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AN INVESTIGATION OF THE EFFECTIVENESS OF PUBLIC PARTICIPATION IN THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) IMPLEMENTATION PROCESS: RWANDAN

CASE STUDIES

Ву

George Bob Nkulanga

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Faculty of Science and Agriculture
University of KwaZulu-Natal, Pietermaritzburg

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Declaration

I NKULANGA George Bob declare that

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- (ii) This dissertation has not been submitted for any degree or examination at any other university.
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Abstract

There is an increased need for PP in making decisions that affects their livelihood and the environment surrounding them. Rwanda continues to strive to initiate programs and projects to ensure improved living conditions for the citizens. It is important and necessary to ensure that the interested and affected community member take an active role in the Environmental Impact Assessment (EIA) decision making process.

Without consultation and meaningful participation of interested and affected parties (IAP's), there is a serious danger of conflict of interests during project implementation. Such conflict of interests so often contributes to project delays through litigations, loss of invested resources and environmental degradation. The need for meaningful public involvement in the EIA process has been recognized by the World Bank, and the European Union Governments, the United Nations, and many governments around the world. There is also a large amount of research literature that supports the concept of the EIA process.

This study has 4 key objectives, namely;

- Determine the requirements for, and barriers to effective PP in the EIA implementation process;
- 2) review three EIA practical case studies in Rwanda in order to investigate the effectiveness in ensuring PP in practice;
- explore the views of Interested and Affected Parties (Environmental consultants, NGOs, REMA and community representatives) with regard to the effectiveness of PP in EIA processes in Rwanda;
- 4) To consider the future for meaningful PP in the EIA process in Rwanda.

In order to achieve the objectives of the study, a wide selection of literature on PP in the EIA process has been reviewed; document analysis, questionnaire interviews, and three case studies have been reviewed.

The findings of this research reveal that, with specific reference to the cases studied, the current EIA implementation process in Rwanda is ineffective in ensuring meaningful public involvement. Some procedural challenges have been identified in the implementation process and these acts as a barrier to effective participation. They include:

- inadequate follow-up of compliance,
- absence of the PP guidelines,
- late public involvement in the EIA process and
- poor communication mechanisms.

The following recommendations are made to enhance meaningful PP in the EIA process in Rwanda:

- that there be a full exchange of information between developers and IAP's involvement should be increased to ensure informed decision-making and meaningful input;
- that there be early public involvement in the EIA Process to reduce manipulation and possible conflicts;
- that PP guidelines should be established and formalized to ensure effective monitoring, enforcement and compliance.

Acronyms

CEAA Canadian Environmental Assessment Act

EDPRS Economic Development and Poverty Reduction Strategy

EIA Environmental Impact Assessment

EIS Environmental Impact Statement

SEA Strategic Environment Assessment

IAPs Interested and Affected Parties

IEA Integrated Environment Assessment

REMA Rwanda Environment Management Authority

PP PP

PEI Poverty Environment Initiative

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CHAPTER ONE

INTRODUCTION

1.0 Background

In the recent years, Rwanda has astonished the World with the incredible speed and scope of reconstruction progress of a Nation once devastated by the 1994 genocide that claimed over one million innocent lives. The horror period left the country on its knees due to the unimaginable human loss, and complete breakdown of the national institutional structure, and socio-economic resources.

Rwanda has designed a development plan as a way forward to rebuild the once collapsed economy and hence, the adoption of vision 2020 development plan in 2000 This vision underpins the post-genocide reconstruction and development strategies. Vision 2020 "...is a holistic blueprint encapsulating the essence of the Government's development philosophy" (UNDP, 2008). To many people Vision 2020 has been regarded as an ambitious one.

The Poverty Environmental Initiative report (2007) identifies the Economic Development and Poverty Reduction Strategy (EDPRS) as a development program that has ambitious timelines drawn from the Rwandan Government's vision 2020. For instance the Government of Rwanda's (GoR) intention to reduce the number of households in the agriculture sector from 90% at present to less than 50% by year 2020 (GoR, 2003; GoR, 2007). This can be regarded as one of the ambitious goals of the country's development strategy. Such good Government policies, if not carefully planned, are likely to end up negatively impacting the Rwandan environment. Given the fragmented operational conditions of Government institutions that are in Rwanda in terms of environment and development planning, the environmental degradation has continued to worsen in Rwanda.

This is the big picture in the background to Environmental Impact Assessment (EIA) and Public Participation (PP) challenges in Rwanda that could be regarded as both socio-economic, and political in nature. This research is focused only on investigating the effectiveness of the current EIA system in Rwanda in relation to meaningful participation of Interested and affected parties (IAPs).

Rwanda being a democratic country, PP in decision-making is not only a human right but many authors consider it as the most crucial aspect in EIA process (Julie, 2007; Abaza et al, 2004). EIA relates to the tools used to predict and mitigate possible environmental impacts of proposed development projects while Integrated Environmental Management (IEM) mitigates possible environmental impacts of plans, policies and programs earlier on at a strategic decision making level. PP in EIA process offers an opportunity to integrate the views of Interested and Affected Parties (IAP's) in the decision-making process. It also ensures transparency and accountability of the system (Julie, 2007). PP is not only a legal requirement in the environmental law of Rwanda but is also a democratic governance principle.

The challenge to PP in EIA process in Rwanda can be traced from a top down form of decision-making process that has characterized and shaped the Rwandan administrative structure in the past. However, with the implementation of the decentralization program since 2006 more room for public involvement in the decision-making process seems to be available.

There is need to exploit this opportunity in order to encourage public involvement in the planning and decision-making process for development projects that affects the lives of different stakeholders either positively or negatively.

In cases where PP in EIA process is low, the effectiveness of the decisions made regarding development projects can be severely affected. This often only becomes apparent at latter stages. In other words, decision-making under such circumstances is affected by lack of transparency and accountability and the decision made may be based on: inadequate information as a basis for decision-making; narrow in scope; inadequate consideration of possible alternatives to proposed development; bias due to inadequate integration of the views and interests of IAPs.

To ensure effective PP in the EIA process it requires that the legal framework, implementation process and desired outcomes be clearly understood by the IAPs. It is worth noting here that, EIA is a new system in Rwanda and was formally adopted in 2005 under the Environmental Organic Law. The inadequate awareness about environment is not only affecting the quality of PP in EIA but is a challenge to environmental management in Rwanda in general. This could be among other reasons that hamper PP in the EIA process in Rwanda. PP in the EIA process in Rwanda is influenced by social, economic, and political dynamics. Therefore effective EIA PP process requires an integrated environmental management (IEM) approach. This requires a self auditing mechanism by project developers to ensure compliancy to not only effective EIA PP requirement but also corporate responsibility and continued improvement rather than carryout an EIA process just to fulfill the legal requirement.

This research intends to investigate the views of IAP's on the effectiveness of the current EIA implementation process in ensuring meaningful PP in Rwanda. Given the time constraint to this research, the study will focus on IAPs views including; NGO's, Rwanda Environmental Management Authority, Funding agencies, consultants and local community members. Based on the views of IAP's and the critical review of the three case studies on PP in the EIA process in Rwanda, this study analyzed the effectiveness of PP process in Rwanda.

1.2. Need for the Study

With over 90% of Rwandan population relying on subsistence agriculture to meet their daily needs (GoR, 2007); the state of the environment has got vast implication for the wellbeing of the already vulnerable population. Due to continuous environmental degradation in the name of 'development' projects the poor are denied access to land, natural resources on which they depend on their entire lives. The end result of this is a steady decline not only of the environmental condition, but also the socio-economic and the general wellbeing among the community members. The limited public involvement in the decision-making process especially regarding development projects seems to be one of the reasons behind the worsening environmental conditions in Rwanda. The purpose of this study is to investigate views of IAP's on the effectiveness of PP in EIA decision-making in Rwanda. The result of this study may facilitate not only increased awareness of the challenges to PP in the EIA process, but could also provide new insights.

1.3 The Research Problem

The 2005 Rwanda Environmental law under its article 67 states that all development policies, plans, programs and projects likely to have an impact on the environment are obliged to be subjected to EIA prior to their commencement (Organic Law, 2005).

However, as observed in the Poverty Environment Initiative report knowledge of environmental issues is still "limited at local government levels" (PEI/REMA, 2007:51) and yet due to decentralization the decisions regarding development projects are made at local government levels at present in Rwanda. As discussed in chapter 2 PP is required throughout the entire EIA process. Despite this requirement PP in Rwanda seems to be inadequate in the EIA process and also in environmental management in general (PEI, 2007). However, the focus of this study is only limited to analyzing the effectiveness of PP in the EIA process in Rwanda based on IAP's views and the reviews of three practical EIA case studies.

As considered by Julie (2007) in his evaluation of the EIA process in two of the World's most populated and rapidly developing countries of China and India, PP is a crucial aspect of the EIA process. The reasons being, it ensures transparency and accountability (Julie, 2007). By contrast, participation of IAPs remains a challenge to Rwanda despite the progress made in the few years since Rwanda Environment Management Authority (REMA) was formed, in a bid to strengthen environmental protection (PEI, 2007).

One may ask a question, as to why there is low PP in EIA processes in Rwanda and how sustainable are the decisions made on development project when the views of the IAP's are disregarded? The answers to these questions are explored in this study. It is important to understand the views of IAP's on the effectiveness of the current EIA process in Rwanda. Under this research an understanding of the views of IAP's on the effectiveness of PP in EIA process was established.

1.4. Aim of the Study

The aim of this study was to investigate the effectiveness of Rwandan EIA processes in ensuring meaningful participation of IAP's. As part of this aim the barriers to effective and meaningful participation of IAP's in EIA process in Rwanda were explored and

made recommendations for future meaningful PP. A key element in the achievement of this aim was an analysis of 3 case studies

1.5. Research Objectives

The above aim was achieved through addressing the following objectives:

- Determine the requirements for, and barrier to effective PP in the EIA implementation process;
- 2. review three EIA practical case studies in Rwanda in order to investigate the effectiveness in ensuring PP in practice;
- explore the views of Interested and Affected Parties (Environmental consultants, NGOs, REMA and community representatives) with regard to the effectiveness of PP in EIA process in Rwanda;
- 4. To consider the future for meaningful PP in EIA process in Rwanda.

1.6. Methodology

The nature of the study conducted is a case study research. In order to answer the research objectives of the study in Section 1.5, four steps were followed in this research as detailed in chapter 3 under Section 3.2. The methodology adopted was corroborating evidence from several sources to obtain consistence in data collected that include literature review, document analysis, semi-structured questionnaire interviews, openended interviews focused on the role players in three EIA practical case studies.

The sampling procedure adopted, data collection and analysis techniques applied in this study are explored in detail under Section 3.3, 3.4, and 3.5.4 respectively in chapter 3.

The theoretical perspective on case study research is presented in Section 2.5 and the justification for the methodology adopted in this study is covered in the same Section.

1.7. Clarification of concepts

It is important to understand the key concepts and the context within which they have been used in this study. The key concepts in this study include the following:

The term Proponent in the context of this study refers to a developer who is proposing the project which requires an EIA. A project developer refers to the individuals or organization proposing the implementation of a given project that requires PP in EIA process.

Environmental Impact Assessment (EIA) is both a legal and procedural step by step process that requires public input to allow informed decision-making about the likely impacts of the proposed project. In the context of this study EIA relates to that step by step impact assessment process of the proposed development project by a proponent that requires public input.

Interested and Affected Parties (IAP's), is a general term that combines two intertwined groups of people in the EIA process. The first groups include those directly affected by the proposed development project or the community members closer to the location of the project. These groups of stakeholders are sometimes the minority community members. The second group of people includes those that are not directly affected by the proposed project but are interested in the EIA process. In most cases these include both local and international NGO's (World Bank 2006, Abaza et al, 2004). In this study IAP's relates to both categories of stakeholders.

Meaningful PP in the context of this study relates to an EIA participation process that reflects IAP's say in the final decision-making based on transparency, efficiency, accountable and empowering to all parties (CEAA, 2008).

PP defines and relates to different meanings for different interests when used by researchers in different circumstances. It is a general term used to relate to any process that may involve public input in decision-making (CEAA, 2008). To clear the fog surrounding PP, the researcher intend to separate the two words (Public & Participation) in trying to clarify them for the readers understanding of the context under which they have been used in this research. 'Public' in this research relates to all those stakeholders that may be affected either directly or indirectly by a proposed development project. They are sometimes referred to as interested and affected parties (IAP's). On the other hand, the term participation is often used interchangeably with words such as consultation, involvement and engagement for different reasons. In the context of this study PP relates to the process of active involvement of IAPs in EIA process.

1.8. Dissertation Structure

The study is organized into separate yet interlinked parts. The focus of the initial chapter was to give the background to this study, explain the research problem, and specifically guide the study. It also identifies the aim and objectives of this research and gives a brief overview of the methodological steps to be followed in this research. Following the introduction to the study, the remainder of the following chapters was arranged as follows:

Chapter 2 will review existing literature related to PP in EIA process in order to benefit from experiences and conclusions from a number of studies carried out by different researchers. Under literature review, the purpose of this chapter is to evaluate the context in which PP is conducted in EIA both the procedure and the process. This may help the reader to understand the context under which this research was carried out.

Chapter 3 describes the research methodology adopted in this study. The research procedure is described in terms of sampling method, data collection and analysis methods applied in this study. Finally, the limitations of the study are discussed.

Chapter 4 critically reviews the three EIA practical case studies. Covering PP in EIA based on two issues, legal framework and practical implementation process. This was achieved through reviewing their Environmental Impact study (EIS) documents for the three case studies, field visits and interviews. Chapter 4 will start by providing a background to the three EIA case studies and critically review the role of PP in the development of each project. The level of public involvement and participation in EIA process was explored. Finally lessons were drawn from the three case studies. Chapter 5 will present a detailed analysis of the study findings in relation to the research objectives in order to determine if the study has achieved its purpose.

Chapter 6 will draw conclusions and recommendations based on findings and literature review. It will also highlight future areas for research.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

Chapter one briefly highlighted the importance of PP and the contribution through IAP to the making of informed decisions in the EIA process. Chapter one also referred to the existence of barriers to effective and meaningful PP. This chapter evaluates the context in which PP procedures and processes are conducted in EIA. Chapter two also explores the barriers to effective PP and considers the requirements for an ideal and meaningful PP. Much emphasis in this chapter is focused on reviewing research studies conducting on issues related the effectiveness of PP in the EIA.

Chapter three begins by clarifying the purpose of PP in EIA processes in order to help the reader to understand the complexity of the issue under investigation and the context under which this research was carried out. EIA is a complex and interlinked step by step process that requires PP. This chapter explores existing literature on PP procedure in the EIA process. Before discussing the levels of PP in the EIA process, it is important to understand the EIA process itself. Section 2.1 explores step by step EIA Process in relation to PP.

2.2. EIA process and PP

EIA process does not occur in a vacuum rather requires a comprehensive arming process referred to as Integrated Environment Management (IEM) system. However, so often EIA is considered as an end in itself.

The EIA process is summarized into six stages (Coastlearn undated) which include; screening, scoping, Assessment, EIA report review, decision-making and lastly monitoring. The intention of reviewing EIA procedure is not to detail the contents of each

and every stage of the process but to establish whether meaningful PP is part of the entire process.

Table 1 : Summary of EIA process and objectives of PP (Coastlearn, undated)

Stage of EIA process	Objectives of PP	
Screening	Identification of significant impacts	
Scoping	Identification of public interest and values	
	Identification of priorities for assessment	
	Encouraging public understanding of the proposed project	
Impact Assessment	The public can contribute local knowledge and values to the	
and EIA report	prediction, evaluation and mitigation of impacts	
preparation	Improvement in quality and acceptability of EIA report	
EIA Report Review	Public contribute to quality evaluation and acceptability of the	
	report	
Decision- Making	Public comment on acceptability of project impacts	
Monitoring	Take part in project impact evaluation that occur and support	
	project environment.	

Under each stage as identified in table 1 above, PP is required for strategic reasons. Therefore, PP should be embedded in the entire EIA process rather than being selectively positioned at a single stage.

2.2.1. Screening

Wood (2003) agrees that the screening of projects is unsatisfactory in many developing countries. The screening process is vital for PP to ensure that decision-making at this strategic level takes into account inputs from IAP's. In most cases what happens is that public opinion is ignored at the screening stage and decisions are made without public input (Coastlearn, undated). Similarly, the Rwandese EIA process ignores PP at this important strategic level of project planning as illustrated in Section 2.4. Since the public is unaware of the development at this strategic level, it is the responsibility of the proponent (either the developer or competent authority) to seek the opinion of the IAPs.

2.2.2. Scoping of Impacts

Scoping is an important stage in the EIA process. PP at this stage may guarantee that the interests, values, and priorities of both parties concerning the proposed project are understood and harmonized (World Bank, 2006). However, this is "frequently missing; at least in so far as public consultation is concerned" (Wood, 2003:10).

Scoping identifies boundaries for the assessment process. Impacts to be deeply investigated and alternative to be considered are determined during the scoping stage (Coastlearn, undated). The process of PP helps to maximize public knowledge and widens the assessment process boundaries and may promote the proponent and IAP's meaningful collaboration.

2.2.3. Impact Assessment and EIA report preparation

Impacts for a proposed project could range from social, economic, cultural to environmental impacts. The understanding of the whole picture requires shared knowledge from various stakeholders. In most cases EIA process is considered as a

technical exercise that requires expert knowledge. EIA reports are prepared in such a way that they are not user friendly as Lee (2000b) cited in Wood (2003) relates them to PhD theses in terms of their indigestible nature. Both the Impact Assessment process and the outcome are very important in determining meaningful PP (Doelle & Sinclair, 2006). Methodologies applied in the Assessment process need to be suited to the existing conditions (Wood, 2003). Most EIA methodologies are adopted from developed countries with conditions different from those of local. Therefore, it is important for EIA report preparation to consider input from IAPs to not only promote transparency and accountability but also attends to the voices of the minority in the community (World Bank 2006).

2.2.4. Review of EIA Report

At this stage, it is important for the public to be involved to make sure that, their views are put into consideration by the decision-makers before final project authorization. More importantly, it gives IAPs a chance to screen the Environment Impact Study (EIS) report to ensure quality and where possible identify omissions and inaccuracies (Coastlearn undated). It is more likely that with meaningful PP in the review process more informed and sustainable decisions are made. This may promote transparency, accountability and improve public trust in the process that so often results to increased support for the project. Furthermore, it "helps to ensure a higher degree of objectivity by flushing out bias" in the final report (Jolie, 2007:6).

2.2.5. Decision Making

The decision-making stage is formally the responsibility of the competent authority. The IAPs are not actively involved in the final decision-making process. However, in case of meaningful PP, the proponent (competent authority) is required to justify the basis of the decision made to the public and seek public comment on the acceptability of the project

(Bond et al 2004). Failure to ensure effective integration of IAP's views and concerns in the final decision making, usually contribute to unhealthy conflicts during project implementation. This sometimes lead to costly delay to the proponent and at the stream end could culminate into litigation measures by the IAPs.

2.2.6. Monitoring of impacts

Monitoring stage of the EIA process often neglects PP and is considered as a technical and expert based exercise (Doelle & Sinclair 2006; Enserink & Koppenjan, 2007).

However, PP does not actually end with drafting EIA report or at the decision making stage, but "should continue as the project is implemented with the aim of ensuring continuing confidence in the developer" (Coastlearn undated). This could build public trust in the process and a sense of community co-ownership and management of the project. Considering the above stages, meaningful PP at each stage is very vital. A number of authors have identified barriers to effective and meaningful PP in the EIA process.

2.3. Key requirement for, and barriers to effective and meaningful PP in the EIA process

The table below contains a summary of information gathered from literature consulted on EIA and PP highlighting key issues in the EIA process. Table 2 was compiled by the author through the use of a pattern matching technique adopted in this research study as stated in Section 3.5.4.

Table 2: Key elements in the EIA - PP process

Purpose of PP in the EIA	Key elements to effective	Barriers to effective
process	participation	PP in the EIA process
Improve informed decision making	Early involvement of IAPs in the EIA process	Public inadequate access to information
Improve quality and quantity of information	Public access to information	Late public involvement in the EIA process
Improve project design	A transparent process and accountable decisions	Poor communication channels
Minimize or avoid environmental effects	Taking into account the values of the community	The level of PP planning framework and outcomes
Minimize long-term costs and delays	Empowering stakeholders	Level of transparency in the EIA decision-making process
Increase project support	Legal basis for effective participation	Nature of community organization
Build relationships	Guidelines for effective PP	
	PP planning	

2.3.1 Purpose of PP in EIA process

"If the field of PP is to benefit the world as it aspires, it must "mature" as a practice, a profession and a discipline" (Glock-Grueneich & Ross, 2008a:1).

At the core of PP lies the need for the improvement of the quality of decision-making in an EIA process (Fitzpatrick et al 2008; Wood, 2003). However, the purpose of PP can be better understood by exploring the benefits and actual outcomes in EIA (Wood,

2005). Environmental decisions are cross-cutting and impact a large number of stakeholders because the actions of each stakeholder affect other stakeholders. The relationships of stakeholders for environmental management are "intrinsically interconnected" (World Bank 2006:16). Hence, it is important to start by appreciating the fact that dealing with an environmental decision-making process involving a range of IAP's is a complex issue requiring complex approaches that could cover the dynamics of the whole process (Ross & Glock-Grueneich, 2008b). In other words, the absence of this level of complexity in addressing PP in the EIA process has made EIA to remain merely a fulfillment of procedural requirement rather than being a meaningful process for both the decision-makers and IAPs. Therefore, it is correct to say that without appreciation of the above fact, EIA facilitators fail to address PP in all its levels of complexity simply because they have no "method by which to recognize the different levels of complexity in the tasks of public interaction" (Inglis, 2007:3).

The purpose of PP in the EIA process can be summarized as follows:

- Improve quality and quantity of information ,
- Increase informed decision making
- Improve project design
- Minimize or avoid environmental effects
- Minimize long-term costs and delays
- Increase project support
- Build relationships
- Build capacity.

Canada Environmental Assessment Act (CEAA, 2008)

a) Improved Quality and quantity of information

PP is a three way process that requires the flow of information between the proponent and the IAP. Under such circumstance a lot of data and information is generated and

shared among the parties involved in the process. Local knowledge related to project location and some solutions to identified problems are obtained from the local community members. Where and when there is a shortage of data in expert studies, workshops may be held with a selection of experts, representatives of interest groups and "knowledgeable citizens" to ascertain impact measures (Stolp et al, 2002:16). In a transparent and inclusive PP process as such, there is a better chance of getting information of meaningful quality and quantity to help in decision-making (CEAA, 2008).

b) Increase informed decision-making

Environmental decision-making is a complex task that requires input from a wide range of stakeholders (Hartley & Wood, 2005). Meaningful PP in the EIA process incorporates the views of the IAP's in decision-making (Julie, 2007; Fitzpatrick et al 2008; Palerm, 2000; Palerm, 1999a, Palerm, 1999b). Decisions that result from meaningful PP are likely to increase the knowledge base for informed decision-making (CEAA, 2008). Decisions taken on the basis of improved quality information obtained through a transparent and inclusive participation process is likely to receive the support of the general public. The relevant community members are likely to identify themselves with the decisions taken about a particular project in a co-management perspective and, as a result, such a project is likely to result to sustainable outcomes. Enserink & Koppenjan (2007) believe that, public consultation natures meaningful information sharing and as a result better decisions are made and as a result the project outcomes are sustainable due to social acceptance of the project by different stakeholders.

In this way community members view the project through a collaborative lens other than the project being alien to the community.

c) Improve the Project Design

Projects are often designed in the interest of the proponent (Abaza et al, 2004). The participation process of IAPs in the EIA is usually the only opportunity through which the

proponent may note the concerns of other stakeholders. Early participation of IAPs in the EIA makes it possible for likely constraints to the project to be identified if it is implemented in its original design (Wood, 2003). PP also promotes a shared vision between the proponent and the IAPs, and help in providing improvements on the original project design, thus avoiding costly delays that would have been faced during actual implementation (Bond et al, 2004; Purnama, 2003; Soneryd, 2004). At this level, also alternatives can be considered in consultation with interested and affected parties. Therefore, the important economic, environmental and social information collected by experts and IAP's, help to clarify misconceptions and gaps in the available information. PP in this context is most likely to improve project design.

d) Minimize effects to the environment

If different stakeholders effectively share information about a proposed project and integrate their views and ideas, negative environmental effects of the project are likely to be minimized. Meaningful PP in the EIA process tries to ensure that no stone is left unturned in critiquing the environmental impact of the project. It promotes the identification of most of the direct and cumulative environmental and socioeconomic and cultural effects of the projects, and offer alternatives and mitigations which may not have been considered by the project developer (World Bank, 2006).

e) Minimize long-term costs and delays

Early PP in the EIA process minimizes litigation issues that sometimes arise during actual project implementation and contribute to financial losses and unintended delays (Shepherd, 1997; Abaza et al 2004). For example in 2002, the State of the Environment Report developed by the Ministry of Natural Resources and Environment (MoNRE) in Thailand concluded that, "lack of participation from local community and all stakeholders in the early stage of the mega development projects that led to conflicts and protests" (World Bank, 2006:20).

Most of the likely challenges to the project can be identified through the inputs of various stakeholders at early project planning level. However, there is no guarantee that PP will ensure that all likely effects of the proposed project are identified at once. Some effects especially cumulative effects may not be visible at the outset of the project and can be identified at a later stage, especially during actual implementation (Julie, 2007). Nonetheless, meaningful PP lessens the chances of facing delays during actual implementation of the project and enhances project acceptance by the IAPs.

f) Increase project support and minimized conflicts

The seeking of views of the IAPs through-out the EIA process usually increases project support from those involved in the actual process (Purnama, 2003; Julie, 2007; Bond et al, 2004). The degree of success in achieving this depends on the level of participation. The level of participation as explored in Section 2.4 proves that, unless the IAP's views are integrated into decision-making, participation may end up yielding to nothing. Hence, success depends on the development of a shared vision about the project and on the level of conflict resolution in the process (Abaza et al, 2004). Healthy conflicts are vital in any interaction where different parties come together but only healthy conflicts can yield sustainable and meaningful results. Therefore, the project proponent has to make sure that the IAPs get access to sufficient and specifically user-friendly (most appropriately a non-technical report) type of information about the project. Early and meaningful participation of IAPs often contributes in the identification of likely areas of conflict such as economical, social, political, cultural and environmental issues. The way the conflicts are dealt with depends on a number of factors ranging from conflict resolution skills of the proponent and the context under which those conflicts have surfaced.

g) Build relationships

A transparent and inclusive PP process is likely to foster a better relationship between the proponent and the IAPs. However the development of such a relationship requires time and favorable conditions to flourish. The proponent cannot just walk into such a complex interaction process involving different stakeholders with various views and interests on the proposed project and simply establish common ground with them. It may take a few months or years to win public trust depending on the existing circumstances. Favorable conditions for building relationship between the developer and the community members or IAP's may require community groupings that are coherent and stable. These groupings could be in form of trade unions, active community based organization (CBO) among other community groupings. The level of community organization in terms of grouping to have one may generally say is still very week. Therefore, this may require to be improved in context of Rwanda in a long run if the public is to actively participate not only in the EIA process but in all development programs.

It is a process that requires learning and improving relations. Enserink & Koppenjan (2007:10) concluded that an effective PP process will make people "feel more responsible for the project". Thus, meaningful PP fosters a sense of local community co-ownership of the project.

h) Capacity building

A meaningful PP process contributes to capacity building. By participating in the entire EIA process, IAPs are likely to improve on their understanding of the EIA process. This may develop stockholder's confidence and promote a healthy networking with the proponent in order to share skills and knowledge among those engaged in the process (CEAA, 2008). Thus the role of PP in the EIA process cannot be overlooked and should also be viewed as a matter of democratic principle and a human right.

Despite the function of PP in the EIA process as discussed above, PP has continuously been ignored in many countries and where it is applied it is manipulated, lacks transparency and is unplanned (Abaza et al, 2004; Bond et al, 2004; World Bank, 2006; Inglis, 2007). PP in many cases is, 'merely a procedure fulfillment' with pre-determined

decisions (Abaza et al, 2004). This can be identified by the level of PP in the EIA process and the barriers to effective and meaningful participation as discussed in Section 2.3.2.

2.3.2. Key elements that determine effective and meaningful PP in the EIA process.

A number of authors (Bond et al, 2004; Ahmad & Wood, 2002; Wood 2003) have suggested various criterions for analyzing the effectiveness of PP in EIA process. Below are the key elements that could justify an effective and meaningful PP process.

These key elements include;

- Early involvement of IAPs in the EIA process
- Public access to information.
- A transparent process and accountable decisions
- Taking into account the values of the community
- Empowering stakeholders
- Legal basis for effective participation
- Guidelines for effective PP
- PP planning

a) Early involvement of IAP's in the EIA process

Abaza et al, (2004), argues that public involvement in the EIA process "is most beneficial if it occurs at the time of identification" (Abaza et al, 2004:72) in order to integrate the views of the IAPs at all planning and decision-making stages. Early public involvement can ensure reduced unhealthy conflict of interest, costly delays and avoid litigations from occurring. Early involvement does not end with notifying the public about the proposed project per se but needs to be a continual two way flow of information

process and active involvement of the IAPs throughout the entire EIA process. The technical question of identifying who the affected parties are, how and when to involve them?, could be a determining factor for the effectiveness of early PP (Enserink & Koppenjan, 2007; Scottish Parliament, 2004). However, early public involvement alone is not a guarantee for meaningful participation. The project could still encounter cynicism depending on other issues such as the level of transparency, time allocation, accessibility to meaningful information and the level of stakeholder's empowerment (Scottish Parliament, 2004). By contrast from the illustration in Section 2.7, the public is ignored in project identification, screening and partly at scoping level in Rwanda and community input is called for at project review stage. It should be noted that at this stage major decision are already made. PP at this stage can be considered as a form of manipulation with less meaningful outcome from such participation process. This clearly limits the level of PP input in the EIA report since most of the decisions at this stage are already pre-determined in the absence of the IAPs.

b) Public access to information

Access to information is vital for meaningful PP. It is not about just the provision of information but the "provision of key information" (Bond et al, 2004:622) to IAPs. This information could be in the form and context that all stakeholders can understand and be timely to allow IAPs to solicit their views about the proposed development. Provision of timely and user friendly type of information could be in form of non-technical reports. This form of information is likely to yield meaningful PP rather than merely providing information that cannot be digested in a given milieu, especially for rural illiterate community members (Abaza et al, 2004). For instance, the provision of technical reports or questionnaires to local community members in rural areas could limit their level of participation because of the literacy levels.

As Beker (2004) points out in his article on rethinking community based conservation, that information can hardly be perfect and therefore, "the use of imperfect information for management necessitates a close cooperation and risk-sharing" (Bekers, 2004:624).

Access to meaningful and timely information promotes informed public comments on proposed action and the suggested mitigation approaches (Julie, 2007). Public early awareness of the proposed project, their entitlement to participation and early access to not only mere information but digestible to the group in context, promotes meaningful participation (Julie, 2007). In contrary, Abaza, et al, (2004) argues that, there are provisions in the EIA procedures to which under some circumstances may require withholding information from the public. However, Abaza et al (2004) fall short of explaining for such circumstances. Even though those provisions do exist in EIA system, an ideal condition would require the competent authority to justify the reasons for withholding the information to the IAPs and most importantly this could only apply to a few projects and cannot be generalized to all projects.

c) Level of transparency in the process and accountability of decisions

Transparency and accountability in decision-making is not only a requirement for meaningful PP, but also is a sign of egalitarian governance. Meaningful PP increases the level of transparency and this in turn could result in political accountability on the decision made and hence increasing the level of effectiveness (Julie, 2007). Bond et al (2004) warns that, "where decisions are not justified, trust is lost and decisions lose legitimacy...." (Bond, 2004:623) and is a sign of command and control form of governance. However, the level of transparency diminishes when it comes to private sector proponent, due to overriding concomitant to profitability (Abaza, et al, 2004). The private developers focus on maximizing profits at the expense of IAPs. It is the responsibility of the competent authority to defend the voices of the powerless and in this context the community members.

d) Taking into account community values

Accountability to community values is important, and such a complex task to accomplish. Communities are not homogeneous and they attach different values to

different resources in the community (Stolp et al, 2002). The interests range from social, economic, cultural and political values among the community rich and poor. Meaningful and effective PP requires being inclusive in decision-making process, through integrating the views of especially minority affected parties (Bond et al, 2004).

e) Empowering stakeholders

Effective and meaningful PP process can only be viewed based on the level of public influence in the decision-making process. Arnstein's ladder relates stakeholder's empowerment to citizen's power (Lithgow, 2004). At this level of PP in the EIA process, informed decision are made based on shared knowledge. The IAPs are discouraged from participating in the EIA process due to the barriers identified in Section 2.4 and most importantly due to the fact that, the participation exercise is just ceremonial in some cases. In other wards decision are made prior about project location, selection of alternatives and the scope of the EIA process. Under such circumstance PP is merely a way of legitimizing the decision. Meaningful PP requires to be empowering to the public to the extent that the outcome of the EIA PP process should clearly reflect the views and interests of the IAPs. This way, the public could be empowered to a level where they can influence decisions relating to proposed projects in a transparent, accountable and collaborative process.

2.3.3. Legal requirement for PP in the EIA process

PP in decision-making is not only intended to address issues that affect lives of IAPs in the EIA process but it is also a democratic principle (Abaza et al, 2004). The legal basis for PP ensures that decision making process must encompass the views and interests of the IAP's (Enserink & Koppenjan, 2006). Having said this, legal requirements should not be the impetus for meaningful PP; rather it should be based on balanced proponent astute for respecting the interests, concerns and voices of the IAPs. The legal

requirement for PP in EIA process in Rwanda is based on article 63 of the 2005 Organic law as presented in Section 2.7.1. However, having a well documented legal framework that requires PP in EIA process does not guarantee meaningful participation per se, rather it creates a sense of responsibility and accountability, and if effectively executed it may empower the public.

2.3.4. Need for guiding principles for PP in the EIA process

Based on the legal framework, the procedure for PP in the EIA process need to be in place, that is appropriate and flexible to the existing conditions. A competent authority requires drafting guidelines for PP clearly stated but flexible enough to avoid 'one size-fit's all' process that could become a barrier to meaningful participation. Such guidelines are not formally established in Rwandan EIA PP process (Enserink & Koppenjan, 2007). However, even in case of adopted PP procedure is the challenge to the implementing authority to ensure its practical, effective and meaningful outcome.

On one hand, the absence of a criteria for meaningful PP, may create a vacuum for manipulation and cosmetic participation process adopted by project proponent to merely 'have it done' without meaningful public involvement (Doelle & Sinclair, 2006). On the other hand, it should be noted that, having a procedure or a clear criteria for Public involvement in the EIA process is not a panacea for meaningful PP, rather it would limit room for manipulation. In case of Rwanda as discussed in Section 2.4, in the area of procedural requirement for effective PP which, much still needs to be done in terms of strengthening and mainstreaming PP in the EIA process. Meaningful PP process requires planning and willingness of both parties to actively collaborate in an effort to find reasonable solutions to the problem at hand. As pointed out in Section 2.3.5 below, effective and meaningful PP in the EIA process requires planning and effective participation techniques.

2.3.5. PP planning

It is important to understand the planning process that promotes meaningful and effective participation since PP does not take place in a vacuum.

PP planning is a roadmap that underpins the gamut of public involvement, objectives and the intended outcome of the process. It requires to be drawn by the proponent in consultation with IAPs. Planning can play a great deal in reducing the encumbrances that could be encountered without a clear PP planning process (CEAA, 2008). Therefore it depends to the proponent planning skills that can enable a comprehensive and meaningful PP planning process.

The discussion in Section 2.3.1 relating to the purpose of PP in the EIA process and the criteria for analyzing meaningful PP in Section 2.3.2, has formed the lens through which PP in EIA process in Rwanda was investigated and viewed.

Section 2.3.6 below covers the challenges to meaningful and effective PP process in the EIA process.

2.3.6. Barriers to meaningful PP in the EIA process

As discussed in Section 2.3.1 and 2.3.2 respectively, PP is vital in EIA process not only for ensuring informed decision-making but also as a principle of democratic governance. However, despite the good intentions of public involvement in the EIA process, there are formidable barriers to meaningful participation (Diduck & Sinclair, 2002; Enserink B, Koppenjan, 2007; Doelle & Sinclair 2006; Stolp et al, 2002; Ahmad &Wood, 2002; Games-Ochoa, 2006; Furia &Jones, 2000).

Some barriers to meaningful PP in the EIA process originate from the three complex tasks of; identifying who was affected and when and how should the public be involved? (Aschemann, undated; Enserink & Koppenjan 2007). Therefore failure to address who, when and how questions, often creates a barrier to meaningful PP.

The barriers to effective PP are categorized below as:

- The level of transparency in the EIA process
- Public inadequate access to project information
- Inadequate communication channels
- Late public involvement in the EIA process
- Inadequate level of PP planning framework and focused outcomes
- Inadequate community organization

1) The level of PP in the EIA process

The EIA process and the outcome are constrained by the level of participation. Arnsteins (1969) cited in Lithgow (2004) considered three major levels of PP which include; 1) non-participation, 2) degree of tokenism and the last level 3) as citizens power.

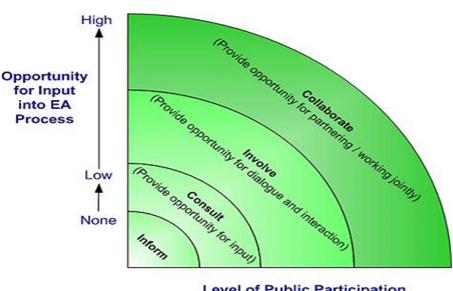
In the first three levels (non-participation and tokenism) of participation Arnstein's relates them to a form of procedure fulfillment but with nothing much to offer to the public since the decisions in most cases are pre-determined before PP is conducted (Enserink & Koppenjan 2007; Abaza et al, 2004; Ahmad & Wood, 2002; Wood 2003).

However, a more current form and focused level of PP in EIA process explored in this study is that suggested by CEAA, (2008). It is important to understand the context under which PP is carried out and the level of PP in order to appreciate the barriers. The level of PP determines public contribution, outcomes, techniques to be applied in the process; it influences timing, resources required and likely benefits from such practice (CEAA, 2008). International Association for PP (IAPP) identified four levels of PP most relevant to EIA process explored in this study. These levels include;

a) Inform,

- b) Consult;
- c) Involve and,
- d) Collaborate.

As presented in the Figure 1 below, the four levels of PP in the EIA process identified by IAPP in 2006 cited in (CEAA, 2008), clarify the differing degree of PP and consequently the nature of outcomes.



Level of Public Participation

Figure 1: The levels of PP in EIA process

Source: Adopted from CEAA, 2008.

These four levels of PP suggested by IAPP are interconnected and are explored below.

a) Inform

Informing IAPs is geared at creating awareness of the proposed project and EIA process. It is achieved through various means including, adverts in the local newspapers, holding meetings, seminars, providing non-technical summary report of the project and through other approaches.

However, much attention in this study goes to context and appropriateness of the approaches used to inform the IAPs. For instance using adverts in the local newspapers in trying to inform the community members based in the rural areas would be an inappropriate approach (Abaza et al, 2004) for awareness creation.

It should also be noted here that, the act of merely informing the public of the proposed project does not ensure meaningful PP (Nieslony 2004; Stolp et al, 2002; Doelle & Sinclair, 2006 and Fitzpatrick et al, 2008). In other wards informing the public is quite different from effectively imploring their views and integrating them into the EIA process in all stages identified in Section 2.2. This calls for a meaningful consultation, involvement and most importantly accountable PP outcomes. Effective PP in the EIA process should "encourage them to participate in the decisions that affect the air they breathe, water they drink, and the quality of the environment in which they live" (Julie, 2007:9). There is need to appreciate the fact that, meaningful PP requires appropriate level of public involvement and is significantly different from the command and control system of decision making.

b) Consultation

Under PP consultation process, the views of the public about the proposed project are solicited ranging from project design, scope, and Impact assessment report, report review, decision-making and monitoring (Soneryd, 2004; Diduck, 2002). Based on proponents report, presentation, proposal, recommendation, the IAP's views are solicited. This is often done through holding public meetings, facilitation, focused group discussion, surveys, and interviews, sometimes request for submission of written comments (Stolp et al, 2002; Palerm, 2000). Consultation is not a barrier to meaningful PP per se rather the appropriateness of the consultation approach employed in relation to the public in context is the issue of concern in this study. In Rwanda consultation generally speaking is ignored hence limiting community input.

c) Involvement

A well planned public involvement process could provide an opportunity for dialogue and trading in ideas (CEAA, 2008). Therefore, at this level of participation communication is improved and it promotes co-management of natural resources in planning and decision-making (Berkes, 2004).

It is likely to promote public understanding of the proposed project and a sense of ownership among local community members. Having said this, mere public involvement without clear channels of meaningful public contribution and influence to the outcome of the participation process does not yield to effective participation. As noted several times above, proponents of development proposals skew public involvement to merely fulfill legal requirement (WWF- Malaysia 2007). Therefore, such public involvement practice often practiced, stymie participation creating a barrier to the process and the outcome. It can be concluded that Public involvement process that does not reflect the interests and concerns of the IAP's in the EIA process can be considered as a failure. These interests and concerns can only be reflected in the outcome of the PP process (Doelle & Sinclair, 2006), where the interests and concerns of the public are integrated in the final decision making about the proposed project.

d) Collaboration

Unlike the three levels discussed (inform, consult and involve) collaboration stage offers a better opportunity for public input into the EA process. PP at collaboration level should be more transparent and providing clear opportunities for IA's contribution and influence to the final decisions. A well planned collaborative PP process could contribute to a three way flow of information, integration of local knowledge into the planning process, and sustainable solution are likely to be defined (Fitzpatrick et al, 2008) as a result. In the light of the discussion above, participation approaches that create opportunities for increased public input in the EIA process at all stages is required (CEAA, 2008). This could enable not only increase public trust in the process, but could end mere informing, cosmetic consultation process to an effective and meaningful active involvement and

collaboration between the IAP's, proponent (developer) and the competent authority (regulator). As indicated in the diagram above, collaboration is the desired outcome of a meaningful PP process. However, in practice it is more challenging for EIA planners to open up for the public to get involved in decision-making and planning to a level of effective collaboration.

2) Public inadequate access to information

Public access to meaningful information is important in ensuring effective participation. IAPs are diverse and are at different levels of information interpretation (Purnama, 2003). Forwarding of a full project technical report to rural community members could be more of a barrier to meaningful participation than achieving the intended outcome. Project proponent that regard the interested and affected parties as a homogenous group create barrier to meaningful PP in the EIA process. For instance advertising the PP plan in the local newspapers in the context of rural stakeholders would be inappropriate channel of making information accessible to the all the interested and affected parties. For instance the number of community members that read newspapers is limited and this is true in Rwandan context. Therefore, there is need to find appropriate techniques to deal with public accessibility to meaningful information.

3) Inadequate communication channels to the targeted public

Answering the three questions of who is affected, how and when to involve IAPs (Enserink & Koppenjan 2007) in EIA process and drafting an inclusive Pubic Participation process as discussed in Section 2.6 is important to understand communication techniques to ensure effective participation. Different stakeholders require different communication techniques. IAP's range from illiterate community members living closer to the location of the proposed project and are those affected directly by the proposed development project (Abaza et al, 2004).

The second category of interested parties may include local and international Non-Governmental Organizations (NGO's) operating in the area. The second group of interested parties is not directly affected by the project implementation impacts, rather are interested in the level of transparency in decision making and in ensuring meaningful PP (Wood, 2003). As the categories of IAP's varies so does the approaches of communication needed for meaningful participation.

So often the directly affected community is ignored and where they are involved the communication channels is a one-way process (Bond et al, 2004 and Soneryd, 2004). For instance community members close to a project site could be illiterate. Therefore, requiring such IAPs to submit written comments about the EIA report, or to contribute under public hiring's could instigate unintended form of intimidation and barrier to meaningful PP. This is one of the challenges to the EIA process in Rwanda.

Communication channels that are appropriate to the local context need to be thought at a planning stage in consultation with the stakeholders prior to the actual exercise. This ensures meaningful and appropriate communication among different stakeholders.

4) Late public involvement in the EIA process

Bond et al (2004), in their investigation of PP in EIA of nuclear power plant decommissioning projects in three European countries that include Germany, Spain, and the United kingdom, concluded that public involvement in the EIA process must take place early in the planning and decision-making process. The need for early public involvement in the EIA process has been explored in depth in Section 2.3.1. Having said this, the public is often ignored at strategic planning stages (Doelle & Sinclair, 2006 and Soneryd, 2004). For instance at the screening level, project review, decision-making and monitoring the IAPs are often left out. Involving the public at latter stage in the EIA process while major decisions have already been made regarding project alternatives, impacts and site selection create a serious barrier to meaningful participation. Similarly in Rwanda as illustrated in Section 2.4 public involvement is ignored at this strategic level. Literature has shown that, there are those who argue that early involvement of

IAPs in the EIA process can be time consuming and costly (Doelle & Sinclair, 2006; Ahmad & Wood, 2002). However, it should be noted that, there is a lot to lose by the developer in case of failure to involve early enough the public in the project designing. For instance any changes that are proposed by the IAP's at a later stage of involvement regarding the project design, in most cases directly affects the proponent not only in terms of costs to changes in the project design but also unintended project delays due to litigation threats to such project by the IAPs. Therefore it is appropriate to involve the public at early stage in the EIA process as it benefits all the interested parties.

5) Inappropriate PP planning framework

Conducting PP process without carefully strategic planning for it can hardly contribute to effective participation by all stakeholders. The eschewing of meaningful PP is partly caused by inadequate planning involving all stakeholders with the aim of constructive outcome of the process (Scottish Parliament, 2004). The inadequate planning contributes to lack of clear objectives regarding which issues are to be addressed, setting the boundaries for meaningful PP and outcome of the process (Doelle & Sinclair, 2006). Barriers to participation are not in most cases adequately understood and so often results in costly project delays or making uninformed decision. The whole picture of EIA process in the context of meaningful PP needs to be mapped out at a strategic planning level as discussed under Section 2.3.5. Without adequate planning, issue such as inadequate allocation of resources to the process, flexibility in the PP process and time constraints result.

6) Nature of community organization structure

Communities are not homogeneous in their organization structures especially in developing countries (Stolp et al, 2002 and Abaza et al, 2004). The approaches to community involvement in EIA process requires flexibility, and must be relevant to the community organization in context. This may help not only to ensure meaningful

participation, but also to give an opportunity to the voices of the minority to be heard. Approaches to PP that are designed in such a way that 'one fits all' are a barrier to meaningful PP. The nature of community organization also determines their level of influence to decision-making. Community structures that are less organized in form of community based organization (CBO), trade unions and other forms of unified community structures are more vulnerable to manipulation and intimidation in the EIA PP process (Dent, personal communication 2008).

2.4. EIA procedure in Rwanda

There has been considerable progress in Environmental Impact Assessment especially in terms of legal and procedural requirement in Rwanda. This is manifested in the evolution of environmental policies, laws, plans and programs and the existence of an institution formally responsible for not only EIA coordination but also environmental monitoring in general. In Rwanda EIA was formally established under the Organic law No 04/2005 of April, 2008 in its article 67 (Organic Law, 2005). The same organic law established Rwanda Environmental Management Authority (REMA) as the competent authority in charge of coordinating all environmental laws based on article 65. Environmental guidelines determining the stages of EIA process and many other ministerial orders have been drafted and ready for cabinet approval (Mashinga, 2007). EIA in Rwanda's Organic Law under article 67 is described as follows:

"Every project shall be subjected to the environmental impact assessment, before obtaining authorization for its implementation. This applies to programs and policies that may affect the environment. An order of the Minister having environment in his or her attributes shall determine the list of projects mentioned in this organic law" (Organic Law, 2005:20).

As shown in figure 2 below, EIA is a step by step process. In Rwanda the first step in the EIA process is the submission of the project brief by the proponent (developer) to REMA to establish if the project is likely to have significant impacts and also to determine the

level of EIA required (Sanyu Consultants, 2006). The next step is the screening process which is carried out by REMA based on the project brief and "... seeking input from appropriate local Governments and other relevant stakeholders" (Sanyu consultants, 2006: 4-10). It can be said that, PP in the EIA process in Rwanda lacks adequate PP input at very strategic stages such as project identification, screening stage and scoping. It is the intention of this research to investigate the level of effectiveness of the current EIA system in integrating PP in decision-making and chapter 4 will explore in detail and establish the level PP in Rwanda. In Rwanda, the screening process helps to categorize projects into three levels. Level one are projects that do not require an EIA process, level three require certain extent of assessment while level three is subjected to full EIA. In case of level three projects the EIA process progress up to step 8 as illustrated in figure 2 below. Further investigation on EIA process in Rwanda is in chapter 4.

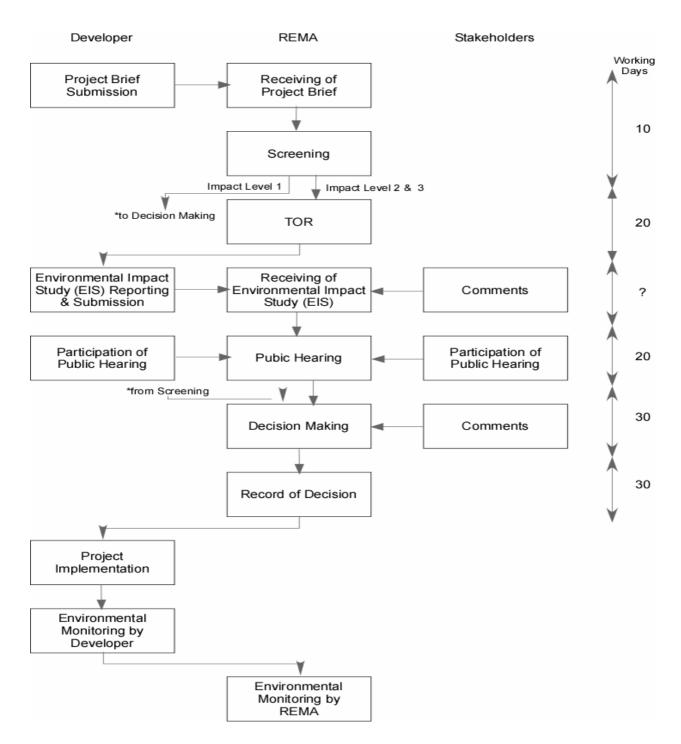


Figure 2: Shows the EIA procedure of Rwanda.

Source: Sanyu Consultants Inc. (2006)

2.4.1. Overview of public involvement in the EIA process in Rwanda

It is clear under Section 3 where the rights and obligations of the public are defined in article 63 of Rwanda's Organic Law of 2005 which states as follows;

- "In environmental management, the population has the right to:
- A free access to sufficient information on environment;
- Be given time to express their views on the environment;
- Representation in decision making organs on environment issues;
- Training, sensitization and access to findings of the research on environment" (Organic Law, 2005:19).

Much as article 63 defines clearly the rights and obligations of the public in EIA process in Rwanda, public involvement in practice has proven a serious challenge to Rwanda. Not only is the public (interested and affected parties) ignored at strategic decisionmaking levels done earlier in the EIA process as discussed in Section 2.2, but also the time allocated for public input at project review stages is undefined. The level of transparency and participation is insufficient for meaningful PP and the current practice enforces the status quo of command and control approach. It is full of manipulation and in appropriate techniques to meaningful PP. Alshuwaikhat (2004) argues that, existence of good EIA guidelines and legislation has not changed the level at which environmental degradation is taking place in developing countries. This is true since good policies and laws on paper without appropriate implementation mechanism are good for nothing. Alshuwaikhat further critiques the process in developing countries as being based on inadequate legislations, organization capacity, and low awareness level, inadequate accessibility to information, experience, political will and donor policy. Similarly in Rwanda the environment continues to be degraded despite the existence of good EIA legislation. Mashinga (2007) points out some challenges to environmental management in Rwanda related to those mentioned by Alshuwaikhat (2004). Mashinga (2007) mentioned challenges to REMA which include; inadequate and inexperienced human 38

resource, inadequate legislation, limited enforcement capacity, low level of awareness and inadequate sector coordination as a key barriers to Rwanda's Environmental Management Authority.

2.5. Case study research requirement

Since this study will include a predominantly case study approach it is considered necessary to review some of the literature on the techniques of studying cases. Case study research relates to intensive investigation of a particular phenomenon (Welman, et al, 2005) and does not specify approaches to be applied.

Case study research helps to understand complex issues. Games – Ochoa (2006) argues that case study research "seeks to achieve a more complex and fuller explanation of phenomena" (Games-Ochoa, 2006:24) hence the adaptation of multiple data collection methods. In this case investigating the effectiveness of PP in EIA process whereby a range of stakeholders are involved is a complex phenomena. Welman, et al. (2005), pointed out some key requirement in case study research as summarized below.

Welman, et al (2005: 126)

- the unit of analysis in a case study research require to be typically a representative of a particular population;
- it does not necessary require to be human, it may also involve documents and records. So often field work is conducted to understand the phenomena in natural circumstance of that case;
- use of participant observation and unstructured interviews to study a chosen case;
- the research requires focusing on recurring patterns and consistent regularities;
- Finally it requires triangulation to discern the patterns. It's therefore important to determine findings in at least three different approaches.

Yin (2003) warns that, case selection is always a difficult step in case study research since it "needs to incorporate the specific reasons why you need a particular group of cases" (Yin, 2003:10). For this case study, the selection of cases was not merely based on convenience rather on accessibility of information; cases that require a mandatory full EIA process, and cases conducted in accordance to the 2005 Organic Law. Several criticisms exist towards case study research that the researcher will endeavor to overcome. Among the often cited criticism of using case studies include, lack of rigor in data collection that often results in biased results (Smith, 2003). By contrast, Smith argues that, bias is not only a challenge to case studies but is also common in quantitative research. Smith (2003) argument can be regarded as generally a defensive response rather than constructive in context. Further still the study cross-checked and draw conclusions from various sources of information through triangulation data collection techniques to establish consistency in the result (Welman et al, 2005). The data collection techniques include, document analysis, questionnaires, interviews, field visits and observation approaches to determine recurring patterns in the three case studies reviewed.

2.5.1. Case study data collection

Case study research does not specify data collection approaches (Welman, et al, 2005, Yin, 2003, Games – Ochoa P. Y, 2006) and this makes case study distinctive from other forms of research that require pre-determined data collection approaches. This allows the researcher to adopt flexible and relevant data collection methods suitable for a particular case study under investigation. Having said that, Welman et al, (2005) points out some key requirements (see Box 1 above) in case study research that deserves attention in order to achieve meaningful results. Yin (2003) warns that, case studies should not use a single source of information rather should be based on multi-sources of evidence. In case of this study, methodological triangulation of data sources was applied that include; literature review, document analysis, interviews, questionnaire and field visits and this allowed collected evidence to be corroborated and where contradicts exist

highlighted. The details and rationale for selecting these data collection methods is explored in chapter 3.

2.5.2. Case study data analysis

Data analysis adopted in this research is qualitative in nature. It should be understood at the outset that, the intention of this research is not in the number of IAP's participants involved in the EIA process per se rather the level of participation and the outcome as discussed in Section, 2.3.1. It involves people's thoughts and interests in EIA process in practice. Yin (1994) defines case study data analysis in four forms which include; examining, categorizing, tabulation and recombining. Yin (1994) further warns that, analyzing case studies is sometimes difficult due to the absence of pre-determined data analysis techniques in case study research. Having said this, Yin (1994) suggested four analytical techniques that can be applied in case studies which include; pattern-matching, explanation-building, time-series analysis and program logic models.

For the data gathering and analysis, the study adopted a triangulation method. This technique confirms the observation by Welman et al that in a case study the main research focus is on recurring patterns and consistence. Therefore cross comparison of data collected to come up with coherent results was achieved in this study using triangulation data collection and pattern matching techniques. Therefore, data and information generated through interviews, questionnaire, observation and document analysis will easily be incorporated into this technique. There are numerous examples of successful applications of the case study research technique (for example, Bond et al, 2004; Soneryd, 2005; Palerm 1999b; Del Furia, 2000) to explore the role of public involvement in EIA process. The study reported in this dissertation explores the how, when, and why question about PP in the context of EIA process in Rwanda. Therefore, it should be remembered that data analysis techniques adopted in any case study research depend on "sufficient presentation of evidence and careful consideration of alternative interpretations" (Yin, 1994:102) and also the investigators own thinking.

2.6 Conclusion.

Literature has shown that PP in EIA process is a complex task. It follows a step by step process that requires a comprehensive planning in advance by the proponent in a timely manner and adequate consultation of the interested and affected parties. According to literature (references), meaningful PP requires early stakeholder involvement, access to information, clear and effective three way communication channels, and should be an empowering process. Literature has also shown that, effective and meaningful PP can be measured against some of the above criteria. A well planned PP process that is transparent, with clear and relevant communication channels to the stakeholders in a particular context can yield meaningful results as discussed in Section 2.2. However, it should be noted here that, a well planned and early involvement of IAPs is not a guarantee for project acceptance by the community. Similarly conflicts may rise at any stage of the EIA process. For a well planned PP process all those uncertainties can be reduced and where they arise could be handled transparently. Success of the PP process requires a comprehensive and complex process that addresses the basic principles mention in Section 2.3. It can be concluded that PP is a step by step learning process that requires flexibility in approaches yet containing some degree of complexity in order to try and address the dynamics of conflicting interests and power imbalances in a systematic perspective.

2.6.1. Chapter Summary

Chapter 2 has covered PP in EIA process from a range of perspectives. The areas covered in chapter 2 include; the purpose of PP in the EIA process, the link between EIA process and PP, levels of PP in the EIA process, barriers to meaningful PP and what makes EIA process meaningful and effective for PP. An overview of the EIA process in Rwanda is also covered. Chapter 2 concludes with a brief discussion on the requirements for case study research. Chapter 3 explores the methodology and research design applied in this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

To investigate the effectiveness of PP in the EIA process in Rwanda, various techniques were used in data collection and analysis to address the four objectives of this study. The techniques adopted in this study include; literature review, questionnaire interviews and review of three case studies. The reasons for choosing case study approach for this study as one of the data collection methodology have been discussed in Chapter 2 Section 2.5. In order to achieve the objectives of this study, the analysis of the cases under investigation was divided into a step by step process. These steps are discussed below followed by the sampling process and the data collection methods applied in this study.

3.2. Overview of the methodology

To understand the broader picture of the methodology adopted and the steps followed in this research range from sample selection, data collection approaches, to data analysis. These steps are discussed below and the challenges of the research methodology adopted were also explored. Three steps, as shown in Figure 3, were followed in the methodologies for this study.

In STEP 1 of the research methodology (Literature review) discussed in chapter 2, the researcher was able to derive a good understanding of what an effective PP process entails while conducting an EIA. Therefore, from establishing the criteria for an effective PP process, the author was able to design a questionnaire. This questionnaire was used to solicit the views of IAPs on the effectiveness of PP in the EIA process in Rwanda.

Information from step 1 below explored in chapter 2 formed the conceptual framework under which this study was conducted. Step 1 also helped to draw together the semi-structured questionnaire that was used to explore the views of IAP's on the effectiveness of the EIA process in Rwanda. Step 2 which covers questionnaire development and data collection has been explored in Section 3.4. Under step 3, interviews were conducted with 6 community representatives selected through snowball and purposive sampling methods as detailed in Section 3.3. This helped to ensure validity and reliability of findings. Step 3 also involved document analysis (specifically EIS reports for the 3 case studies), and open-ended interviews with local community leaders. Based on questionnaire responses, document review and interview results, and the general conclusions on the effectiveness of PP in the EIA process in Rwanda was analyzed. The procedure for analyzing the results is explored in Section 3.5.4. Figure 3, below is an overview of the research design followed in conducting this research.

Literature review Journal Articles, document, reports (requirements for, and barriers to effective PP in the EIA process). Overview of Rwanda EIA procedure Case study research STEP 1 Pilot study Questionnaire Pre-questionnaire interviews with 6 participants (1 consultant, 1 representative of NGOs, 1 REMA staff and 3 local leaders) Questionnaire interview STEP 2 **Interviews** Face to face interviews with respondents in the three case studies Review of the three practical case studies Documentation analysis (EIS reports), field visits, STEP 3 To assess the practical effectiveness of EIA implementation in ensuring meaningful PP (based on the three case studies)

Figure 3: Overview of the Research design

3.3. Data collection methods

As mentioned under Section 3.2 multiple approaches have been adopted for data collection in this research. These approaches used include literature review, case studies review and document analysis, semi-structured questionnaire and open-ended interviews were conducted. These different data collection approaches were adopted in this case study research to enable the researcher to verify results (Yin, 1999 and Welman et al 2005) using various data collection tools and sources.

3.3.1 Literature and document review

Literature was reviewed to broaden the researchers understanding of the issue under investigation. Sources of literature consulted include; journal articles, environmental legislations, government reports and books. A review of the literature helped to address objective one of this study related to requirements for and barriers to meaningful PP in the EIA process in general and also set a scene for investigating the effectiveness of PP in EIA in Rwanda. Literature reviews also helped in the formulation of the research questionnaire and in focusing this study. The formulation of an interview guide, drafting of the questionnaire and the research design were informed by the literature review.

3.3.2 Analysis of EIA documents

The document analysis focus in this study was on documents that related to the three case studies outlined in Chapter 4. It should be noted that the documents analyzed in this study are limited to Environmental Impact Assessment (EIA) reports of the three case studies. This helped to establish the background to the three case studies reviewed and the chronology of events in the EIA PP process. The pros, cons and the outcome of the three case studies in relation to participation of IAPs and the detailed

discussion about three cases studies is in chapter 4. The Rwanda environmental law was consulted to understand the context under which EIA is required to be conducted in relation to participation of IAP's using the three case studies. The information obtained through document analysis will build on other data and information obtained through questionnaire and open ended interviews.

3.4. Sampling method applied

The sampling procedures adopted for this study were applied in the all three case studies. These procedures included the selection of the three practical EIA cases to be studied and selection of the interviewees (IAP's). To ensure collection of useful information and case specific for PP in the EIA process, purposive and snowball pilot sampling procedures were adopted in this research. The three case studies were purposively selected, and so were the IAP's. In order to get the overall picture of the key knowledgeable respondents, and compare the participants understanding of the questionnaire designed (see 3.4), a pilot sample of 6 participants contacted. The sample included, 1 consultant, 1 representative of NGO, 1 REMA staff, and 3 local leaders) was conducted. This pilot sampling exercise added much value to the questionnaire formulation and sample selection for the full study.

The selection of the three practical case studies was based on the following criteria:-

- Accessibility and availability of data and information required to investigate the case study
- Must be subjected to mandatory EIA;
- Conducted in accordance to the EIA requirement of the 2005 Rwanda Environmental Law:
- Required to involve PP in the EIA process.

The criteria set above guided the selection of three cases which met these criterions, and the three practical case studies selected for investigation are;

I. Agro-processing plant (Inyange Industries)

- II. Free Trade Zone,
- III. 20 MW Thermal Power Plant(Jabana)

The three case studies selected fulfill these criteria and helps to answer the research objectives stated in chapter 1 under Section 1.5.

The sample size for the study at hand was determined by a number of factors which include time and resource constraint. Therefore to investigate the views of IAPs on the effectiveness of the current EIA process and PP a representative sample was selected. Through purposive and snowball sampling a limited but effective representation of IAP's in the EIA process in the three case studies was selected. These representatives range from organizations that include; three NGO's, three consultancy firms, government institutions, and local community leaders (representatives) as summarized in table 3 below.

Table 3: Participating organizations and number of respondents

	Participating organizations	Number of respondents
1	Consultancy firms	2
2	NGO's	2
3	Government Institutions	2
4	Local Community leaders	6
5	REMA staff	2
	Total	14

As illustrated in the table above, Consultancy firms, NGO's, Government institutions and REMA in particular, each contributed two respondents, while local community representatives (leaders) were six participants. This criterion determined the sample size

(14 respondents) as identified in table 3 above. The researcher is fully aware of the argument advanced by Welman et al (2005) that a larger sample size results into few errors and also too small a sample size is likely to pose specific problems in the validity and credibility of the research outcome. However, this does not apply under this research. It should be born in mind here that, the nature of the research at hand focused on seeking understanding not statistical proof and therefore sample size in this case study was less important. The depth of understanding in this study was of much interest in this research. However, the researcher is also fully aware that a purposive sample does not necessarily result in a representative sample.

3.4.1. Questionnaire

To explore the views of interested and affected parties, a questionnaire-based interview was completed. For this study, the questionnaire technique was used as it enabled the researcher to gain in-depth information from purposely selected participants. In order to maximize the response rate from the selected sample, closed questions with a range of pre-given answers were used. Pre-given answers in a questionnaire make an impression that the questionnaire is simple to complete and may encourage the respondent to complete it (Denscombe; 1998). Whereas questionnaires which are lengthy and contain many open ended questions may limit the response rate. The questionnaire was administered through a face to face interview with selected respondents. However, to gain in-depth information from the interview participants some open-ended questions were included in the questionnaire. This allowed the respondents to give deeper explanations and views on various issues related to current PP in the EIA process in Rwanda. This enabled the researcher to gain in-depth information from the respondents through using both pre-given answers and open-ended questions in the questionnaire interviews.

In consideration of financial and time constraints, the participants were selected to be 14 potential interviewees' in this study. These participants were then telephoned and asked if they would participate in the study. The majorities of selected participants agreed to take part and were consequently approached and the researcher explained to them the overall research objective and the questionnaire (Appendix 1) was completed afterwards. The second thing to consider was the nature of the questionnaire to be used in this research.

The questionnaire was then pre-tested through a pilot study that involved five interviewees to check its usefulness, if the participants understand the questions it contains before being sent to all respondents. A time frame of four weeks was set before data analysis would begin in order to include the input from the pilot study.

3.4.2. Semi-Structured Questionnaire

In order to explore the views of IAP's on the effectiveness of PP in EIA process, a semi-structured questionnaire was compiled. A semi-structured questionnaire was developed and used to solicit the views of IAP's grouped in this study as Consultancy organizations, NGOs, Government departments, REMA and Funding agencies. The researcher tested the questionnaire to check its usefulness and understandability before sending it to all respondents using a minimum of one respondent from each organization as a pilot study. The respondents in the pilot study were consulted by the researcher during questionnaire pre-testing as stated in Section 3.4 under step 2 of the research design. The researcher was aiming at anticipating attitudes towards the questionnaire to know whether the respondents understand the questionnaire and to eliminate ambiguous questions, which could create bias in responses. This provided an opportunity to integrate interested and affected parties views into the designing and development of the questionnaire. The organizations which participated in this study have been mentioned in Section 3.4 under table 3. Each organization in the four categories was represented by two respondents while the local communities had six.

Therefore, 14 representatives from the five groups formed the sample size for the questionnaire interview. The representatives were purposively selected, basing on their knowledge and position in the context of their organizations, and role or interest in EIA and PP process.

3.4.3. Open-ended questions

Yin (1994:85) identifies interviews as one of the most important sources of information in conducting case studies. He emphasizes that "interviews are an essential source of case study evidence". Case study interviews should ideally be open-ended in nature to allow the researcher to seek the respondent's views and their perspectives on the issues under investigation (Yin, 2003). In other words a combination of data collection approaches were adopted in this research to ensure validity and usefulness of findings and as this is considered to be important by various researchers (Welman, et al, 2005; Yin, 2003 and Yin, 1994) in case study research. The other reason for using openended questions in this study was to explicitly gather more in depth information from community representatives where the three EIA practical case studies selected are based. This helped the interview participants to express their views in a more detail.

3.4.4. Data analysis

Pattern matching (Yin, 1994) is the technique for data analysis that was adopted in this research. The analysis allows comparison of empirical data collected using multiple techniques through examining, categorizing, tabulation and recombining (Yin, 1994) evidence collected with desirable attributes predicated in theory.

As mentioned above, this study adopted multiple approaches in data collection, and pattern matching in data analysis. Therefore, various instruments were used in data collection and analysis. These instruments include; literature review, document analysis,

semi-structured questionnaire interview guide that combined both close and open-ended questions as discussed in Sections 3.4.3 and 3.4.3.1 respectively. The method of data analysis adopted in this research is a qualitative in nature as was briefly discussed in chapter 2.

Chapter 4 investigates the three case studies. It starts by introducing each case study, its background, and then proceeds to the role of PP in the EIA process in Rwanda. Chapter 4 further investigates the level of participation and lessons drawn for each case study. Chapter 5 proceeds with an analysis and interpretation of the results based on the main aspects of the three case studies and the views of IAP's in response to the semi-structured questionnaire. The information collected through the use of semi-structured questionnaires, case study investigation and document analysis then formed the basis for drawing conclusions and recommendations in chapter 6.

3.4.5. Challenges faced in planning this research design

The key challenge in planning this research was the identification of a comprehensive data collection and analysis technique appropriate for this study. Case study research data analysis is complex since it adopts multiple sources of evidence as is the case in this study. The challenge of data analysis was overcome by adopting a multiple data collection and pattern matching analysis techniques as discussed in Sections 3.2, 3.3, and 3.4 respectively. This researcher recognizes that no statistical analysis was applied as the study's primary purpose was to develop an understanding of the factors influencing effectiveness of public participation in EIA implementation processes in Rwanda..

CHAPTER FOUR

PRESENTATION OF THE THREE PRACTICAL CASE STUDIES

This chapter presents a description of the three case studies and the results. The investigation of the three case studies responds to the research objective two (2) of this study in Section 1.5. The information in this chapter is presented in the form of chronology of events.

The data was grouped into two covering description of cases and presentation of issues identified in each case. This chapter is divided into these two main Sections:

- Description of case by case (Project under investigation)
- Presentation of the issues identified in each of the three case studies through chronological pattern matching of events.

4.1. Investigation of the three cases

To study the effectiveness of PP in the EIA process in Rwanda, case studies were selected that: (1) required PP and full EIA process recommended; (2) were potentially controversial, in order to assess the different levels of public involvement; (3) were of national interest (REMA) to study and look at actors at different levels in order to investigate the interaction of actors under different mechanism and modes of participation.

The EIA case studies selected and their EIA requirements are listed in Table 4 below.

Information on the three case studies investigated in this study is drawn from EIA report reviews, as well as interviews with stakeholders involved the three case studies and local community representatives in the vicinity of the project area.

Table 4: Selected Case Studies and EIA requirement

Case study	EIA requirement	Level of EIA requirement
Agro-processing plant	Organic Law	
Kigali Free zone	Organic law 2005 No. 04/2005	Full EIA
Urgent Electricity Rehabilitation Project	Organic law & World Bank requirement	

As indicated in table 4 all the three selected case studies required a mandatory full EIA to be conducted. The main actors in this study were identified and listed in table 5 below. The processes of participation by different actors were explored while investigating the aspects that encouraged or inhibited meaningful participation. The responses from the participants was very valuable since the respondents were selected based on their interests, objectives and their required engagement in the EIA process. The data collection methodology adopted in this research, was flexible enough to allow gathering information from various sources as discussed in Chapter 3.

4.2. Case study 1: agro-processing plant at masaka- kigali

4.2.1 Description of the project

Inyange Industries Limited (Ltd) began its formal operations in 1999 (Inyange EIA report SGS, 2007). The Inyange Industries is engaged in processing and marketing of a variety of dairy, fruit and juice based products (Inyange EIA Report SGS, 2007).

The expanding market demand for Inyange industries products can be related to population growth of Kigali City over the past decade and rural-to urban migration (Inyange Industries EIA Report, SGS (2007) and this demand is also increasing not only in Kigali City but country wide. To satisfy this increasing demand it became necessary

for Inyange industries to expand both the production capacity in terms of quantity and quality of products (Inyange Industries EIA Report, SGS, 2007). The main actors for the case study are listed in table 5.

Table 5: Main Actors for Case Study 1: Agro-processing plant

Developer	Inyange Industries s.a.r.l
Consultant	SGS Kenya Ltd
Competent Authority	Rwanda Environmental Management Authority (REMA)
	Rusororo Sector in Gasabo District
Affected local authorities	Masaka Village (Umudugudu)
	Masaka Sector in Kicukiro District to the South
	Runyonza Village (Umudugudu

The project site is located 19km east of Kigali City centre close to the proposed Kigali Free Trade Zone. The site is close to the main highway from Kigali to Kagitumba border between Rwanda and Uganda. Administratively the site is located within Rusororo Sector in Gasabo District and borders Masaka Sector of Kicukiro District to the South (Inyange Industries EIA Report, SGS, 2007). The site previously used to be a factory producing roofing materials from papyrus reeds. At the time of its purchase in 2005 through public auctioning only the remains of the concrete floor and roof structure existed (Inyange Industries EIA Report, SGS, 2007).

The proposed area for Inyange Industrial development covers approximately 3.25 acres, while the land use around the site is predominantly agricultural with a small settlement area across the road to the north of the site. However currently there is a growing

residential development in the vicinity of the project site for instance real contractors Construction Company are establishing a medium income estate right opposite to the project site. This is a indication that the area will most probably be occupied by residential areas in the next few years.

4.2.2 Main Aspects in the EIA process for Agro-processing plant

Inyange agro-processing plant belongs to this category of Projects that require mandatory full EIA to be conducted as stated in the environmental law Number, 04/2005. It was therefore necessary to carry out a full EIA study for the agro-processing plant in order to identify and mitigate possible negative impacts to the environment that could result from the construction of the agro-processing factory in the area. However, it is important to not that the introduction of the new industry in the area would consequently have significant socio-economic and environmental impacts that could either be positive or negative both in the short term and long-run perspective.

The EIA process was guided by the terms of reference (ToRs) reviewed and approved by REMA. By February 2007, initial negotiations with REMA and key informants in the Project were held (Inyange EIA Report, 2007). Early explorations of the project area were conducted in order to establish baseline information and by mid-April 2007. A detailed impact assessment was undertaken, to investigate the potential adverse and beneficial impacts of the proposed project in the area.

4.2.3 Role of PP in the EIA process: Agro-processing Plant

Though not well articulated, how the IAP's should be effectively engaged in the EIA preparation process, PP is a requirement in conducting an EIA study in Rwanda. Therefore in order to fulfill this requirement a public consultation meeting was held on 17th April 2007. In this meeting the local community members were informed about the proposed development. The meeting was convened and chaired by REMA

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representative (Mr. Remy Dusabe) and co-chaired by the representative from Gasabo District. The minutes for the public consultation meeting indicate that, the meeting was attended by representatives from;

- Inyange industries
- REMA
- Rusororo Sector
- Gasabo District
- EIA Consultant (SGS)
- Village Chief (Umudugudu) Masaka
- Village Chief (Umudugudu) Runyonza and;
- Approximately 400 community members from the surrounding villages.

In this meeting among the concerns raised by local population centered mostly on how the local community members could access jobs from the new industry and only one individual from the community questioned the way the new industry would manage the factory effluents. In response to these questions the EIA consultant assured the local community that the project would give first priority to residents in the area. On the issue of waste management, the EIA consultant that conducted the study respondent that a detailed waste management plan, that would include the treatment, proper storage and disposal was developed for the proposed project. However this waste management plan was not discussed in detail in this meeting.

4.3. Case study 2: Kigali Free Trade Zone (KFTZ)

4.3.1 Description of the Project

The strategic central location of Rwanda in East and Central Africa provides a potential for economic and social hub for the neighboring countries and to the Rwandan economy more directly (EIA report, 2007). This zone according to the EIS report is expected to foster trade, offer basic service chain and extend relevant linkages and product demand

in the East African region in general. The development of this free trade zone is considered by Rwanda Investment and Export Promotion Agency (RIEPA) as an opportunity to boost and facilitate investment and export promotion. The site for the proposed FTZ is located in the Munini area in Gasabo district on the eastern side of Kigali city. This area is characterized by banana plantations, seasonal cultivation of beans, vegetables, cassava, sweet potatoes and planted reeds for fodder. The natives of this land were compensated and shifted to country side. The larger portion of the project area falls under Kigali city local administration.

RIEPA has a mandate of providing basic services to the free zone that include access roads, power, water, parking lots ready plots and buildings ready for potential investors (EIA report, 2007). The total area to be occupied by the free trade zone under this study is about 90 hectares which was developed in portions of 38ha for phase 1, and phase 2 with (52ha.) divided into 37ha, and 15ha respectively. However, according to the Director General of Rwanda Investment Group (RIG) Mr. Fiacre Birasa the majority shareholders with over 75 percent and 25 percent for the Government of Rwanda (GoR) states that the FTZ currently occupies 100 hectares of surface area. This shows an over 10 hectares more than those indicted in the 2004 and 2007 EIA studies.

Rwanda's Environmental Organic law No, 04/2005, requires that all new development plans, programs, policies and projects be subjected EIA process. It is in this respect that RIEPA tasked an EIA consultant (SGS) to conduct an EIA for proposed Kigali Free trade zone project. The EIA was finalized in 2007.

According to (Rugege, 2004) EIA first Draft and the final EIA reports for the proposed Free Trade and Export Processing Zone indicate that, the project will consist of two categories of heavy and light industries. The need by the Government of Rwanda to attain the objectives set up in the countries vision 2020 development goals encouraged the Ministry of Commerce, Industry, Investment Promotion, Tourism and Cooperatives (MINICOM) to initiate an idea of establishing Kigali Free Trade Zone (KFTZ). The establishment of the Free trade zone at Munini and Masoro area required re-location and compensation to over 524 families that comprise approximately 2620 people. Through its executing body, Rwanda Investment and Export Promotion Agency

(RIEPA), MINICOM intends to establish the Free Trade and Export processing zone site for the investors (Rugege, 2004a). This free Trade Zones will basically be a zoned area for industrial development in Rwanda with all basic infrastructure requirements in place.

The Country's vision 2020 is focused on the need to create alternative jobs besides substance agriculture and the environment is strongly considered as one of the major cross-cutting issues that need to be addressed in all development decision-making. Practically speaking one way of attaining this vision, the Free Trade zone is a great hope towards job creation and offering alternative to unskilled labor in Rwanda. Jobs were expected to result from industrial development (during construction and operation), construction of road networks in the project site, and the construction of housing estates for the employees in the Industrial zone. Socio-economically the development of the area through the construction of industries would lead to creation of new opportunities in-terms of markets for agricultural products, art and crafts sale in the area. Some progress has been made towards making the dream come true for the establishment of the FTZ. Notable achievement by 2009 includes; the approval of the EIA report by REMA, construction of feeder roads in the project site, launch of the physical and engineering studies. All these positive steps should build confidence in the investors to commit money. However this is not currently the case on the ground.

The project was based on the assumption that it would have to create over 1500 jobs directly and indirectly during construction phase and the financial turnover of US \$ 24 million annually during construction phase of 2-3 years (Rugege, 2004a). However, only 10 percent of the expected investors who had earlier shown interest (pre-booking) in the KTFZ have bought plots of land for investment, according to Rwanda Investment Group (RIG). RIG is a consortium of local investors that partnered government to introduce the industrial park. The project had earlier in 2004 received 81 interested investors. The poor investor's turn-up is attributed to the economic crisis.

Table 6: Main Actors for Case Study 2: Kigali Free Trade and Export processing

Developer	RIEPA
Consultant	CAPE Consultant Ltd
Competent Environmental Authority	Rwanda Environmental Management Authority (REMA)
Main Stakeholders	Ministry of Natural resources
	Ministry of Infrastructure
	Kigali City Council
Affected local community	Munini and Masoro hills residents
	Gasabo District

4.3.2 Main Aspects in the EIA process for Kigali Free Trade Zone

The Environment Impact Assessment (EIA) for Kigali Free Trade Zone began in June 2004 and the final report approved by REMA in October 2009. It started with the signing of a contract between RIEPA and the Independent consultant (Dr Rugege), intended to carry out an EIA. The end result was to advise RIEPA the appropriateness of the site for the establishment of the Free trade zone (Rugege 2004a). The initial EIA report conducted in 2004 by an independent consultant (Rugege, 2004a) concluded that;

- It was necessary to carryout property valuation and compensation arranged in preparation for relocation of families from Munini, Masoro and Ndera proposed FTZ development area.
- No industrial development should proceed in Nyandungu and Kabagenda valleys.
- > Employment for the Free Trade and Export Zones should be drawn from the local community where possible.

The conclusions of the EIA report conducted in 2004 were not definitive in determining the commencement of the actual construction process of the Free Trade zone. This was identified by the consultant to be a result of gaps in the information that was available to the consultant for a comprehensive analysis. The consultant that conducted the study pointed out the absence of a proposal document or a master business plan for the proposed Free Trade and Export processing zones development (Rugege 2004a)., This was a major limitation to the consultant in-terms of considering the nature of industrial activities to be carried-out and their potential impacts (Rugege, 2004b). Important issues in this case study concerning phasing of development, description of machinery, output volume and concentration of effluents, emissions and by-products, source and volume of raw-material among other critical issues that required a detailed investigation was not available to the consultant due to the absence of the business plan.

Unfortunately these critical issues were ignored right from the preparation of the first EIA draft report in 2004 to the final EIA investigations in 2007. In analyzing the EIA draft report conduct in 2004 by an independent consultant and the consequent final EIA conducted in 2007, both reports in general terms mentions public consultation in the EIA process. However, no consultative meeting was held to bring together the interested and affected parties.

4.3.3 Role of PP in the EIA process for case study 2

PP in the EIA process was generally mentioned in this case study without any record of a consultation meeting held. Therefore, it can be argued that, mere mentioning of PP in the EIA process without a clear record of public involvement in practice is untrue statement and can be considered as a form of process manipulation.

The final EIA report compiled in 2007 (Inyange EIA Report SGS, 2007) justifies the absence of PP in the EIA process of FTZ. It argues that prior to the EIA; the occupants of the land had already been compensated and moved to alternative settlements. The

report further justifies the absence of public involvement in a sense that since the occupants had been already compensated and moved to alternative places their input in the EIA process was found unnecessary (Inyange EIA Report SGS, 2007). However, there are other community members in the project area that could have been involved. This was necessary despite the fact that, the way the actual occupants were evacuated was not recorded in the EIA report. However community members interviewed mentioned that their land was undervalued and as a result they were paid less than the actual land value at the market at the time. According to the EIA draft report conducted in 2004, (Rugege, 2004a) for the proposed FTZ, categorized affected community members as: "cattle grazers, stream/pond water utilization or laundry and cooking, stream/pond water utilization for car/motorcycle wash, permanent home owners, subsistence farmers and local community" (Rugege, 2004). Most of these affected community members lived in the vicinity of the project site and they were neither involved, nor consulted in the entire EIA process.

4.4. Case study 3: 20 megawatts thermal power plant at Jabana

Background

Urgent Electricity Rehabilitation Project (UERP) is a project funded by World Bank/International Development Association (IDA) to construct a 20 MW thermal power plant. This initiative was intended to curb the power crisis experienced in the country. The power crisis escalated as a result of draining of Rugezi wetland for rice growing. The Rugezi wetland acts as the water shed for Rugezi Main River the source of hydropower generation that supply 70% of the electricity used in country (PEI, 2006). As a solution to the power shortage facing the country, World Bank granted the Rwandan Government a loan to implement an urgent electricity rehabilitation project.

Therefore, in compliancy with the World Bank and Rwanda's policies and regulations, an Environmental Impact Assessment and Environmental Management plan for the proposed 20 MW thermal power project were mandatory before the commencement of

this project. Just like any other EIA process, PP and consultation was mandatory for this project.

4.4.1 Description of the Project

Initial surveys for the project location began in 2006 (Kodiaga, 2007) and the first site was identified close to the Jabana power plant 1. Later due to technical and administrative challenges another alternative site was identified 1.2km from the existing Jabana 1 substation along the Kigali–Byumba-Gatuna road. The project required identification of the suitable site for the plant, compensation of the landowners, and the land would be cleared for construction to install diesel engines to generate electricity. These generators would be connected through installation of a 110 Kv transmission line from the plant to the existing national grid following interconnectivity to Jabana substation (Kodiaga, 2007). The project required approximately 3.59 ha. Including the land area for installing the plant, engine hall, control building and fuel handling house all required for the 20 MW thermal power plant.

The new site identified as suitable for the project was found to have three houses/structures in the immediate surroundings. This required a resettlement plan before the actual construction. These three house-holds which initially were the actual land lords had already sold the land and had been compensated by Home of Hope Rwanda a faith based organization that currently owns the land.

4.4.2 Main Aspects of the EIA process for 20 MW power plant

In 2006 Urgent Electricity Rehabilitation Project (UERP) through Electrogaz and Ministry of Infrastructure began searching for a suitable site to locate the 20 MW thermal Power plant. By September 2007 UERP and Electrogaz through their contractor (WARTSILA) had begun the excavation exercise at Jabana 1 sub-way (Kodiaga 2007). This was intended to extend on the existing thermal power plant. However, the progress of this project came to an end due to two major reasons (Kodiaga, 2007). First of all, the

Contractor (WARTSILA), UERP and Electrogaz realized during the implementation phase the challenge of soil softness. Therefore this would necessitate the contractor to excavate much deeper and extensive filling than initially anticipated to establish a stable base that was required. This of course meant increased cost of the project that was not budgeted for in the World Bank/ International Development Association (IDA) allocated loan (Kodiaga, 2007).

In addition to that, another dimension of the problem was based on the conflicting interests between REMA and UERP. This conflict of interest was purely based on social issues in terms of project location suitability. According to REMA, the first site that was considered as suitable for the 20 MW Thermal Power Plant by UERP was inappropriate due to its strategic location. The first argument by REMA was that the site was too close to Nyabugogo wetland and this posed danger of potential contamination of the river. Scondly, its proximity to the existing oil depot (Mashinga 2008 person com.) was viewed by REMA as risky site for such development. Thirdly, the site is also next to Kigali-Byumba highway, a busy road with heavy vehicles heading to and from Uganda. It was based on these arguments that REMA had not approved the EIA report considering the site as a poor choice for such a sensitive project.

In relation to the above challenges, it was necessary for UERP and Electrogaz to search for an alternative site for the project. Based on consensus, REMA had proposed early in 2006 for the project to be located 1.2km from the existing Jabana substation site as an ideal location for the project with less possible risks. REMA considered the site appropriate for the proposed project (EIA Report for Thermal Power Plant, 2007)

4.4.3 Role of PP in the EIA process for case study 3

Based on the EIA report for the proposed construction of the 20 MW thermal Power Plant, the project financed by World Bank/IDA loan of this nature is grouped in category B of the World Bank Operation Procedures (O.P) out of the three (A, B, C) categories.

According to operational procedures 4.01 of the World Bank classifies proposed projects into one of the three categories, depending on type, location, sensitivity and scale of the

project and the nature and magnitude of its potential environmental impacts; A proposed project is classified as category "A" if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. For category "B" are projects with potential adverse environmental impacts on human population or environmentally important areas that include wetlands; forests, grasslands and other habitants and are less diverse than those in category "A" projects. These impacts are site-specific; fewer and in most cases can be mitigated. While category "C" are projects likely to have minimal or no adverse environmental impacts and only screening is required for these types of projects with no further EIA. According to World Bank funded project requirements, for all category A and B projects proposed for International Development Assistance (IDA) financing, the interested and the affected groups have to be consulted in the EIA process by the borrower. This also includes the local nongovernmental organizations (NGOs) and takes their views into consideration. The stakeholders and affected parties that required not only to be consulted but to also actively and meaningfully be involved in the EIA process of the 20 MW Thermal Power plant are listed in table 7. This is the responsibility of the borrower, Rwandan Government, to initiate this consultation process as early as possible (World Bank, 2007). Further still, it is a requirement by the World Bank/IDA funded projects to ensure meaningful consultation between the IAPs and the developer while fulfilling World Bank procedure requirement. This applies to all category A and B projects proposed for funding by the World Bank in which the developer (borrower) provides relevant information material in a timely manner to the interested and affected parties. This is required to be done prior to the consultation in form and language understandable and accessible to the groups being consulted (World Bank, 2007). Table 7 below, contains a list of main actors for case study 3. Table 7 was complied as a result of document review of the EIS report for the 20 MW power plant and conducting field visits and interviews.

Table 7: Main Actors for Case Study 3: 20 MW Power Plant

Developer	UERP/Electrogaz
Consultant	WARTSILA
Competent Environmental Authority	Rwanda Environmental Management Authority (REMA)
Stakeholders	Ministry of Infrastructure
	Gasabo District
Affected local community	Jabana Sector

In reference to the technical and procedural requirement for PP in the EIA process by the World Bank/IDA financed projects, the 20 MW thermal Power project required public involvement and input at all stages. Based on Rwanda's EIA requirement, PP was mandatory for the 20 MW Thermal Power Project. In the EIA report for the power plant, there exists an attempt to document the PP process to a limited extend where the minutes of meetings held with those identified in the EIA report as affected community members.

As mentioned in the EIA report, a stakeholder mapping exercise was undertaken during the scoping exercise focused on identifying IAPs to the project (Kodiaga, 2007). It is also argued in the same report that, after identifying all IAPs to the project "a gleaning exercise was undertaken by the consultant in collaboration with the developer and the representative of the local authority to exclude those who would not be impacted both positively and adversely" (Kodiaga, 2007:16). Little is mentioned by the consultant in the EIA report about the actual stakeholders identified during mapping exercise and scoping. The information related to IAP's consultation and the decision making on the gleaning process, to identify and exclude some participate was not transparent.

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CHAPTER FIVE

ANALYSIS AND INTERPRETATION OF RESULTS

5.1. Introduction

Chapter 4 presented the three case studies investigated in this research. Chapter 5 entails a detailed analysis, and interpretation of the results of this research. The analysis is guided by the objectives of this research stated in chapter 1 Section 1.5. In analyzing and interpreting the results in this chapter, appropriate reference to literature reviewed in Chapter 2 has been made to assist in formulating findings. As presented in chapter 3 under Section 3.4.5, the data analysis technique adopted in this study is a case study analysis. The case study approach examines, categorizes, and recombines (Yin, 1994) collected data and information.

This chapter is divided into the following two sections:

- The first section identifies barriers to effective PP in the EIA implementation process in Rwanda;
- The second section, analyses the views of IAP's interviewed on the effectiveness of PP in EIA process;

Two sections of this chapter cover two objectives of this study out of the four listed in Section 1.5. The second objective of this study listed in Section 1.5 was addressed in chapter 4. The fourth objective of this study, regarding the future of PP in the EIA process, is explored in Chapter 6 Section 6.4.

The analysis and interpretation of the research results are presented both in text and table format.

5.2. Barriers to effective PP in the EIA process

The requirement for public involvement is stipulated in the 2005 Rwanda Environment law. In practice it requires public input at several stages of the EIA process as noted in Section 2.2. This also requires that, the public get access to non technical reports of the proposed project early enough to digest what is contained in the project document so as to effectively participate in the EIA process from an informed perspective. This could also help the IAPs to be sensitive of the decision to be made about the fate of the proposed project and could possibly reduce conflicts and strengthen consensus building between different stakeholders.

Views from the IAPs in Rwanda indicate that the requirement for PP in the EIA process is seldom properly implemented. In practice, there is inadequate enforcement of the legal requirement stated in the EIA flow chart of Rwanda to ensure public input in the process. As a result, the current EIA process in Rwanda has shows what is widely regarded in literature consulted as a process merely done to fulfill the procedure requirement with little or no public input (Bond et al, 2004). The underlying barriers to participation that lead to this being the case include; lack of political will to involve the IAPs in decision-making process, and the absence of an active civil society grouping to defend the interests of the vulnerable community members.

The IAPs in the three cases studied, were found to be powerless in the EIA process as they do not get access to information. In cases where the public endeavor to participate, consultation was done to merely inform the public of the proposed developed in form of a one way information flow without feedbacks. Relevant examples of lack of public involvement in the EIA process evident in the three case studies reviewed in chapter 4. For instance in the case of FTZ whereby no one was consulted or involved in the entire EIA process as far as the IAP's participation was concerned (See table 8). It was a purely a two party business involving the developer (RIEPA) and the authority (REMA).

In cases where the IAPs were involved, unfortunately as noted in the three case studies reviewed, it was always late in the EIA process when the EIS report has already been

prepared and where most sensitive decisions had been made as indicated in table 8 and 9 respectively. Decisions related to project site location, selection of alternatives and identification of mitigation measures were made prior to public involvement. This was the barrier clearly manifested in the Agro-processing project (Masaka). It should be noted that at this stage major decision are already made. Consulting the Public stakeholders with pre-determined major decisions on the proposed development including site selection can be considered as a form of manipulation. This level of public involvement leads to less meaningful outcome (Koppenjan, 2007; Bond et al, 2004) from such a participation process. This clearly limits the level of PP input in the EIA report preparation.

Early PP is meant to give all stakeholders an opportunity to raise their concerns at a point where stakeholders input can influence the overall outcomes (Bond et al, 2004). This could enable the public to look at the impact to the environment of a proposed development project in a broader sense so as to include a number of social dimensions. It should not be seen or used as merely a trivial procedural step that can be glossed over and abused, as it looks to have been the case in the three case studies investigated. This means that, there are clearly formalized procedures that are abused and ignored in the EIA process which require to be applied effectively in order to achieve the objectives of PP. Therefore, there is need for clear two-way communication process that allows timely feedbacks on decision-making. When the assessment is done too late to effect the decision, then it is unlikely to achieve the intended broad objectives discussed in Section 2.1. These objectives include identification of significant impacts, public interest and values, priorities for assessment, public understanding of the proposed project, and contribution of local knowledge to improve the quality and acceptability of EIA report and the project. These objectives were not achieved in the 3 case studies reviewed in this study. The barrier to engagement in the three case studies included the lack of knowledge and ability to organize (IAPs) to get better information

There is low level of IAPs awareness' as far as their role and rights in the EIA process are concerned. In order to ensure meaningful PP in the EIA it is imperative to have an informed public. The public stakeholders should have Information related to their

responsibilities, rights, ability to influence the results on decision making of the proposed development. However, due to the high illiterate levels in the local communities in Rwanda limited effort is made by IAPs to get information. This barrier of illiteracy hinders the IAPs to access the necessary information, due to lack of self confidence and hence hindering them from organizing well.

The low awareness level of environmental issues applies not only to the local community members but also to the local authorities based on respondents in this study from two groups (local community representatives and local leaders). For this reason it seems practically ineffective to talk about EIA and PP prior to sensitization of not only IAPs but including local leaders. It appears evident from the three case studies reviewed that, the IAPs together with local leaders were involved in a process that they had no idea about. Therefore, in order to ensure meaningful and effective participation of IAPs in Rwanda, it is of urgent need to mobilize IAPs leaders and sensitize them about their role and rights in the EIA process. This is the responsibility of REMA to sensitize the public about environmental issues, in partnership with the local authorities, NGOs, different government departments, and the developers.

Perhaps to ensure sustainability of the participation process, it may be important to design and adopt a flexible and appropriate PP guideline in Rwanda. In trying to establish what makes an ideal PP guideline for a developing country like Rwanda, the author applied some key principles that can be further elaborated and considered in the designing of PP guidelines.

The PP guideline requires covering legal procedure, administrative framework and compliancy monitoring and enforcement modalities to ensure effective public and IAPs participation.

Table 8 highlights key issues which need to be addressed by the PP guidelines.

Table 8 : Key issues that need to be addressed in the PP guidelines

Legal procedure	Administrative framework	EIA compliancy monitoring and					
		enforcement					
Does PP in the EIA implementation have a secure legal	Are the following steps formally	Are there formal EIA compliance					
basis?	included in the EIA procedure?	monitoring programs in place?					
	·						
a. To be implemented through primary	a. screening process	a) carried out by the core					
legislation b. to be implemented through	b. scoping meeting and site visit	environmental agency b) carried out by					
administrative arrangements	c. a formal mechanism	competent authorities					
c. for appeal and dispute settlement d. for compliance monitoring and	for independent EIA review	c) involvement of independent review					
enforcement	d. the proponent	bodies in the programs					
Does the core environmental agency produce a complete	responds to the	d) submission of regular					
set of EIA guidelines?	various representations and	monitoring results by the proponents					
e. technical guidelines for various types	makes those	e) a formal mechanism for					
of development f. for the EIA procedure	responses public e. the proponent revises	reviewing the results of compliance monitoring					
g. for EIA report preparation	the EIA report, based	f) involvement of local					
h. for EIA review i. for appeal	on the comments from the interested and	communities in the program					
j. for strategic environmental	affected parties to	g) access to the results of					
assessment	produce the final EIA	the compliance					
Is there a systematic monitoring and enforcement	report f. publicity of the EIA	monitoring and enforcement program by					
procedure for the development and management of the PP	decisions and results	the public defined					
process?	g. the EIA review bodies have a veto power	penalties/sanctions against noncompliance					
	over the decision-	with EIA decisions					
To what output is and should the DD process he	making h. formal mechanisms	h) channels for public to					
To what extent is and should the PP process be decentralized?	for appeals and	appeal against noncompliance with EIA					
	dispute settlement i. clear time limit for	decisions i) involvement of judicial					
k. the core environmental agency l. various central agencies	i. clear time limit for each step of the EIA	i) involvement of judicial agencies in EIA					
m. the core environmental agencies and	procedure	enforcement					
local authorities n. various central agencies and local							
authorities		How could the core environmental					
To what extent are interagency coordination mechanisms		agency conduct regular audit of					
for PP in place?		EIA process to ensure meaning PP?					
o. formal mechanisms established							
p. integration of interagency participation Are the EIA review authorities independent from the							
project proponents?							
Do the public have following formal channels to participate							
in the EIA procedure?							
a. Prior to the EIA study (i.e., scoping,							
public presentation).							
b. during the EIA study c. access to the EIA reports							
d. public hearing held							
e. to be involved in EIA review f. to be involved in decision-making							
i. to be involved in decision-making							
Source: Adaptation from Wen-Shyan Leu W.P. and A.V	V Dork (1000)						

Source: Adaptation from Wen-Shyan Leu W.P. and A.W.Bark (1996).

The point here is that it is vital to recognize the need for establishing a formally recognized set of basic criteria for public involvement in the EIA process.

Therefore, there is a need to implement PP guidelines as an opportunity to add value to a decision-making process. The PP guidelines ensure that all stakeholders participate throughout the entire EIA process.

Table 9 below was compiled to show the level of effectiveness of Public involvement and practical barriers to meaningful PP that can be judged by directly observable phenomena in the three case studies

Table 9: Goals of Public involvement and barriers to their achievement that can be judged by directly observable phenomena in the three case studies

Goals	Achieved	Evidence – the directly observable barriers to effective public stakeholders' participation.
I. Identifying and involve all interested and affected parties so that their concerns are integrated into decision making	Stakeholders Involved: To a less extend(some stakeholders were involved though their views were not considered in the preparation of the EIA report)	In the Free Trade Zone case IAPs were not involved in the EIA process at all including the surrounding communities for instance cattle grazers, stream and pond water utilizes, home owners, substance farmers and local authority representatives. The neighboring community members of the selected site for the 20 MW power plant were neither consulted nor involved, only a few members of the community were selected and involved in the consultation process although their views were not taken into consideration. For the case of Agro-processing plant, the IAPs especially the community members were not represented in the initial EIA process stages and only one public meeting was held to inform the public of the project.
	Identified stakeholders : YES	One meeting was held between the community members, competent authority (REMA), local leaders and the developer. This was conducted as a way of merely informing interested and affected parties about the proposed project but without prior initiatives to make available information related to proposed project in a non-technical summary form or in the local language digestible by the community.
		In this meeting few issues of concern were raised for instance the issue of how the waste water from the plant would be managed. The EIA consultant was present in this meeting to give quick fix responses to such questions. It can be said that based on the minutes of the meeting the issue that came-up over and over again was related to how the local community members could benefit from the new industry in terms of employment rather than balanced argument related to short and long-term project impacts. The lack of knowledge and ability to be organized and get better information is among the major barriers that prevent engagement of IAPs in the EIA process.
2. Improve quality and quantity of information in relation to the proposed development project	NO	The quality and quantity of information was not improved in all the three case studies due to the fact that the IAPs were given little or no opportunity for meaningful input in the decision-making process. The IAPs were neither consulted nor involved at the EIA initial stages and were also denied access to the information related to the proposed development. These case studies show the level of democracy and limited rights to information. However, the lack of knowledge and skills by IAPs in the area of EIA process acted against them as barriers to participation. The EIA information was considered highly technical and no effort was made to translate in local language and make available a non-technical summary to the IAPs.
Enhance informed decision-making	NO	The decision-related to the three EIA cases reviewed were not enhanced due to inadequate IAPs participation; barriers are similar to those mentioned above.
4. Improve Project design	NO	The project design could have been improved by effective and meaningful public involvement which did not adequately occur. The barriers to this was the fact that the during the project initial designing phase the IAPs were not involved and were partly informed about the projects during the final stages when major decision had been already made even site location.
5. Mitigation of impacts to the environment	NO	Some possible impacts to the environment were mitigated based on expert judgment and experience. However local knowledge about the area especially in the case of free Trade zone could have helped in identifying issues of concern and possible mitigation would have been proposed. There was no consultation of IAPs in the EIA process of the Free Trade Zone.

Under chapter two Section 2.2, the EIA process is explored and the purpose of public involvement at each stage is well discussed. The table 10 below summaries the stages of the EIA process and the level of compliancy in the three case studies reviewed. Table 10 results, depicts the barriers to effective and meaningful participation mentioned also in table 9 above. From table 10 below shows that in the three case studies reviewed the public stakeholders were ignored in the early stages of project screening, scoping, to EIS preparation. Only in the two case studies (Agro-processing and the 20 MW power plant) that IAPs were informed of the ongoing proposed development. This was a mere procedure fulfillment as major decision about project site selection and impact identification had been pre-determined. This analysis shows the lack of transparency and empowerment of the IAPs in the three case studies reviewed.

Table 10: The level of PP in the EIA process in the three case studies

Stage in the EIA procedure	Free Trade Zone	Agro-processing plant	20 MW Power Plant
Screening	None : The affected parties were not involved	None : No PP held	None: The interested affected parties were not involved
Scooping	None : The affected parties were not involved	None : The affected parties were not involved	None : The interested affected parties were not involved
EIS preparation	None : The affected parties were not involved	None: The affected parties were not involved	None: The affected parties were not involved
EIS review	None : The affected parties were not involved	Partial: The public was merely informed in one general community meeting	Partial: a few group of community members were untransparently selected
Decision-making	None : Not considered	None	None

Table 10 above, shows how the public was ignored right from screening to decision-making level in the three case studies reviewed. The stakeholders were neither consulted nor meaningfully involved.

5.3. Views of IAP's on the effectiveness of the EIA process in Rwanda

Out of 14 questionnaires dispatched, 13 respondents replied as indicated in table 11 representing 93% response rate. However, one respondent (7%) apologized for unable to respond due to lack of time as a result of being involved in field works at the time of this research. All the 13 respondents were also interviewed.

Table 11: shows respondents and questionnaires dispatched

	Respondents	
Nature of stakeholders	Dispatched Questionnaires	Replied
Consultants	2	2
NGO's	2	2
REMA staff	2	2
Local leaders	6	6
Government Institutions	2	1
Total	14	13

Having analyzed case by case below the three case studies are combined in table 11. From the analysis in table 12 below and in relation to literature reviewed a conclusion is drawn about PP in the EIA process in Rwanda. The questionnaire (see Appendix 1) is based on conceptual framework for meaningful and effective PP in the EIA process as explored in chapter 2 of this research.

The detailed analysis of the questionnaire responses in chapter five, table 12, 13 and 14 respectively.

Stage II of the research Section covers the main approaches to meaningful and effective PP in the EIA process. Under this Section, these statements ask for the understanding and interpretation of the meaningful and effective PP in Rwanda. It also investigates the degree of agreement or disagreement for the key elements that entails an effective and meaningful PP process.

Table 12 investigates the thoughts of IAPs on the effectiveness of the EIA process. The results from this analysis helped to improve one of the objectives of this study which focuses on the future of PP in the EIA process in Rwanda.

Further still in table 14 the views of IAPs on the importance of particular elements in the EIA process are considered with the view of emphasizing certain key issues which require more attention in ensuring effective and meaningful PP.

The overall results from the questionnaire responses indicated that the EIA PP process of Rwanda is ineffective in practice. Table 13 shows a high rate of agreement with statements concerning, for example, need for stakeholder involvement (statement no. 1), the importance of transparency in the EIA decision-making process (no. 2), or the importance of early public involvement in the EIA process and stakeholder access to meaningful project in a timely manner (no.3 and 5). It is widely agreed in literature reviewed that PP is very important in the early stages of the EIA process if it intends to improve decision-making.

Views of IAPs on the effectiveness of the current EIA process in Rwanda is reflected in table 12 below. Having an effective EIA-PP process requires a numbers of things to be done at different stages. Some of the key issues that were identified in this study that contribute to the effectiveness of an EIA-PP process include those that have been grouped from 1-8 under table 12. Stakeholder involvement in the EIA process in Rwanda was considered to be ineffective with 61% of the respondents to the questionnaire highlighting it as problem. The respondents also view the EIA process as ineffective (61%) in terms of transparency and access to EIA decision-making process. The involvement of IAP's at the start of the EIA process and empowerment of stakeholders were pointed out to be ineffective in Rwanda by over 76% of the

respondents. Therefore, in addressing weakness to the current EIA process in Rwanda these issues need to be brought into consideration.

Table 12 : Views of IAPs on the effectiveness of the current EIA in Rwanda n= 13

	very effective	Effective	Neutral	Ineffective	Very ineffective	No opinion
Stakeholder involvement (poor, rich, minority groups)	1	2	2	6	1	1
2. Access to the decision-making process	0	3	2	8	0	0
3. Open, transparency and accountable EIA process	1	3	1	1	7	0
4. Empowerment	1	1	1	9	1	0
5. Integrating the views of IAP's in decision- making	1	3	0	6	2	1
6. Meaningful participation throughout the whole EIA process	0	2	2	0	8	1
7. Provide adequate opportunity for the active involvement of all the stakeholders	2	2	2	6	0	1
8. Ensuring that affected groups are involved at the out start	0	2	1	5	4	1

As summarized in table 13 below, interview participants were asked their views as to which phase of the EIA process the IAPs should be consulted, involved and given

information related to the proposed development. The combined responses revealed interesting results as shown in table 13 below.

To ensure effective IAPs input in the EIA decision-making process, early involvement of different stakeholders groups should be made part of the entire EIA process in Rwanda, with 92% of the respondents in agreement. All the respondents (100%) were in agreement with the need to have a formal requirement for PP before decision-making by the authorities. The need to make copies of EIA documents available to the public in a non-technical form at any stage of the EIA was highlighted by respondents with over 84% in agreements. With regard to the cost effectiveness due to early involvement of key stakeholders only 46% were in agreement. In contrast to the literature reviewed, 61% of the respondents believe that involving IAPs in the EIA process during early stages of the project development causes economic losses as it delays the project.

This was an attitude the researcher found to be shared across all stakeholders. On the side of the developers, they are mostly focused at minimizing project approval time spent on consultations, while the beneficiaries or IAPs, are interested in short-term opportunities likely to come up as a result of project approval and implementation. Such opportunities include employment for local people in the project area. This mentality has to change if we are to talk about sustainable development in Rwanda. During project development, there is need for good planning and projection to allocate adequate time for stakeholder's consultation in the EIA process.

Table 13: Level of agreement of IAP's on the stages of participation in the EIA process

	strongly	Agree	Neutral	Disagree	Strongly	O No opinion
1 The early involvement of different stakeholders groups (e.g before the scoping stage) is cost effective because it avoid costly modifications	4	2	2	5	0	0
2 PP in early stages of project development causes economic losses because it usually delays the project	1	7	0	1	3	1
3. PP should be part of all the EIA process in Rwanda including initiation, planning, implementation, monitoring and evaluation.	6	6	1	0	0	0
4. PP should take place prior to scoping, during scoping, during EIS preparation, during review and following revision, during decision-making and during monitoring.	8	5	0	0	0	0
5. There must be a formal PP requirement during the authorities' decision-making process	4	9	0	0	0	0
6. Copies of EIA documents must be made public at each stage/any stage of the EIA process in a non-technical form if possible translated into the local language (Kinya-Rwanda)	6	5	2	0	0	0
7. PP methods/techniques must be appropriate to the stage of the EIA process at which they are employed and the stakeholders need to be trained.	4	4	5	0	0	0
8. Published guidance on PP is a necessary requirement for meaningful participation	4	9	0	0	0	0

The interview participants were also asked their views on the importance of PP in the EIA process. The responses of the interview participants have been summarized in table

14 below. The interview respondents consider stakeholder involvement, transparency in decision-making, public access to information and public empowerment as very important in the EIA process. Transparency in the EIA decision-making process was considered important in the EIA – PP process by all respondents (100%) of the 13. Also stakeholder consultation and involvement was highlighted to be very important in the EIA by over 76% of the respondents to the questionnaire.

Table 14: Views of IAPs on the importance of PP in the EIA process

	Very important	Important	Neutral	unimportant	very unimportant	No opinion
Public/stakeholder involvement	1	9	1	2	0	0
2. Transparency in decision-making process	9	4	0	0	0	0
3. Early involvement of stakeholders in decision-making	7	1	0	5	0	0
4. Participation as a two-way communication affair	5	5	2	1	0	0
5. Public access to information	1	8	1	3	0	0
6. Public empowerment (influence decision-making)	1	7	2	3	0	0

Early public involvement in the EIA process "is most beneficial if it occurs at the time of project identification" (Abaza et al, 2004:72) in order to integrate the views of the IAPs at planning and decision-making stages. Timing of PP is a basic requirement in the EIA process, and this is the challenge to Rwanda's system. Early involvement does not end with notifying the public about the proposed project as is the case in the agro-processing project and the 20 MW project. However, this needs to be a continual two way flow of information process and active involvement of the IAPs throughout the entire EIA process. In the three case studies reviewed in this research the public was ignored in the project identification, screening, scooping and review process. As summarized in table 12 the questionnaire results, the overall perception is that the current EIA PP

practice in Rwanda is practically ineffective in ensuring meaningful outcome. This perception was investigated in detail by analyzing questionnaire responses to openended questions or extra comments made by the respondents were considered in this part (See appendix,1&2). Due to the perceived limitation of early public involvement in the EIA process, the need for formal PP guidelines was often mentioned by stakeholders as being more effective in promoting meaningful PP in the EIA process. This perception is broadly shared within the wide literature reviewed (Wood, C, 2003; Purnama D. 2003).

5.4. Conclusion

Chapter five presented an analyzed and interpretation of the research findings based on the four research objectives. The barriers to meaningful IAPs involvement in the EIA process in Rwanda were identified based on the finding from the investigation of the three case studies and also in reference to the views of affected parties. By identifying the challenges in the current EIA process in chapter 5 is a building block for chapter 6 in proposing recommendation for improvement.

CHAPTER SIX

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction

The discussion, conclusion and recommendations in this chapter are structured around the four following objectives of this study which are to;

- 1. Determine the requirements for, and barrier to effective PP in the EIA implementation process;
- 2. review three EIA practical case studies in Rwanda in order to investigate the effectiveness of PP in practice;
- 3. explore the views of Interested and Affected Parties (Environmental consultants, NGOs, REMA and community representatives) with regard to the effectiveness of PP in EIA process in Rwanda;
- 4. consider the future for meaningful PP in EIA process in Rwanda.

Based on the research findings presented in chapters 4 and 5; chapter 6 covers all the objectives of this study. It should be remembered that some of the objectives of this study were addressed at different stages of the study. Objective 1 of this study was partly addressed in chapter 2 and 4, while research objectives 2 and 3 were also explored in chapter 5, while objective 4 is covered in chapter 6.

Therefore, the thoughts of interview participants on the effectiveness of PP in the EIA process in Rwanda were analyzed and discussed in the context of the findings in the previous chapters as well as in relation to literature reviewed. The results from the questionnaire interviews and field data collected on the views of respondents in relation to the effectiveness of PP in the EIA process lead to unsurprising conclusions.

6.2. Discussion of results

To achieve the overall objective of this study, i.e to investigate whether EIA as currently practices in Rwanda is promoting effective PP, three methodological stages were undertaken. First, a conceptual framework was developed highlighting key elements that determine meaningful PP in the context of EIA process. Secondly, three EIA practical cases studies were reviewed to analyze the effectiveness of PP in the EIA process in Rwanda. Finally a questionnaire interview guide was developed and used to solicit IAP's views on the effectiveness of PP in the EIA process. Within this chapter, it is intended to discuss whether the current EIA practice is promoting effective and meaningful PP in Rwanda. The perceptions of the interview participants, the three case studies reviewed and wide literature consulted on the effectives of the current EIA practice in Rwanda are discussed below.

As summarized in Section 5.3, table 12, 13 and 14 of the responses to the questionnaire interview, the overall perception is that the current EIA practice is ineffective in ensuring meaningful public stakeholders involvement. Responses to detail investigation of particular elements of the EIA process outlined in the questionnaire and open-ended questions are considered in this discussion. EIA practice in Rwanda is currently seen as a mere administrative procedure in which PP by IAPs can be ignored without consequences, rather than being a tool to support informed decision-making concerning potential environmental impacts of the proposed development projects. The responses of IAPs interviewed in this study summarized in table 12,13 and 14 in chapter 5 above and the findings from the three case studies reviewed this research reveal a similar picture of ineffectiveness of the PP in the EIA process.

Some of the respondents considered the ineffectiveness as a result of manipulation and political influence in the EIA decision-making process. This kind of lack of trust of the EIA process and frustration was also shared by some EIA technical officers that were interviewed, District Environmental officers and the local community representatives. The political influence in the EIA process serves those in strategic decision-making

positions. It is unfortunate that even REMA's EIA officers share this concern of political pressure in terms of project EIA approval. This political influence in the EIA process to issue project approval EIA certificate in the shortest time possible has affected the quality of EIA studies conducted; the extent of consultation, stakeholder engagement and the kind of decisions made.

An effective EIA process does not occur by accident rather it must be carefully planned and implemented. This is not currently happening in Rwanda's EIA process due to lack of political will and conflicting interests among decision-makers. This challenge is aggravated by the inadequately staffed REMA that can hardly conduct a comprehensive follow-up of consultants when conducting the EIA to ensure the IAPs have effectively participated before the project approval to issue an EIA-certificate.

The total of 13 (100%) interview participants agree with the suggestion that IAP stakeholders should be part of all the EIA processes in Rwanda including initiation, planning, implementation, monitoring and evaluation. The result in table 10 chapter 5 confirms ineffectiveness of PP in the EIA process in the three case studies reviewed. On the other hand early stakeholder involvement not only improves the quality of decision-making but also builds trust and confidence among various stakeholders. However, some authors (Wang *et al*, 2003, Bond, 2004) argue that EIA cannot simply stand on its own and operate in a vacuum; it requires the political will, change of attitude to support meaningful stakeholder participation.

A certain level of disagreement become clear when some respondents especially EIA consultants regard early public involvement in the EIA process as unnecessary. They argued that, it contributes to delays in decision-making and causes economic losses. In contrast to these views, a wide range of literature indicates that PP is very important in the early stages of the EIA process if it intends to improve decision-making.

Therefore, when socio-economic aspects are included in the EIA process, could lead to disappearance of environmental interests in the decision-making process with a weaker lobby in the face of stronger lobby placed on the importance on socio-economic

benefits. However, a careful and well planned EIA process can mitigate both long and short-term economic and environmental loss. Therefore planning plays an instrumental role in allocating adequate time to stakeholders for effective engagement in the EIA decision-making at all levels. The inadequate planning for EIA implementation (conducting the study) process creates a vacuum of lack of follow-up by REMA to ensure that the EIA process is conducted in respect to the required standards (environmental law) and ensuring that all IAPs have effectively participated.

This may also require strategic environmental assessment (SEA) at strategic decision-making level in an integrated Environment Management Strategy (IEM). Therefore project level EIA should be well-planned to involve public stakeholders, in an integrated and coordinated decision-making system could be seen as an aid to meaningful decision-making in relation to the proposed development.

Therefore PP throughout the EIA process should be seen as an opportunity to promote informed decision-making taking into account stakeholders interests, concerns, and potential impacts to the environment for a better economic growth path. All the interview respondents considered stakeholders participation in the EIA process as an important issue in contributing to transparency in decision-making, empowering the public stakeholders, and timely access to information. The three cases reviewed revealed some generic barriers to effective PP in the EIA process in Rwanda conforming to those identified in the wide literature consulted.

The generic barriers to effective PP in the three EIA case studies reviewed include;

6.2.1 The lack of a political will to fully engage the IAPs in the EIA process

Views from the IAPs in Rwanda indicate that the requirement for PP in the EIA process is merely theoretical. In practice, there is inadequate political will to enforce the legal requirement stated in the EIA flow chart of Rwanda to ensure public input in the process. As a result, the current EIA process in Rwanda has proved what is widely regarded as a merely done to fulfill the procedure requirement with little or no public input (Bond et al, 2004). The weak civil society organizations which are just forming after the terrible

experience of 1994 genocide are currently not in position to pressure the politicians to properly implement the law that requires PP in the EIA process.

6.2.2 The inadequate transparency in the EIA Process

Early Participation of IAPs in the EIA is important to ensure that decision-making related to proposed project take into account concerns of all stakeholders. The process in Rwanda is different as has been highlighted in the three case studies reviewed. The EIA decision making process is influenced by the political and developers interests with less consideration for the IAPs. The projects are formulated without information dissemination by the government to local authorities and IAP's. For example absence of public disclosure of project documents it is difficult to achieve effective PP. This practice has promoted mistrust and misunderstanding between IAP, the developer and REMA. This was the case with the three EIA case studies reviewed in this study.

6.2.3 Late public involvement in the EIA process

When an effort was made to involve the IAP's by the developer through the consultants who conducted the study or REMA, unfortunately as noted in the three case studies reviewed, it was always late in the EIA process when the EIS report has already been prepared and where most sensitive decisions had been made as indicated in table 9. Decisions related to project site location, selection of alternatives and identification of mitigation measures were made prior to public involvement. This shows that, IAPs participation at this stage when major decision have been made does not serve intended purpose and objectives as discussed in chapter 2. This was the barrier clearly manifested in the Agro-processing project (Masaka). It should be noted that at this stage major decision are already made. This is in consistent with broader literature consulted which concluded that late stakeholder involvement in the EIA process when major decisions have already been made as a form of manipulation (Bond et al, 2004) from such participation process. In the absence of a vibrant and active civil society such injustices in the implementation of the environmental procedures as required by the law continue to be ignored in practice.

6.2.4 Inadequate level of PP planning framework

Public involvement at the end of the EIA process as noticed in the case studies reviewed can be referred to as a merely manipulative act. In practice this approach is disempowering to the IAPs as they merely attend the public consultation meeting in which predetermined conclusions were already established. The public input whatsoever could hardly change the result of the EIS report already determined by the developer. Therefore, the decision made in such engagement can be termed as a win-lose scenario. Formalized EIA process of Rwanda require to be applied effectively in order to achieve the objectives of PP in the EIA process

In order to ensure meaningful and effective participation of IAPs in Rwanda, it is of urgent need to mobilize not only IAPs but also community leaders and sensitize them about their role and rights in the EIA process. This is a key responsibility of REMA to sensitize the public about environmental issues, in partnership with the local authorities, NGOs, different government departments, and the developers.

Furthermore; it is important to express the views of IAP's on the effectiveness of the current EIA process in ensuring meaningful and effective PP. Over 76% (10/13) of the interview respondents mentioned that low level of public awareness as one of the major barrier to meaningful and effective PP in Rwanda. "The information related to EIA and the need for PP is not made accessible to stakeholders" according to the statement by one of the respondents. The absence of vibrant civil society organizations in Rwanda that could raise pressure on REMA, and the consultants, to engage the IAP's in the process makes IAPs more vulnerable.

The absence of strong civil society groupings in Rwanda make it even harder for the local community members to understand the EIA process itself, since both the consultants and REMA are reluctant to engage other stakeholders. Hence many interview respondents' felt that they are not part of the EIA process in practice since they are less involved in the decision making process. Only 30% (4/13) of respondents referred to the lack of access to decision-making in the EIA process by IAP's in Rwanda

as based on influence of political interests in the process. According to one of the participants "EIA is merely carried out to fulfill the procedure purpose and involve the IAPs late in the process but not for its intended purpose" the example given was that "as an EIA officer how can a developer put pressure on me to ensure that he/she is issued an EIA certificate within less than 2 weeks and in case of any delay you are reported to your superior, this is technically inappropriate" (respondent no.2). This also proves what is considered as manipulation in literature (Bond et al, 2004). One of the local leaders stated that "The developer submits a project brief to REMA and the process continues ignoring the public stakeholders till the EIA certificate is issued ignoring the input of the local community".

The challenge to local leaders is that local authorities are requested by REMA to monitor the impacts of such projects during implementation to which they did not have any opportunity for input in decision making process and no budget for monitoring given to them. There is a sense of frustration among the six respondents from local community leaders in regard to the process of issuing EIA certificates in Rwanda. Currently there is evidence of public stakeholders' collaboration and organization to build a vibrant civil society in order to respond to this ongoing manipulation and unjust EIA process. An example can be drawn from the recent petition by affected residents of Jaban Sector to the Ombudsman's office. The residents complained to the local authority due to the dust pollution caused by stone quarrying in the community by a Chinese firm using dynamites and machines. This has lead to heavy emission of dust and smoke in the area exposing residents to health hazards and the explosives used to blast the rocks causes cracks in the houses of near residents leading to loss of property worth millions of francs. In response to this serious problem the affected residents wrote a formal complain to the Ombudsman's office to intervene. As Ssuuna and Kwizera described (2009) in their article Ministry turns guns on Kigali City Mayor, the Ombudsman conducted a site visit with all stakeholders and concluded in the agreement with the affected communities to stop the Chinese firm from stone quarrying in the area. However after the meeting nothing happened, "we tried to tell our local authorities to help us solve this problem, but they have done nothing, yet the mining activities are continuing to have far reaching effects", according to one of the angry resident of Jaban Sector.

Following this incidence the Ombudsman's office wrote to the Prime Minister asking him to intervene. In response to this the Prime Minister wrote to the Minister of Local Government asking him to instruct the Kigali City Council (KCC) and Gasabo District to stop the operation of the Chinese company. However, KCC and Gasabo District never acted on the orders of the Minister of Local Government as the company continued to use the dynamite. This prompted the Minister of Local Government to write to KCC's Advisory Council asking the members to take action against the Mayor. The Minister in the same letter also ordered the district of Gasabo to put in place a committee to assess the damage the quarry has caused to the residents and order the company to compensate the victims since it was provided for in the contract. This recent case in 2009 shows the growing potential of public pressure on development projects that ignore IAP involvement in the EIA process. This case also shows the silence of REMA in enforcing compliance to environmental management plans for approved projects.

However, some community representatives show positive interest in socio-economic impacts of the proposed development projects in their communities. These interests include employment to local community, infrastructure development and these are often major considerations that influence decision making to issue an EIA certificate for a proposed project.

6.2.5 Absence of participation guidelines

There is need for an EIA PP guideline to act as a clear channel for public input and as a leading tool in ensuring adequate understanding of the PP process by all stakeholders. Such an EIA public stakeholders participation guideline is absent and lacking in Rwanda. The reason given by REMA for this was that the environmental issues and EIA in particular is new concept in Rwanda. The environmental law that requires projects to be subjected to EIA was adopted in 2005. REMA claims to be currently building the institutional capacity to effectively manage the EIA process. However, the issue of lack

of a clear IAP participation guidelines, is not entirely caused by institutional capacity, it is also partly due to little importance attributed to IAP participation in the EIA process. During the interview conducted, it became evident that REMA officials were not concerned by the limited IAP's participation in the EIA process.

The author intends to address this challenge by identifying baseline PP guidelines that can further be developed and integrated into Rwanda's EIA process that could serve as a point of reference for further detailed designing. It should be noted that EIA PP guidelines proposed by the author cannot be considered as a panacea to ensuring effective and meaningful PP process in Rwanda. However, it could serve as a window of opportunity to integrate PP guidelines into mainstream EIA process. As mentioned above unless the guidelines are accepted by politicians and REMA official and becoming willing to implement these guidelines, nothing good can result from all such efforts.

The political will to enforce IAP in the EIA process is the challenge to Rwanda Environmental Management Authority (REMA) since even the established and formal EIA guidelines for different projects such as mining, cement industry, textile, and tannery, slaughter houses among others are deficient and hence have implementation problems.

6.3. Conclusions

This research aimed at investigating and answering the question of whether EIA, as currently practiced in Rwanda is effective in promoting meaningful PP. By undertaking a desk study and interviewing stakeholders for their perception concerning the effectiveness of the EIA in ensuring meaningful PP, three main problems in investigating the research objectives have been revealed. Wide literature research has been done on the development of the PP guidelines Worldwide (Abaza et al, 2004). However, EIA PP guidelines would not ensure meaningful participation unless there is political willingness to ensure practical implementation. Therefore, an EIA PP guideline for Rwanda can in

one way contribute to IAP participation and can further be developed with key emphasis on answering identified questions which include;

- Does PP in the EIA implementation have a secure legal basis?
- Is there a systematic monitoring and enforcement procedure for the development and management of the PP process?
- To what extent are interagency coordination mechanisms for PP in place?
- Do the public have clear formal channels to participate in the EIA procedure?
- Are there formal EIA compliance monitoring programs in place to ensure that IAP effectively participates?
- How could the core environmental agency conduct regular audit of EIA process to ensure meaningful PP?

The details on some of the key issues that can be covered in the formal EIA PP guidelines are included in table 8.

Therefore, having identified these barriers that require to be addressed to ensure effective PP, the perception of stakeholders on EIA effectiveness in Rwanda has been analyzed. While the IAP's perceive EIA as ineffective in ensuring meaningful stakeholders participation, the reason for this failure seems to emanate from the inadequate political willingness to involve the public stakeholders in the EIA process and the weak civil society.

Therefore, due to weak civil society organizations in Rwanda both REMA and the project developer take advantage to ignore their input. Therefore EIA decisions are made and projects are approved and EIA-Certificate issued without the active consultation and participation of all IAPs. This practice of ignoring IAPs in the decision-making process as required by the EIA process in Rwanda explains the lack of trust in the EIA process and inadequate political willingness to ensure effective PP in the EIA process. As it can be identified in figure 2 Section 2.4 of the EIA process in Rwanda, the decision making process is not transparent as the public is not given opportunity for input hence rendering the current EIA process to be ineffective.

Institutionally, REMA works closely with the decentralized Environmental Officers, who are responsible for environmental management of project activities. However, REMA is still a young institution and some elements of it are yet to be developed especially its capacity and staffing. REMA has been in existence only since 2003, the Organic Law (No 4/2005) on environmental protection since 2005, and the general EIA guidelines since 2006. Demand for REMA services outstrips its staffing, and both REMA and District level environmental staff lack robust EIA IAPs participation experience and technical training.

Logistical support to adequate implementation and monitoring of IAPs participation in the EIA process requires strengthening. It is important to note that REMA has been only recently (early 2009) reorganized in conjunction with the establishment of the Rwanda Development Board (RDB) which took over the EA function (and human and technical resources) from REMA.

However, it should be noted that within the structural limitation of the Rwanda's EIA process, EIA has the potential to ensure some minimum level of PP. Therefore, it may be appropriate to conclude that Rwanda's current EIA implementation process is weak in ensuring meaningful PP. As this research has revealed that, Rwanda's EIA process is faced with a number of procedural and actual implementation limitations that require to be addressed to ensure effective PP. This is also interlinked or feeding into political willingness to democratically involve and empower the public to meaningfully participate in EIA decision making process.

6.4. RECOMMENDATIONS

This Section specifically addresses the fourth research objective. Recommendations have been generally discussed in the preceding chapters, although this Section singles them out and discusses them in detail.

6.4.1 Need to established formal EIA PP guidelines

To ensure future meaningful participation by interested and affected parties in the EIA process in Rwanda, formalized PP guidelines have to be put in place. The PP guidelines have to be designed in such a way that they address real challenges on the ground which include:

- the inadequate transparency and political will to involve public stakeholders in the EIA process,
- poor communication channels,
- late public consultation,
- inadequate access to project and EIA information in-time,
- Lack of vibrant and active civil society groups and
- poor PP planning framework.

6.4.2 Early public involvement

The inadequate public involvement opportunities offered in the current EIA practice in Rwanda can clearly be drawn from the existing EIA process (see figure 2). As noticed informally under the EIA flow chart in Section 2.2 figure 2, public hearing is called for

after screening and conducting of the Environment Impact Study (EIS). Generally speaking, a systematic PP process is missing. According to the literature reviewed, early PP in the EIA process minimizes litigation issues that sometimes arise during actual project implementation and contribute to financial losses and unintended delays (Shepherd, 1997; Abaza et al 2004). Therefore, not only does early PP avoid delays in project implementation but seeking of views of the IAPs through-out the entire EIA process usually increases project support from those involved in the actual project implementation process (Purnama, 2003; Julie, 2007; Bond et al, 2004). Therefore, EIA should be seen as the integral part of the IEM process that involves other environmental assessment tools that could enhance the EIA process such as Strategic Environmental Assessment (SEA) of Policies, Plans, Programs and Projects. However, currently Rwanda lacks a comprehensive IEM strategy.

The public stakeholders' involvement should be integrated in the entire EIA process right from screening to decision-making level rather than participation at EIA reviews stage when major decisions about the project have already been made. Also the involved stakeholders require to be provided with adequate and timely information from the developer regarding the project information to allow them enough time to understand the proposed development its likely impacts both positive and negative such that they can provide their comments and be catered for right from the screening stage to decision-making. This will ensure empowerment of the IAP's and their political rights to have a say in the decision-making process, especially on matters that affects the environment in which they live. It is important for the IAPs to be involved at early stage of the EIA process as this level of participation does not happen accidentally rather has to be well planned.

Secondly, PP processes should be genuine otherwise PP becomes a procedural exercise rather than a substantive contribution to final outcome and decision-making on the EIA report. Therefore, public stakeholders should be allowed to actively participate at satisfactory level which Arnstein, (1969) categorized as partnership under citizens' power. At this level public stakeholders would be fully empowered and able to

effectively participate and influence decision-making. Otherwise they could be allocated a place at the decision-making table to fulfill the administrative procedures while powerless in terms of knowledge power. Therefore, such representation at the decision-making platform could be meaningless and just a form of manipulation.

However, in practice it is complex and challenging since it requires a political willingness and a vibrant civil society grouping in the long run to ensure effective PP in the EIA process in Rwanda.

6.4.3 Increased exchange of information in an accessible and timely form

As noticed in literature reviewed and the three case studies covered in this study, meaningful and effective PP requires a multi-party input and flow of information. As it can be noticed from Section 2.4 under the EIA flow chart in figure 2, information exchange seems to have no place in the EIA process in Rwanda since the public hearing phase as considered in figure 2 is often ignored in decision-making. Therefore, there is need to establish a clear two way communication between all stakeholders in the EIA process.

6.4.4. A follow-up of compliance and enforcement mechanism

The findings of this research suggest that, the ineffectiveness of the current EIA process in ensuring meaningful PP seem to be a question of inadequate implementation mechanism. The ineffective follow-up in ensuring compliance, to IEM process rather than EIA as a tool itself is the challenge to Rwanda's system. EIA process required to be seen as an integral part of an overall IEM strategy which is lacking in Rwanda at present. The current process of issuing the EIA certificates in Rwanda can be considered less sensitive to the level of public involvement at present as required in the Organic law of 2005 and subsequent general EIA sector guidelines. Therefore, there is

need for a clear and regular compliance and enforcement mechanism by the REMA to force developers (EIA-Consultants) to effectively involve the IAP throughout the EIA process.

6.5. Topics for future research

Future research should be involved in furthering the following discussions listed below to ensure effective and meaningful EIA process:

- An assessment of government capacity to foster PP in the EIA process
- An assessment of the quality of EIA decision making process in Rwanda.
- Assessment of the capacity of civil society organization to participate in the EIA process.

CHAPTER SEVEN

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APPENDICES

APPENDIX 1

Covering letter

Questionnaire

George Bob Nkulanga,
University of KwaZulu-Natal
Centre for Environment,
Agriculture and Development (CEAD),
Private Bag X01,
Scottsville, 3209, South Africa

Job Title:

Organization:

Address:

01/09/2008

Dear Mr.

I am undertaking a Masters course in Environment and Development, at the University of KwaZulu-Natal, Pietermaritzburg Campus South Africa. As part of this course, I am undertaking a research that seeks to examine PP in Environmental Impact Assessment (EIA), implementation process. I am using a Rwandan case study for this research, as Rwanda is walking the road of building a good environmental reputation and sustainable utilization of her natural resources. I am a Rwandese; therefore I made the decision to study Rwandan case and positively contribute to the management of our environment bearing in mind that our economy to a great extent depends on natural resource exploitation.

At present little research has been conducted into the opinions of the Interested and Affected Parties (IAP's) in the EIA process in Rwanda. However, as a requirement to ensure transparency and accountability of the decision-making process on development Plans, Programs and Projects, the views of IAP's are critical. As part of my research, I

have developed a short questionnaire which I hope you can complete. It should take you no more than 20 minutes to complete. The information provided was invaluable to my research.

As part of this research, I am also hoping to complete a set of interviews in order to gain a more in depth understanding of the topic. The face to face interview would last around 30 minutes. If you would be willing to take part in the process, I would be very grateful if you mark the box at the end of the questionnaire.

I would like to assure you of the confidentiality and anonymity you will receive if you agree to take part in this survey. The University of KwaZulu-Natal has an ethical code that all students are obliged to follow when undertaking research. I would also like to assure you that as a participant you have the right to withdraw from the process at any stage of the research program and there is no payment to the participants since it's a voluntary exercise.

I very much hope you was able to help me with this project and would also like to offer you the opportunity of receiving a summary of the report once it is completed this year. If you require any further information please contact me or my supervisor at;

CONTACTS DETAILS

<u>STUDENT</u> <u>SUPERVISOR</u>

Mr. George Bob Nkulanga, Dr. Mark Dent

University of KwaZulu-Natal, University of KwaZulu-Natal,

Private Bag X01, Scottsville, 3209, Private Bag X01, Scottsville, 3209, Scottsville, 3209,

South Africa South Africa

Fax 27 (33)260 6118 Fax 27 (33)260 6118

Cell phone: 08308020 Phone: 27 (33) 260 5775

Email <u>nkulanga1999@yahoo.com</u> Email <u>dent@ukzn.ac.za</u>

George Bob Nkulanga

DECLARATION

Iparticipant) hereby confirm that I understand the contents nature of the research project, and I consent to participating in	of this do		of I the
I understand that I am at liberty to withdraw from the projection.	ct at any t	ime, should	l so
SIGNATURE OF PARTICIPANT	DATE		

QUESTIONNAIRE GUIDE

PP in EIA	process	the	case	of	Rwan	da
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Semi-structured interview

The information obtained from this questionnaire was treated as confidentially. No individual was identifiable in any published work.

Please give the sector/profession you are working for/in:

To what degree do you consider the effectiveness of the current EIA practice in Rwanda based on the following statements?

(Please choose/ circle only one number, e.g. 2= effective)

I. Do you feel current EIA practice is effective in ensuring participation of Interested and Affected Parties (IAP's) in Rwanda through: For each option please circle one number you feel most fits your view

	very effective	effective	Neutral	Ineffective	Very in effective	No opinion
1. Stakeholder involvement (poor, rich, minority						
groups)						
2. Access to the decision-making process						
3. Open, transparency and accountable EIA						

process			
4. Empowerment			
5. Integrating the views of IAP's in decision-making			
6. Meaningful participation throughout the whole EIA process			
7. Provide adequate opportunity for the active involvement of all the stakeholders			
8. Ensuring that affected groups are involved at the out start			

II . To what extent do you agree with the following statements?

(Please choose/ circle only one number, e.g. 2= agree)

	strongly	agree	Agree	Neutral	Disagree	Strongly disagree	No opinion
1 The early involvement of different stakeholders							
groups (e.g before the scoping stage) is cost							
effective because it avoid costly modifications							
2 PP in early stages of project development							
causes economic losses because it usually							
delays the project							
3. PP should be part of all the EIA process in							
Rwanda including initiation, planning,							
implementation, monitoring and evaluation.							

4 PP should take place prior to scoping, during	
scoping, during EIS preparation, during review	
and following revision, during decision-making	
and during monitoring.	
5. There must be a formal PP requirement during	
the authorities' decision-making process	
6 Copies of EIA documents must be made public	
at each stage/any stage of the EIA process in a	
non-technical form	
7 PP methods/techniques must be appropriate to	
the stage of the EIA process at which they are	
employed and the stakeholders need to be	
trained.	
8. Published guidance on PP is a necessary	
requirement for meaningful participation	
III. PP is a requirement in the EIA process in Rwan	da environmental law.
What is your thought about the main purpose of	PP in the EIA process in Rwanda?
Please tick one box only?	
To ensure transparency and accountability	Provisional of local experi
knowledge	
Identification of possible alternative/option	Ensure involvement of affected
groups	
Integrate the views and interests of interested	
and affected parties into decision-making	Others please state

			•••
IV. Do you have any commen current EIA practice in Rwanda	•	nake about the effectiveness of the IPP?	ne
V. What are the strengths of th choose a maximum of 2 answer	·	in ensuring PP in Rwanda? (plea	se
Good basis in the legislation	adequ	uate PP guidelines	
Increasing PP inte	grg the views of the		
Others (please state)	decision ma	king	
VI. What are the weaknesses Rwanda? (Please tick a maxin	•	ctice in ensuring meaningful PP	in
Lack of public involvement		inadequate transparency and accountability	

Decision are based on political interests		nvolver e decisi			eholders	3			
Inadequate inclusive of a wide range of IAP's	It is	a one w	ay c	commun	ication				
Lack of public access to information	Lack of PP guidelines								
Lack of empowerment of the public to	othe	rs (plea:	se st	ate) _					
influence decisions				L					
VII. If you were given an opportunity to improve the effectiveness of PP in the current EIA process, would the three weaknesses chosen in question VI above be your priorities? Yes No If No, what would be your main priorities?									
VIII. Have been extend along the black those fallowings:	:		، مما		: -l - v:				
VIII. How important do you think these following issues ought to be when considering the effectiveness of PP in the EIA process in Rwanda? (Please circle one number e.g 2 = important)									
	Very important	important Neutral	unimportant	very unimportant	No opinion				
Public/stakeholder involvement									
Transparency in decision-making process									

Early involvement of stakeholders in decision-							
making							
Participation as a three-way communication affair							
Public access to information							
Public access to information							
Public empowerment (influence decision-making)							
· · · · · · · · · · · · · · · · · · ·							
Taking into account the interests of stakeholders.							
N/III A see the see see settle see See see see to see store see							
VIII. Are there any other issues not mentioned a				-		aer to	be
important in the EIA process in order to achieve mean	ningful	land	d eff	ectiv	e PP?		
(Plance appoint)							
(Please specify)							
IX. What are the key barriers to effective PP in the El	A proc	ess	in F	≀war	nda?		
(Please use the space bellow)							
		•••••					
	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••			•••••
X. Would you be willing to be interviewed?							
No Yes If yes, please state the con	ntact r	numl	ber d	or er	mail		

 	•••••		•••••	•••••
 		• • • • • • • • • • • • • • • • • • • •		

Appendix 2

Interview Guide

Interview Guide

Introduction

- Masters student
- Dissertation project on PP in the EIA process in Rwanda

Warm up phase

- 1. As a community representative, you clearly have a central role in decision-making process especially as regards the new development projects for the local community. I would like to start by requesting you to describe your involvement in the EIA process for Project X?
 - When and how involved?
- 2. What part did you take when EIS report was being reviewed?
- 3. Are there any key barriers you consider in the current EIA practice that limit meaningful PP?
- 4. How and when did the community access information on EIA for project X?
- 5. What is your thought about the main purpose of PP in the EIA process?
 - To ensure transparency and accountability
 - Provisional of local expert knowledge
 - Identification of possible alternative/option
 - Ensure involvement of affected groups
 - Integrate the views and interests of interested and affected parties into decision-making
 - Access to decision-making process
- 6. Basing on your experience in the EIA processes with project X, to what extent do you consider EIA being effective in promoting PP?

Any other aspect you would like to add to the discussion?