raised by the public members not being addressed when the final EIR was submitted to the competent authority, a negative authorisation was granted and the project could not be constructed. All of the other issues raised and documented in the comments and response report seemed to give answers that were satisfactory to the competent authority as a there was no documentation available to make the researcher believe that the competent authority was not satisfied with the manner in which the issued were addressed.

There are various triggers for additional public participation (Table 1) as documented in the Public Participation Guideline. Some of the triggers are high levels of unemployment and low literacy levels which are usually present in rural communities and informal settlements. The Guideline also stated that additional participation should be conducted where rural communities are affected as well as historically disadvantaged people (Department of Environmental Affairs, 2010). The mining, renewable energy, industrial development, waste storage and management as well as housing project affected rural and/or informal settlements. This would give an indication of low literacy levels and high unemployment which would, according to the public participation guideline, prompt additional participation. Of the five project types that did affect marginalised communities and people, only three conducted additional public participation. For all three project types, public meetings were conducted which is not regulated by NEMA (1998) but mentioned in the Guideline.

The language spoken at the meetings will determine whether or not the people are able to interact with the information presented to them and therefore the effectiveness of the meetings can only be guaranteed by ensuring that the content is understood by all (Kakonge, 1998). During the key informant interviews, the interviewees were asked what constitutes effective public participation. All the personnel interviewed stated that effective participation is the inclusion of affected parties and about getting a message across. One EAP mentioned that effective participation meant engaging people in a language that they understand. *“It is silly to have many meetings and adverts if everything is done in a language that isn’t understood by*

the affected people" the EAP stated. The project types where public meetings were conducted were mining projects, renewable energy projects as well as the housing project.

In addition to public meetings, the public participation Guideline states that announcing the proposed development on a local radio station aids in the public participation process (Department of Environmental Affairs, 2010). Only one of the twenty projects that were analysed had a radio station advertisement as stipulated in the Guideline. This was for an infrastructure development project at one of the country's main airports. The Guideline makes mention that the advertisement should be in a language that is understood by the affected parties and should be aired at an appropriate time (Department of Environmental Affairs, 2010). The language and time of the advertisement were not documented and therefore conclusions cannot be made regarding whether or not that was adhered to.

During the key informant, a question was posed about the capacity for EAPs to go beyond what the law requires where public participation is concerned. Many interviewees stated that it is not up to the EAP to conduct additional public participation but rather up to the client. An environmental lawyer stated that there are instances where EAPs advise the client to conduct additional participation however, the client declines due to financial or time constraints. This is evident in the analysis of two renewable energy projects that both affected rural communities and were conducted by the same consulting company. In the one project, the EAPs conducted additional public participation in the form of public meetings and in the other, no additional participation was conducted. Assuming that the consulting company would have the same principles were public participation is concerned, an assumption can be made that the instructions from the client may have prevented the EAP from conducting additional public participation.

Table 4: Analysis of whether the intent of NEMA (1998) is addressed in the Regulations and/or Public Participation Guideline

Intent of the NEMA	Addressed in Regulations	Addressed in Guideline
6.2.1. The promotion of public participation of all I&APs		
6.2.2 All people have the opportunity to develop skills, understanding the capacity necessary for achieving effective participation		
6.2.3 Ensuring participation of vulnerable and disadvantaged groups		
6.2.4 Decisions that take into account the interest, needs and values of I&APs		
6.2.5 Recognition of all forms of knowledge		

The colour yellow indicates neither a positive or negative answer, detail will be provided.

The second part of answering how public participation is conducted is by assessing what is legislated and whether it echoes the principles of NEMA. The above table summarises whether or not the intent of NEMA (1998) is translated into legislation in the form of Regulations or is evident in the Public Participation Guideline.

6.2.1 The promotion of public participation of all I&APs:

The NEMA (1998) principles state the promotion of public participation of all I&APs (National Environmental Management Act No. 107 of 1998). This is addressed in the Regulation as it states the manner in which the public must be informed of the proposed project as well as keeping the registered I&APs up to date with the developments of the EIA process by making all the reports available for public scrutiny and commenting (National Environmental Management Act: Environmental Impact Assessment Regulation, 2014). The Public Participation Guideline also addresses this by the inclusion of additional participation through the announcement on radio stations, conducting various public meetings and ensuring access to information (Department of Environmental Affairs, 2010).

6.2.2 All people have the opportunity to develop skills, understanding the capacity necessary for achieving effective participation:

The other principle of is to ensure that all people have the opportunity to develop skills, understanding the capacity necessary for achieving effective participation. The NEMA (1998)

Regulations does not make provision for capacity building. The Regulations take the law and make it prescription and give step by step instructions on how to achieve the principles set out in the legislation and skills, understanding and capacity development is not addressed in the Regulations. The Guideline does however make provision, to some extent, to create the capacity necessary for effective participation. The Guideline states that additional participation includes social learning approaches as capacity building to aid in effective participation. Also, separate meetings for vulnerable and marginalised groups as well as providing people of special needs with reasonable assistance is mentioned in the Guideline (National Environmental Management Act No. 107 of 1998). To a certain extent, one can assume that the additional separate meetings would include some sort of capacity and skills development even though it is not stated explicitly. One of the EAPs that was interviewed was asked whether or not provision is made by NEMA (1998) to deal with the effects of historical scars. The EAP stated that is not for the law to make provision for the country's history but rather to prescribe how a process should be conducted in order to ensure effective participation. In my opinion, effective participation cannot be achieved without considering the views of interested and affected parties (especially the affected parties) and usually these are groups of people who are unable to participate in the process due to being previously disadvantaged. These groups are faced with challenges of low literacy and education levels which are vital when participating in a technical and formalised process such as EIAs (Kakonge, 1998).

6.2.3 Ensuring participation of vulnerable and disadvantaged groups:

Ensuring participation of vulnerable and disadvantaged groups is also stated as one of NEMA's principles. Section 41(2)(e) of the Regulation states that reasonable measures should be taken in the event that people are eager to participate but are unable to due to illiteracy, disability and/or other disadvantages (National Environmental Management Act No. 107 of 1998). The Regulation, however, does not stipulate what the reasonable measures are and leave this up to the EAP to determine. I do not necessarily think that this is correct or incorrect as being too description can make the process too rigid for example stating that if there are blind people who would like to participate then the reports should be made available in braille. The EAP can ensure that this is done but what happens in the case that the blind people that are affected are still unable to read braille? There is also a danger in not making it too prescriptive. Leaving it up to the EAP to decide what is reasonable is actually leaving it up to the client to decide. When interviewees were questioned about whether or not they believed that EAPs had the capacity to go beyond what the legislation requires where public participation is concerned, all parties interviewed except the EAPs (lawyers, government

officials as well as well as personnel from environmental rights organisations) believed that EAP can go beyond what the legislation requires. The EAPs mentioned that pressure from clients and associated time and financial constraints means that they do the bare minimum. One cannot ignore the role that the applicant plays in terms of funding and pressure where timeframes are concerned. These factors usually dictate how much public participation may be conducted and it is usually the bare minimum. This is indicated in the analysis of the EIRs where the same consulting company can conduct additional public participation for one project and the legislated minimum for another.

Of the three environmental lawyers that were interviewed, one stated that the EAPs should belong to a professional body and be bound by a code of conduct in order to ensure that they fulfil the requirements of the law. Whether or not that would ensure that that additional participation is considered when dealing with vulnerable and marginalised groups is debatable, not unless it is legislated. In comparison to the Regulation, the Guideline does make provision for the participation of vulnerable and disadvantaged groups. The Guideline states that measures such as radio advertisements at appropriate times in an language understood by affected should be broadcasted. Separate public meetings for the vulnerable should also be conducted and providing reasonable assistance to those with special needs.

6.2.4 Decisions that take into account the interests, needs and values of I&APs

NEMA (1998) states that ensuring that decisions that take into account the interest, needs and values of I&APs as one of its principles. The Regulation and Guideline do make provision for this principle. The Regulation ensures that a commenting period is provided to the I&APs to submit comments which together with responses must be included in the scoping and final environmental impact report (National Environmental Management Act: Environmental Impact Assessment Regulation, 2014). The Guideline also makes reference to this commenting period. Also mentioned in both the Regulation as well as the Guideline is the appeal period. When the environmental authorisation is granted, the I&APs shall be notified of the authorisation as well as be given a period where they can lodge an appeal to the competent authority (National Environmental Management Act No. 107 of 1998). Assessing whether or not the Guideline and Regulation take into account the interests, values and needs of the public is largely dependent on the public being registered as I&APs and making their interests, values and needs known. Only once these are communicated can they be documented and thus an evaluation can be conducted on whether they were adequately addressed and considered. In order for the public to be registered as I&AP, they need to be aware of the

process and interested in it enough to engage with it. Perhaps it is up to the EAP to create the interest but it is also up the stakeholder to want to be involved.

6.2.5 Recognition of all forms of knowledge:

Neither the Guideline nor the Regulation specifically state the recognition of all forms of knowledge. The inclusion of comments made by I&APs shall be documented and submitted to the competent authority, therefore should comments surface around other forms of knowledge other the scientific and expert knowledge, this would have be addressed. It is important to note that the principle mentions that all forms of knowledge should be recognised which if formally presented to the EAP, would have to be recognised. The principle does not make mention of encouraging the inclusion of all forms of knowledge.

Seeing that the manner in which public participation is conducted has been determined, as assessment can be made regarding whether the public can influence decision making.

6.3 Research question 3: Can the public influence decision making?

In order to ascertain whether or the public can influence decision making, the comments and response report for the EIRs submitted was analysed. In this report, EAPs tabulate all of the comments received during the EIA process and document their responses. This is legislated by NEMA (1998) and stipulated in the EIA Regulations (National Environmental Management Act: Environmental Impact Assessment Regulation, 2014).

During the key informant interviews, EAPs that were interviewed stated that it is rare for the public to attend meetings informed. Usually they attend meetings to enquire about the socio-economic activities that would be related to the project and subsequent job creation or business opportunities. In my experience of attending public meetings, the public often use the meeting as a platform to raise concerns about current service delivery challenges that often are not related to the project being presented. This is an indication that public meetings are rarely held and therefore the public use any opportunity afforded to them to raise concerns of service delivery. Also, a member from an environmental non-governmental organisation stated that often the public ask questions about the construction of the project which is usually made reference to in the environmental management programme (EMPr). This document assists in minimising the impacts of the associated project.

Table 5: Number of comments received, 'noted' and addressed in the EMPr for the various project types

Project type	Number of comments received	Number of comments that were 'noted'	Number of comments addressed in the EMPr
Mining	37	0%	41%
Renewable energy	528	5%	15%
Industrial development	132	8%	5%
Waste storage & management	57	2%	11%
Housing	202	20%	4%
Infrastructure development	880	6%	5%
Agriculture	87	5%	3%

The table above is a summary of the comments received per project type and the percentage of those comments that were noted and therefore required no response and those that were addressed in the EMPr. The typical comments that were responded to by stating that they are noted are the comments where I&APs acknowledge receipt of reports or emails, stated administrative corrections to the reports for example their name was spelt incorrectly. In one instance the comment that was noted was one that came from an affected landowner who stated that there is no trust between the community and the government. In these instance, the EAP can only note the comment and not provide any remarks. As indicated in the table above, the percentage of comments that were noted were minimal except for in the case of the housing project. For this project, a total of 202 comments were received and many of the noted comments had to do with other people who attended the meetings and stated that they would like to be registered as I&APs.

The comments that were addressed in the EMPr are those that had to do with the construction activities related to the project and the associated implication on the receiving environment as well as having an impact on the public's lives or interests. These concerns included the increase in traffic that the construction of the project may have, associated noise and dust pollution, the impacts on the groundwater, illegal squatters, security concerns, waste management on site during the construction as well as the health and safety of construction workers. As stated by the respective EAPs, these matters would be addressed in the EMPr. When analysing the comments and response report for the mining projects, over 41% of the comments had to do with construction relation queries which would later be addressed in the EMPr. The other projects had below 16% of the concerns relating to the EMPr. This is an indication that the EMPr plays a vital role in addressing the concerns of I&APs. The challenge with addressing concerns in the EMPr is that even though it is legislated by NEMA (1998) as

one of the documents that form part of the EIA process, the monitoring of the implementation of the programme is rarely practised (Bjorkland, 2013).

The EIA is the tool that predicts the impacts and the EMPr is the tool used to minimise those impacts (Morrison-Saunderson *et al*. 2007) thereby ensuring that the goal of EIAs is achieved (Morrison-Saunders *et al*. 2007; Bennett *et al*. 2016). EIAs can therefore not be considered without their follow up tool also known as the EMPr (Morrison-Saunders *et al*. 2007). As indicted in Table 4, there is a certain percentage of the public's concerns that are raised during the EIA process that relate to the EMPr and therefore it is vital that public participation is also incorporated during and post construction when the EMPr is implemented to ensure that these concerns are adequately addressed (Morrison-Saunders *et al*. 2007; Bjorkland, 2013).

The development of an EMPr is legislated by NEMA (1998) and is required to be submitted and approved by the competent authority along with environmental impact report for an environmental authorisation to be granted (National Environmental Management Act No. 107 of 1998). Oftentimes the environmental authorisation state that the implementation of the EMPr must be adhered to however this is not monitored. The monitoring of the implementation plan will evaluate the accuracy of the predicted impacts and the impacts on site as well as the effectiveness of the documented mitigation measures (Bjorkland, 2013).

The inclusion of public participation during the implementation of the programme is not legislated by NEMA. Where EMPrs are concerned, public participation should entail the transparent communication to stakeholders and provide an opportunity for public involvement (Morrison-Saunders *et al*. 2007). The inclusion of public participation during the EMPr implementation will assist in finding solutions or mitigating impacts that were not predicted or that have occurred due to changing circumstances on the ground. The inclusion of public participation in the implementation of the EMPr will also assist in the inclusion of lay knowledge systems in the process (Morrison-Saunders and Bailey, 1999). The proponent should be responsible for ensuring that the mitigation measures stipulated in the EMPr are adhered to as well as being responsible for the communication of the status of compliance to the stakeholders (Morrison-Saunders and Bailey, 1999; Morrison-Saunders *et al*. 2007). EMPrs should consider the mitigation of adverse impacts of the design, construction and operation of the project as well as the possible decommissioning (Morrison-Saunders *et al*. 2007; Bjorkland, 2013). The EMPrs and associated public participation should be an ongoing process that occurs throughout the project life cycle (Morrison-Saunders and Bailey, 1999; Morrison-Saunders *et al*. 2007) and not only to obtain the environmental authorisation.

The reminder of the comments that were not tabulated in Table 4 were generally around job creation. This was also stated by the interviewees during the key informant interviews. As

mentioned in research question one, interviewees stated that job seekers usually participate in the process and this is linked to them wanting to secure employment that may be available as part of the project. This came up in the two mining projects as well as in the renewable energy projects. For the renewable energy projects, the public wanted to know how much of the workforce that would be used during the construction and operational phase of the project would come from the local community. These projects included a combination of solar farm and wind turbine projects. The wind turbine project had many comments about the impact of the turbines on the bird species in the area. Bird Life Africa was registered as an I&AP and made comments about statistics regarding bird collisions during the operation of wind farms. Other comments included the visual impact of the turbines on the landscape. For one of the wind farm projects in the Easter Cape, the EAP and proponent were met by hostile I&APs as for this particular project, the previous EAP and avifaunal specialist were replaced by a new EAP and specialist. Some members of the public were under the impression that this was done as the previous EAP and specialist were of the belief that the project should not continue due to the negative impacts on bird life in the area. The newly appointed EAP stated that all previous specialist's reports would be made available to the public and the client is allowed to appoint any EAP they chose as long as they are qualified. As already mentioned, it would be beneficial to have EAPs registered on a professional body that would include a code of conduct and certain rules that the EAP would have to abide by. The use of only EAPs that are registered would have to be legislated in order to ensure that proponents use EAPs that abide by the rules of the professional body. I think this would play a part in instilling trust between EAPs, the proponents as well as the public.

For the housing project comments were made regarding an alternative land use for the proposed area. The surrounding landowners stated that the land had high agricultural potential and should therefore be used for farming and not for housing development. The EAP responded that land use potential was assessed and the agricultural potential of the land is moderate. Comments were also made about the design of the houses, storm water management as well as sewage facilities that would be included as part of the housing project. In many instances, comments had to do with the design of the project. Comments received would entail the exploration of the 'no go' alternative when I&APs were against the project as well as choosing another route or site for the project. This would be an example of NIMBYism where the landowners would rather have the project on someone else's site and not their own (Inness and Booher, 2005).

A negative environmental authorisation was granted for one of the renewable energy projects. In the negative authorisation, the competent authority stated that the sources of information that were considered when making the decision was the scoping and environmental impact

report, comments submitted by interested and affected parties, specialist studies as well as the environmental management programme. One of the reasons stated by the competent authority for the refusal of the authorisation are that the concerns stipulated by the interested and affected parties of the impacts on the nearby informal settlement, were not adequately addressed. The environmental management programme submitted to DEA stated that there would be no impact on the settlement even though it was noted as a concern by the I&APs. The respective local municipality as the commenting authority confirmed that the settlement would be impacted and could not guarantee the relocation of the residents for the construction of the project. This project was the construction of a solar farm which is an indication that even though a project may seem to be beneficial for the environment in terms of the generation of renewable energy, the social impacts cannot be ignored as decisions made need to consider social, environmental and economic implications (Morrison-Saunders and Bailey, 1999). In this case, the rejection of the environmental authorisation due to comments received by the public is an indication that the public is able to impact decision making to a certain extent.

As indicated in this section, one cannot confidently state that the public is able to affect decision making. The Regulation does legislate the public access to documentation as well as the opportunity to comment during the EIA process. The comments shall be responded to and these shall be recorded in a comment and response report and included as part of the EIA documentation. This documentation is considered when granting an environmental authorisation. From this point of view, the public is able to influence decision making as is also evident in the negative authorisation granted for the solar farm project due to social issues raised by I&APs. EMPrs also play a vital role in the EIA process as they ensure that the impacts predicted in the EIR are minimised (Morrison-Saunders *et al*. 2007). The monitoring of the implementation plan is not legislated which poses a big challenge as some of the comments raised by I&APs would be addressed in the EMPr. Seeing that the comments raised form part of the EIR documentation and are considered when the authorisation is granted, it is important that the implementation of the programme is also monitored and there is ongoing participation during the implementation of the programme. This would have to be legislated to ensure compliance. Without the legislation of the public participation during the implementation of the EMPr and rigorous monitoring of the implementation of the programme, one cannot confidently state that the public is able to impact decision making, as the decision is made based on a programme that may or may not be effectively implemented.

7 CONCLUSIONS

This research was based on the hypothesis that in South Africa, public participation in environmental assessments is not likely to influence the outcome of the project and therefore is not able to influence overall decision making. In order to answer prove or disprove this hypothesis, a number of questions were asked. Firstly, the researcher had to ascertain who participates in the process. The second question posed was how is public participation conducted and lastly, can the public influence decision making?

When analysing who participates in the process, the results indicated that the majority of the participants are affected parties. This was noted as a positive sign as EIAs should aim at involving at least the people that affected by the proposed development. When analysing the participation of affected parties in rural and urban setting, the results were contradictory. For a mining project that occurred in a rural area, there was a lower percentage of participation of affected parties in comparison to a mining project that occurred in an urban area. This was attributed to language barriers, lower literacy and educational levels that are necessary for participation in a technical process such as environmental impact assessments (O'Faircheallaigh, 2010). In this case where marginalised communities were affected, resources such as time and as already mentioned, education may have been limited which resulted in a lower rate of participation. The same comparison was made between the participation of affected parties for an industrial development project in a urban area versus in a rural area. In this case, the results indicated that rural area participation was higher than in the urban. In this case, an assumption was made that the results were due to the fact that the urban area was already industrialised and thus the affected parties felt no need to participate in comparison to those in a rural environment that is not industrialised. Also, the nature of the project in the urban areas was upgrades and extension of existing facilities and in rural areas, it was the construction of new facilities. When considering who participates, it is not a clear cut answer. Various factors such as the nature of the environment and project type influence the stakeholders involved

There were various documents that were considered when analysing the manner in which public participation is conducted. The NEMA (1998) principles, EIA Regulations as well as the Public Participation Guideline was considered. An analysis was conducted in order to ascertain whether the principles of NEMA (1998) were translated into the Regulation or were only present in the Guideline. During the analysis of 20 EIAs, all of the assessments fulfilled in the minimum requirements of the law, however additional public participation in order to engage vulnerable and marginalised communities in the form of public meetings and announcements on radio stations (as prescribed by the Guideline) only occurred by three of

the five projects that affected these communities (Department of Environmental Affairs, 2010). This was seen as a shortfall as one of the principles of NEMA (1998) is to ensure the participation of vulnerable and disadvantaged groups. It should be noted additional participation for these groups is not legislated and blatantly included in the Regulations but rather it is included in the Guidelines which is not legislated. The Regulation makes mention of using reasonable measures to ensure that illiterate, vulnerable and disabled people who are interesting in engagement are able to (National Environmental Management Act: Environmental Impact Assessment Regulation, 2014). This vague statement leaves it up to the EAP and therefore the client to decide what reasonable measures will be taken, if any. As indicated in key informant interviews, clients usually dictate to the EAPs if any additional participation will take place as this has time and financial constraints. Even if the EAP would like to take reasonable measures such as public meetings to engage marginalised groups, pressure from the client may not permit such. It is important to note is that public meetings are not mandatory as part of the Regulation, even where vulnerable communities are concerned. The meetings should not just be held but in order to ensure the participation of vulnerable groups, the language used should be that which will be understood by all members of the public.

NEMA (1998) principles also include skills development in order to obtain the capacity necessary for effective participation. This not addressed in the Regulations however is addressed to some level in the Guideline. The Guideline states that separate meetings should be held for vulnerable communities (Department of Environmental Affairs, 2010). Assuming that skills development would be included as part of this meeting then the NEMA (1998) principle is fulfilled, however, should the meeting not include developing skills, understanding and capacity needed for effective participation then social learning is cannot take place.

Another principle of NEMA (1998) states the recognition of all forms of knowledge, this is neither echoed in the Regulation or the Guideline. The last principle of NEMA (1998) that pertains to public participation that was assessed was ensuring that public participation takes into account the needs, interests and values of I&APs. This was also part of the third question for this research. Both the Guideline and Regulation state that comments received during the EIA process should be responded to and recorded in a comments and response register. Also, both make reference to the appeal period that can be followed once the environmental authorisation is granted (National Environmental Management Act: Environmental Impact Assessment Regulation, 2014). The comments and response registers for the projects was scrutinised and it was noted that many of the comments made by the I&APs would be addressed in the EMPr. Even though the documentation and approval of the EMPr is legislated, the monitoring of the implementation plan is not. In one instance, a negative

environmental authorisation was granted as the comments raised by I&APs were not adequately addressed in the EMPr submitted to the competent authority. This case indicates that the public is able to influence decision making to some degree.

When considering the presence of the principles of NEMA (1998) in the Regulations, the details of how the intent of NEMA (1998) will be fulfilled is not clear cut. In many instances, the principles are echoed and included in the Guidelines which unlike the Regulations, are not legislated.

The above conclusions prove that the hypothesis made is correct: In South Africa, public participation in environmental assessments is not likely to influence the outcome of the project and therefore is not able to influence overall decision making.

8 RECOMMENDATIONS

A few recommendations are made in order to improve the public participation process. It is noted that the principles stipulated in the National Environmental Management Act are geared towards effective public participation, however the legislation falls short in ensuring that these principles are translated into Regulations. It is therefore recommended that the legislation is revised to make public meetings mandatory especially where rural and vulnerable communities are concerned. The language spoken at these meetings should be a language that is understood by all. Where marginalised communities area affected, social learning and skills development and understanding should be enhanced in order to capacitate the communities and aid in effective participation. This will assist marginalised communities affected by South Africa's history are able to participate in the process. In order to ensure that people have an impact on decision making, the monitoring of the implementation of EMPrs should also be legislated. Public participation should also form part of this process, thus ensuring that public participation is included in the life cycle of the project. The development and legislation of professional registration of EAPs will assist in ensuring that they are bound by rules, adopt best practise for effective participation and limit pressure from clients.

REFERENCES

Arnstein, S. R., 1969: The ladder of citizen participation, *American Institute of Planners Journal*, 35, 216-224.

Bennett, S., Kemp, S. and Hudson, M.D., 2016: Stakeholder perceptions of environmental management plans as an environmental protection tool for major developments in the UK, *Environmental Impact Assessment Review*, 56, 60-71.

Bjorkland, R., 2013: Monitoring: The missing piece a critique of NEPA monitoring, *Environmental Impact Assessment Review*, 43, 129-134.

Bryman, A., 2006: Integrating quantitative and qualitative research: How is it done?, *Qualitative Research*, 6, 97-113.

Chess, C. and Purcell, K., 1999: Public participation and the environment: Do we know what works?, *Environmental Science & Technology*, 33, 2685-2692

Clark, B.D,. 1978: Improving public participation in environmental impact assessment, *Built Environment*, 20, 294-308.

Colvin, R.M., Witt, G.B. and Lacey, J., 2016: Approaches to identifying stakeholders in environmental management: Insights from practitioners to the go beyond the 'unusual suspects', *Land Use Policy*, 52, 266-276.

Constitution of the Republic of South Africa No. 108 of 1996, South Africa.

Cundill, G., 2010: Monitoring social learning process in adaptive co management: Three case studies from South Africa, Ecology and Society. 15, 1-19.

Del Furia, L. and Wallace-Jones, J., 2000: The effectiveness of provisions and quality of practices concerning public participation in EIA in Italy, *Environmental Impact Assessment Review*, 20, 457-479.

Department of Environmental Affairs (2010), Public Participation 2010, Integrated Environmental Management Guideline Series 7, Department of Environmental Affairs, Pretoria, South Africa.

Diduck, A. and Mitchell, B., 2003: Learning, public involvement and environmental assessment: A Canadian case study, *Journal of Environmental Assessment Policy and Management*, 5, 339-364.

Eden, S. and Bear, C., 2012: The good, the bad and the hands-on: Constructs of public participation, anglers, and lay management of water environments, *Environment Planning A*, 44, 1200-1240.

El-Fadl, K. and El-Fadel, M., 2004: Comparative assessment of EIA systems in MENA countries: challenges and prospects, *Environmental Impact Assessment Review,* 24, 553-593.

Enserink, B. and Koppenjan, J., 2007: Public participation in China: Sustainable urbanization and governance*, Management of Environmental Quality: An International Journal*, 18, 459-474.

Environmental Conservation Act No 73 of 1989, South Africa.

Glucker, A.N., Driessen, P.P.J., Kolhoff, A. and Runhaar, H.A.C., 2013: Public participation in environmental impact assessment: why, who and how?, *Environmental Impact Assessment Review*, 43, 104-111

Hunsberger, C.A., Gibson, R.B. and Wismer, S.K., 2005: Citizen involvement in sustainability-centred environmental assessment follow-up, *Environmental Impact Assessment Review*, 25, 609-627.

Hurlbert, M. and Gupta, J., 2015: The split ladder of participation: A diagnostic, strategic, and evaluation tool to assess when participation is necessary*, Environmental Science and Policy*, 50, 100-113.

Innes, J.E. and Booher, B.D., 2005: Reframing public participation: Strategies for the 21st Century, *Planning, Theory and Practice*, 54, 419-436.

Jick, T.D., 1979: Mixing qualitative and quantitative methods: Triangulation in action, *Administrative Science Quarterly*, 24, 602-611.

Kakonge, J.O.,1998: EIAs and good governance: Issues and lessons from Africa, *Environmental Impact Assessment Review*, 18, 289-305.

King, C.S., Feltley, K.M. and Susel, B.O., 1998: The question of participation: Toward authentic public participation in public administration, *Public Administration Review*, 58, 317-326.

Lawal, A.M., Bouzarovski, S. and Clark, J., 2013: Public participation in EIA: the case of Western African gas pipeline and tank farm projects in Nigeria, *Impact Assessment and Project Appraisal*, 31, 226-231.

Mauerhofer, V., 2016: Public participation in environmental matters: Compendium, challenges and chances globally, *Land Use Policy*, 52, 481-491.

Mitchell, R., 2013: Best practise stakeholder engagement begins at day 1, *IAIA13 Conference Proceedings,* 2013.

Morrison-Saunders, A. and Bailey, J., 1999: Exploring the EIA/Environmental management relationships, *Environmental Management*, 24, 281-295.

Morrison-Saunderson, A., Marshall, R. And Arts, J., 2007: EIA follow up international best practice principles, *Special Publication Series No 6*, Fargo, USA, International Association for Impact Assessment.

Morrison-Saunders, A. and Retief, F,. 2012: Walking the sustainability assessment talk – progressing the practice of environmental impact assessment (EIA), *Environmental Impact Assessment Review*, 36, 34-41.

National Environmental Management Act No. 107 of 1998, South Africa.

National Environmental Management Act: Environmental Impact Assessment Regulation, 2014.

O'Faircheallaigh, C., 2010: Public participation and the environmental impact assessment: purpose, implications, and lessons for public policy making, *Environmental Impact Assessment Review,* 30, 19-27.

O'Riordan, T., 1998: Sustainability for survival in South Africa, *Global Environmental Change*, 8, 99-108.

Parnell, S., Simon, D. and Vogel, C., 2007: Global environmental change: conceptualising the growing challenge for cities in poor countries, *Area*, 39, 357-369.

Patel, Z., 2000: Rethinking sustainable development in the post-apartheid reconstruction of South African cities, *Local Environment*, 5, 383-399.

Patel, Z., 2006: Of questionable value: The role of practitioners in building sustainable cities, *Geoforum*, 37, 682-694.

Patel, Z., 2007: Africa: A continent of hope?, *Local Environment*, 11, 7-15.

Rowe, G. and Frewer, L.J., 2000: Public participation methods: A framework for evaluation, *Science, Technology & Human Values*, 25, 3-29.

Webler, T., Kastenholz, H. and Renn, O., 1995: Public participation in impact assessment: A social learning perspective, *Environmental Impact Assessment Review,* 15, 443-463.

ANNEXURE A: EIA CHECKLIST

EIA Checklist
1. Does the environmental impact report meet the minimum requirements where public participation is concerned?
2. Were any issues raised during the public participation process as captured on the comments and response report?
3. Were the issues raised adequately addressed?
4. Were the issues raised relevant to the project?
5. Did the environmental assessment practitioner do anything additional to the minimum requirements pertaining to public participation?
6. Did non-governmental organisations engage in the public participation process?
7. Did environmental civil rights groups engage in the public participation process?
8. Were any of the issues raised during the public participation process reflected in the environmental authorisation?
9. Was additional public participation occur eg press conferences, public meetings, open days etc?
10. Does the project impact on rural communities or informal settlements?
11. Were additional platforms used to notify the public eg announcement on local radio station?

ANNEXURE B: ETHICS CLEARANCE CERTIFICATE

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Molewa

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H16/04/12**
PROJECT TITLE	The effectiveness of the public participation process in Environmental Assessments (EA): A South African perspective
INVESTIGATOR(S)	Ms N Molewa
SCHOOL/DEPARTMENT	APES/
DATE CONSIDERED	22 April 2016
DECISION OF THE COMMITTEE	Approved unconditionally
EXPIRY DATE	24 May 2019

DATE 25 May 2016 **CHAIRPERSON** _____
(Professor J Knight)

cc: Supervisor : Ms I Watson

ANNEXURE C: KEY INFORMANT INTERVIEW QUESTIONAIRRE

1. What do you think constitutes as effective public participation?
2. Do you think that Environmental Assessment Practitioners have the capacity to go beyond what the National Environmental Management Act prescribes to engage and involve the public more during the environmental impact assessment process?
3. In your opinion, what more could be done to engage the public?
4. In your opinion, what can be done to include marginalised people in the public participation process?
5. Do you think the public participation process prescribed by National Environmental Management Act deals with South African problems such as historical scars, the lack of trust people have with the government, poverty and literacy?
6. What other issues do you think should be considered when engaging the public?
7. Do you think that the public is able to influence decision making?
8. In your opinion, which members of the public usually engage in the public participation process where new developments are concerned?
9. Do members of the public come to public meetings informed about the potential impacts (positive or negative) of the proposed developments?
10. What are the attitudes of the members of the public that come to the public meetings?