



Public participation in Environmental Impact Assessment (EIA) – An investigation into theory and practice in Costa Rica and Nicaragua



Pictures © A.N. Glucker

Master Thesis by Anne Glucker

Supervisor: Prof. dr. Peter P.J. Driessen 2nd Reader: Dr. Hens A.C. Runhaar

Public participation in Environmental Impact Assessment (EIA) – An investigation into theory and practice in Costa Rica and Nicaragua

A Thesis submitted to the Faculty of Geosciences in partial fulfilment of the requirements for the degree of Master of Science in Sustainable Development

Anne Nina Glucker Student no. 3440451 A.N.Glucker@students.uu.nl Bahnhofstrasse 34 76137 Karlsruhe Germany

Utrecht University, Faculty of Geosciences MSc in Sustainable Development Environmental Policy and Management Track January 2012

Supervisor: Prof. dr. Peter P.J. Driessen 2nd Reader: Dr. Hens A.C. Runhaar

Internship supervisor (NCEA): Drs. Arend Kolhoff

"Knowledge is not true or untrue as the Aristotelian tradition would like us to believe. It only has some strong and consequently weak aspects. Any product of knowledge can be improved upon."		
	Reuling (1986) ¹	

¹ Cited in Verschuren and Doorewaard (1999, p. 143).

Preface

This research has been conducted in connection with a nine-month research internship at the Netherlands Commission for Environmental Assessment (NCEA). The NCEA is an independent expert body based in Utrecht, the Netherlands. Founded in 1987, the mission of the NCEA is to "assist environment and sector ministries, environmental assessment professionals and non-governmental organizations to achieve better environmental assessment practice" and thereby contribute to sustainable development. In attempting to achieve this goal, the NCEA engages, amongst others, in capacity development for Environmental Impact Assessment (EIA) in developing countries. In this regard, the NCEA has been involved in two capacity development projects carried out in Central America in the period from 2001-2009 with the objective of strengthening the EIA systems in the region.

The research presented in this report, which involved a two-month stay in Costa Rica and Nicaragua, has been conducted upon request and with the financial support of the NCEA. The information and interpretations presented here are those of the author and are not necessarily shared by the NCEA.

² Retrieved from: http://www.eia.nl (last accessed 03.11.2011).

Acknowledgements

At the start of this research project I didn't imagine how many people would eventually become involved in it and contribute to its accomplishment.

Firstly, I want to thank the many people in Costa Rica and Nicaragua who made so much of their valuable time available to answer my questions and patiently explain to me how things actually work on the ground. Their openness and the insights I gained from my interviewees have led me to the decision to keep them anonymous. I would equally like to thank my hosts Marta and Enrique, who made my stay in Costa Rica and Nicaragua such a memorable experience.

My advisor, Prof. dr. Peter Driessen, has given me continuous support, guidance and encouragement throughout the process. I am extremely grateful for his challenging questions, practical advice and reassurances.

Furthermore, I would like to express my gratitude to Drs. Arend Kolhoff, my supervisor at the NCEA. His advice has always been of great help and his enthusiasm for the subject an invaluable motivation. Many thanks also to Drs. Rob Verheem, Ir. Ineke Steinhauer, Dr. Bobbi Schijf and the fellow colleagues from the NCEA for all the support and inspiring discussions during my internship at the NCEA.

Last but not least, I am inexpressibly grateful to my family, to Till, Davina, Didi, Elgin, Ines, Jana, Marie, Gio, Marieke, David, Vasco, Saad, Andi, Annika, Alex, Feline, Janosch and my other friends for being by my side throughout this journey. I am happy to have the best family and friends one could ever wish for.

I can only hope that someone learns from reading this report a fraction of what I learned during the research and writing process.

Anne Glucker Utrecht, The Netherlands

Summary

Introduction

Among scholars, there seems to be broad consensus that public participation is key to effective EIA. However, if one delves deeper into EIA literature, it becomes clear that the concept of public participation is highly contested. Moreover, the literature review revealed that knowledge about the practice of public participation in EIA is limited. Against this background, the aim of this research was to gain insight into the *theoretical debate* on public participation in EIA as well as the *practice* of public participation in two developing countries, Costa Rica and Nicaragua. Both the theory review and the case study analysis have focused on the meaning and scope of public participation, the objectives of public participation, and the factors influencing the effectiveness of public participation in achieving its objectives. Accordingly, the questions addressed in this research were:

- 1. What insights could be derived from the theoretical debate on public participation in ELA concerning the meaning and scope of public participation; the objectives of public participation; and the factors influencing the effectiveness of public participation?
- 2. What insights could be derived from the practice of public participation in ELA in Costa Rica and Nicaragua concerning the meaning and scope of public participation; the objectives of public participation; and the main factors influencing the effectiveness of public participation?

Research Methodology

In order to answer the first research question, a thorough survey of existing EIA literature has been conducted (including academic literature as well as practice guides). In order to answer the second research question, two cases were analysed: Costa Rica and Nicaragua. The case study analysis involved fifteen face-to-face interviews with different EIA actors in each country as well as a document analysis (mainly legal documents). While there are inevitably some methodological limitations, such as the potential for selectivity of recall by interviewees, it is the author's opinion that this particular approach was necessary to achieve a more comprehensive and reflexive understanding of the practice of public participation in EIA in developing countries.

Main Findings & Conclusions

The review of the theoretical debate on public participation in EIA revealed that there is large disagreement concerning the meaning and adequate scope as well as the objectives of public participation in EIA. This means that the consensus implied in the literature regarding the benefits of public participation in EIA is in fact more apparent than real. What is more, varying definitions of public participation and perceptions of its objectives have affected the advancement of scientific knowledge since existing studies each focussed on different elements and outcomes of public participation, which implies that their results are difficult to compare. However, whereas empirical research would certainly benefit from greater consistency, it is questionable whether definitions should be aligned since there is no single right perspective on public participation in EIA. Moreover, a broad theoretical debate may provide an important impetus for future research and reflection. Nevertheless, in order to capitalise on different ideas and approaches and to advance the research agenda, it is of utmost importance to make

differences between definitions and assumptions explicit and to reflect on their implications for research and practice. This is one of the major tasks for future research on the subject of public participation in EIA.

The case study analysis revealed the following: In Costa Rica and Nicaragua public participation has a purely consultative character. However, access to participation is legally unrestricted, i.e. everyone is invited to participate in EIA. Moreover, in both countries the objectives of public participation are not specified in EIA legislation. And yet, all interviewees emphasised that the objective of public participation is to provide people affected by a proposed project with an opportunity to influence decisions regarding that project. Furthermore, all interviewees in both countries are of the opinion that public participation in EIA has been largely ineffective, i.e. they feel that the public's ability to influence EIA processes and outcomes is seriously constrained. When asked about the factors, which have impacted upon the effectiveness of public participation, respondents identified a broad range of barriers. Some of these barriers correspond to factors mentioned in existing EIA literature. For instance, interviewees in both countries regard the involvement of the public at late stages of the EIA process as detrimental to effective public participation. Moreover, respondents identified a lack of commitment to EIA and public involvement on the part of government officials as one of the key barriers to effective public participation in EIA. However, interviewees also highlighted a range of factors that are widely neglected in the existing literature. For instance, various EIA actors in both countries reported that EIA processes are increasingly captured by political and economic interest, which not only influences the outcome of the impact assessment but also the effectiveness of the participatory process embedded in EIA. This insight implies that EIA – which is often depicted as a technical exercise – is a politically contested arena. While this certainly applies to all countries, it is assumed that political pressure and interference pose a particular challenge for EIA in developing counties, because most developing countries introduced EIA due to pressure from donor agencies rather than as a response to indigenous demand for more environmental protection. Thus, future research should seek to understand how the political context in which participatory processes are embedded shapes and influences its functioning and outcomes.

Table of contents

Pr	eface	i
Ac	knowledgements	ii
Su	mmary	iii
At	obreviations & Acronyms	viii
	rapter I	
1.		
1.	1.1 Environmental Impact Assessment (EIA)	
	1.2 Public Participation in EIA	
	1.3 Research Objectives	
	1.4 Research Questions	
	1.5 Research Methodology	
	1.6 Reading Guide	
Cł	napter II	11
2.	Review of the Theoretical Debate on Public Participation in EIA	12
	2.1 Introduction	
	2.2 Public Participation in Environmental Decision-Making – A Historical Perspective.	12
	2.3 The Meaning and Scope of Public Participation	
	2.3.1 What is Public Participation?	
	2.3.2 Who Should Participate?	
	2.4 The Objectives of Public Participation	
	2.5 Factors Influencing the Effectiveness of Public Participation	
	2.6 Synthesis	28
Cl	napter III	31
3.	Case Study I: Costa Rica	32
	3.1 Introduction	
	3.2 Background Information	33
	3.2.1 Country Background	
	3.2.2 EIA in Costa Rica	
	3.3 Empirical Findings	
	3.3.1 The Meaning and Scope of Public Participation	36
	3.3.2 Objectives of Public Participation	
	3.4 Interim Conclusion	
Cŀ	napter IV	
4.		
٦.	4.1 Introduction	
	4.2 Background Information	
	4.2.1 Country Background	
	4.2.2 EIA in Nicaragua	
	4.3 Empirical Findings	
	4.3.1 The Meaning and Scope of Public Participation	54
	4.3.2 Objectives of Public Participation	55
	4.3.3 Factors Influencing the Effectiveness of Public Participation	55 59
	4.4 1006000 00000000	つり

Cl	napter V	62
5.	 Synthesis of and Reflection on Empirical Findings 5.1 Synthesis of Empirical Findings 5.2 Reflection on Empirical Findings in Light of the Theoretical Debate on Public Participation in EIA. 	63
Cł	napter VI	68
6.	Discussion & Conclusions 6.1 Reflection on the Research Design 6.2 Recommendations for Future Research 6.3 Conclusions	69 70
Re	eferences	74
Ap	ppendix A	81
Ap	ppendix B	83

List of Figures

Figure 1: A Typology of Participation in EIA	16
Figure 2: Arnstein's 'Ladder of Citizen Participation'	18
Figure 3: Administrative competences regarding EIA in Nicaragua	53
Figure 4: The different stages of an EIA process	83
List of Tables	
Table 1: Overview of interviewees per country and actor group	9
Table 2: Description of interviewed EIA actors	9
Table 3: Overview of objectives of public participation derived from EIA literature	26
Table 4: Overview of barriers to effective public participation in EIA identified by different EIA	
actors in Costa Rica	47
Table 5: Overview of barriers to effective public participation in EIA identified by different EIA	
actors in Nicaragua	61

Abbreviations & Acronyms

CAFTA US-Central American Free Trade Agreement

CONEIA Engl.: National Commission for EIA

CSO Civil Society Organisation

DGCA Engl.: Directorate General for Environmental Quality
DJCA Engl.: Jurisdictional Oath of Environmental Compromises

ECOSOC United Nations Economic and Social Council

EID Environmental Impact Declaration
EIA Environmental Impact Assessment
EIS Environmental Impact Statement

EPI Yale University's Environmental Performance Index **FEAP** Engl.: Preliminary Environmental Assessment Form

FSLN Engl.: Sandinista National Liberation Front

HIPC Heavily Indebted Poor Countries

IAIA International Association for Impact Assessment

IUCN International Union for the Conservation of Nature

LOA Engl. Environmental Organic Law

MARENAEngl.: Ministry of the Environment and Natural ResourcesMEICEngl.: Ministry of Economy, Industry and CommerceMINAEEngl.: Ministry of the Environment and Energy

NCEA Netherlands Commission for Environmental Assessment

NGO Non-Governmental Organization

NEPA The United States National Environmental Policy Act
OECD Organisation for Economic Co-operation and Development

P-PGA Engl.: Environmental Management Plan
RAAN Engl.: North Atlantic Autonomous Region
RAAS Engl.: South Atlantic Autonomous Region
SEA Strategic Environmental Assessment

SERENA Engl.: Secretariat for Natural Resources and the Environment

SETENA Engl.: National Technical Environmental Secretariat

TAA Engl.: Environmental Administrative Tribunal

ToR Terms of Reference

UGA Engl.: Sectoral Environmental Management Unit

UNCED United Nations Conference on Environment and Development

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Programme

WCED World Commission on Environment and Development

WSSD World Summit on Sustainable Development

Chapter I

1. Introduction

1.1 Environmental Impact Assessment (EIA)

Environmental impact assessment (EIA) "is currently the most frequently applied process oriented environmental planning and management instrument (...) globally" (Fischer, 2009, p. 2). According to Sadler (1996), the fact that more than two-thirds of the developing countries have enacted some form of EIA legislation is "perhaps one of the most striking and possibly under-appreciated trends in the field" (p. 31). While there are certainly differences between EIA systems in developing countries, "EIA in developing countries tends to be different from EIA in the developed world" (Wood, 2003, p. 4). According to the author, the most noticeable difference relates to the fact that EIA has been introduced in developing countries due to pressure from donor agencies rather than as a response to indigenous demand for more environmental protection.

EIA requirements were first formulated based on the United States' National Environmental Policy Act (NEPA), adopted in 1969 (Fischer, 2003). At the United Nations Conference on The Human Environment held 1972 in Stockholm, Sweden, the importance to identify and evaluate the potential environmental impacts of proposed development activities³ was recognised (Cajiao Jiménez, 2003). Principle 17 of the Rio Declaration, adopted 1992 at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, states that "environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority" (UN, 1992). The need for a *preventive* approach to environmental protection was re-emphasised in the Earth Charter published in 2000, which asks to "prevent harm as the best method of environmental protection" (principle 6) and demands to "place the burden of proof on those who argue that a proposed activity will not cause significant harm" (sub-principle 6.b).

Given that EIA is an established and globally practiced policy tool it might be assumed that considerable consensus exists regarding its purposes (Cashmore et al., 2004). On a superficial level this indeed seems to be the case: "it is broadly accepted that the basic intention of EIA is to anticipate the significant environmental impacts of development proposals before a commitment is made to a particular course of action" (Cashmore et al., 2004, p. 296). Yet beyond this general assertion, interpretations of the purpose of EIA considerably diverge. First of all, some scholars emphasise the contribution of EIA to 'informed decision-making' which implies a focus on the assessment *process*: "environmental impact assessment (EIA) is a decision tool employed to identify and evaluate the probable environmental consequences of certain proposed development actions in order to facilitate informed decision-making" (Cashmore et al., 2004, p. 295). Other scientists highlight the substantive contribution of EIA, i.e. the final *outcome* of the EIA process. And yet other authors argue that EIA involves both a procedural and

³ Some authors talk about 'projects' others about 'development activities' that are subject to EIA. Both terms refer to the same, namly to (proposed) actitivies that may cause significant environmental impacts (cf. Wood, 1995). In this study both terms will be used interchangeably.

substantive dimension and thus distinguish between short-term and long-term objectives of EIA (e.g. Kolhoff et al., 2009; Fischer, 2009). What is more, opinions differ as to the substantive objective of EIA. Due to a perceived under-representation of environmental concerns in development planning, EIA has originally been introduced as an "advocacy instrument for the *biophysical environment* in project decision making" (Morrison-Saunders & Fischer, 2006, p. 19, emphasis added). Ever since The Brundtland Report (1987) EIA has increasingly been promoted as a means for achieving more sustainable development.⁴ Scholars and practitioners sharing this perspective, argue that EIA shall contribute to sustainable development by implementing projects that are environmentally sound, socially acceptable and economically viable. Consequently, "the scope of study in EIA should (...) be broadened to include social and economic aspects" (Kolhoff et al., 2009, p. 2). This notion has led to growing international support for integrated approaches to EIA. The essential feature of this new approach is that economic and social impacts are considered on a par with environmental ones (Kidd and Fischer, 2007). The International Association for Impact Assessment (IAIA) (1999) correspondingly defines EIA as "the process of identifying, predicting, evaluating and mitigating the biophysical, social and other relevant effects of development proposals prior to major decisions being taken and commitments made" 5.

In line with Fischer (2005), in this research EIA is defined as a "pro-active decision support, helping to structure decision-making in a rigorous manner and leading to more environmentally sustainable decisions" (p. 3). That is, EIA is supposed to have a 'substantial influence' on the final decision, namely to make it more environmentally friendly. There are two reasons why this position is taken. First, as has been mentioned, several authors argue that the primary objective of EIA is to generate relevant information for decision-makers. Following this line of thinking, EIA does not necessarily have to lead to more environmentally friendly decisions as long as procedural requirements are met. However, as Jesse (2008) points out, this notion is not in line with internationally acknowledged legal principles which clearly emphasise the substantial influence EIA shall have on decision-making: "the variable formulations imply that environmental pollution and other environmental harms should be prevented, or reduced as much as possible" (Jesse, 2008, p. 439). Secondly, at the moment there are no policy instruments other than EIA, which may safeguard environmental interests in development planning. Given that "the environmental situation world-wide actually continues to develop in a negative way" (Morrison-Saunders and Fischer, 2006, p. 27) the ability of EIA to ensure that the environment is protected and managed in a sustainable way should not be put at risk. Empirical evidence suggests that the integration of social and economic aspects in EIA "will ultimately favour trade-offs towards socio-economic benefits, causing adverse environmental impacts" (ibid., p. 19). Morrison-Saunders and Fischer (2006) consequently conclude that EIA shall be used effectively to protect the environment "until power relationships develop in a way that will allow integration in an environmentally sustainable manner" (p. 19).

_

⁴Whereas originally the contribution of EIA to sustainability was seen to arise directly from the integration of environmental considerations into decision-making, it is increasingly suggested that EIA provides "a sound basis that can be extended to include broader sustainability concerns" (Pope et al., 2004, p. 598).

⁵ No page numbers available. Retrieved from: http://www.iaia.org (last accessed 3.01.2011). ⁶ Jesse (2008) defines 'substantial influence' as "the effect of the results of EIA on the final decision-making" (p. 343).

1.2 Public Participation in EIA

"The US National Environmental Policy Act 1969 (NEPA) not only provided the building block for EIA development worldwide, but at the same time embedded in the process the concept of disclosure to, and consultation with, the public" (Petts, 2003, p. 152). At several international conferences following the introduction of EIA, the importance of public participation for environmental decision-making has been formally recognised. For instance, the United Nations (UN) 1992 Rio Conference on Environment and Development, states in principle ten of its declaration that "environmental issues are best handled with the participation of all concerned citizens at the relevant level" (UN, 1992). Another landmark is the 1998 Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters, the Aarhus Convention. The Convention, which sets out minimum requirements for public participation in various categories of environmental decision-making, calls upon signatory states to "guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention" (UNECE, 1998). Reflecting the perceived centrality of public participation in environmental decision-making, all countries applying EIA have enacted at least some practical measures for public participation in EIA (Boyco, 2010). However, as Bisset (2000) reports, in most developing countries the establishment of provisions for public participation in EIA has been induced by foreign donor agencies, most of which have obligatory requirements for public participation (e.g. World Bank, UNEP and OECD). In this regard, it should be emphasised that "the notion of public participation in decision making is revolutionary in many developing countries" (Wood, 2003, p. 17). Clearly, greater public involvement in decision-making is key to strengthening democracy (Fiorino, 1996). In this context, EIA may be seen as a stimulating factor in the process of democratic transition ongoing in many developing countries around the world (Petts, 2003; Wilbanks et al., 1993). Similarly, Boyco (2010) explains, "the process of public participation in the environmental impact assessment (EIA) arena is at the forefront of theoretical and practical debates surrounding the democratization of (...) policy-making" (p. 1).

1.3 Research Objectives

The importance attached to public participation in practice is echoed in scientific literature (Sinclair et al., 2008; Doelle and Sinclair, 2006; Hartley and Wood, 2005; Shepherd and Bowler, 2000; Palerm, 2000; Kakonge, 1996). Many authors highlight that "public participation is a vital ingredient for effective environmental assessment" (Hughes, 1996, p. 21). However, despite its prominence, the concept of public participation appears to be diffuse. First, it is not clear what is meant by and involved in the concept of public participation. Secondly, there is no consensus on who should be allowed to participate. Thirdly, there seems to be confusion regarding the objectives of public participation. Moreover, understanding of the factors influencing the effectiveness of public participation in achieving its objectives is limited. In some articles, factors that are deemed to influence the effectiveness of public participation are mentioned, however, it is unclear how these (mainly procedural) factors are related to the various objectives of public participation highlighted in EIA literature. Moreover, it is not being

discussed whether the factors associated with effective public participation in EIA are equally valid in developed and developing countries. Thus, in order to reach some clarity and to identify aspects requiring further research and debate, the first objective of this research has been to provide a comprehensive overview of the theoretical debate on public participation in EIA, concerning the meaning and scope of public participation; the objectives of public participation; and the factors influencing the effectiveness of public participation in achieving its objectives.

The literature review furthermore revealed that empirical research on public participation in EIA is limited. Similarly, Dietz and Stern (2008) state, "research on the public participation process has lagged far behind the need" (p. 238). Most existing studies sought to assess the effectiveness of public participation in EIA, applying a simplistic 'check list' approach (Bickerstaff and Walker, 2005). Reflecting disagreement on the theoretical level, these studies each focused on different elements and outcomes of the participatory process rather than building upon each other (Rodrigues Rezende, 2009; Wood, 2003; Arnadottir, 2002; Scott and Ngoran, 2003; Del Furia and Wallace-Jones, 2000). Evidently, this kept research from progressing. Against this background, and in light of the inconclusive theoretical debate on public participation in EIA, it seemed necessary to take a step back and to explore what public participation in EIA involves in practice; who is in fact allowed to participate; what objectives the process must fulfil; and what factors influence the attainment of these objectives. As mentioned, in most developing countries public participation in EIA is a highly sensitive issue. On the one hand, it faces great challenges; on the other hand, it might play a key role in the process of democratisation (Lee and George, 2000). Moreover, as Wood (2003) points out, "there is a danger that the advances in environmental protection and enhancement achieved through the use of EIA in developed nations will prove inadequate on a global scale unless a similar level of attention is given to the application of EIA in developing countries" (p. 3). Therefore, two developing countries have been chosen for the empirical analysis involved in this research: Costa Rica and Nicaragua. The criteria for the case selection are outlined in section 1.5 of this chapter.

1.4 Research Questions

The research objectives described above, allow formulating the following two research questions:

- 1. What insights could be derived from the theoretical debate on public participation in EIA concerning the meaning and scope of public participation; the objectives of public participation; and the factors influencing the effectiveness of public participation?
- 2. What insights could be derived from the practice of public participation in EIA in Costa Rica and Nicaragua concerning the meaning and scope of public participation; the objectives of public participation; and the main factors influencing the effectiveness of public participation?

1.5 Research Methodology

As explained above, this research had two main objectives. In this section, the research methodology applied to attain these objectives will be outlined. As will be explained, two

⁷ It seems likely that in countries with authoritarian governments or countries in the process of democratic transition, public participation faces different constraints and challenges than in countries with an established participatory culture.

research strategies have been chosen for this study: desk research (research objective 1) and case study analysis (research objective 2). In chapter 6 of this report, the limitations of the research methodology will be discussed.

Desk Research

The first objective of this research has been to examine the theoretical debate on public participation in EIA. As mentioned, there is no coherent theory on public participation in EIA. Instead, there are a variety of assumptions and normative claims regarding the objectives of public participation in EIA as well as the conditions for effective public participation in EIA. Furthermore, there are different definitions of the concept of public participation as well as 'the public' itself. Thus, in order to provide a comprehensive overview of the theoretical debate on public participation in EIA, an exhaustive review of the relevant literature had to be conducted.

Case Study

In order to explore the practice of public participation in EIA concerning the meaning, scope, and objectives of public participation as well as the factors influencing the effectiveness of public participation in achieving its objectives, two in-depth country case studies have been conducted.8 The type of inference made about the cases is descriptive and qualitative, based on an interpretation of results (see Gerring, 2004; Verschuren and Doorewaard, 1999). A case study can be regarded as "an intensive study of a single unit for the purpose of understanding a larger set of (similar) units" (Gerring, 2004, p. 342). Unlike most existing case studies on public participation in EIA, this research sough to apply a more grounded approach, bringing together the views and experiences of different EIA actors directly involved with public participation. Hence, this research can be defined as exploratory. Gerring (2004) points out that "case studies enjoy a natural advantage in research of an exploratory nature" (p. 349) due to the depth of analysis that they offer. Besides this advantage the case study method also has a weakness, namely the limited external validity of results. However, as Hillebrand et al. (2000) point out, the external validity of qualitative case study results may be increased: "when a researcher is able to formulate logical argumentation in support of causal relationships, it may be concluded that these causal relationships also hold for cases that are structurally similar" (p. 655). Thus, "the quality of case research is strongly influenced by the extent to which the researcher offers logical argumentation in support of his findings" (ibid., p. 654). However, while theoretically it might be possible to generalize from case study analyses, in practice it is a major challenge (ibid.). Nevertheless, in this study any attempt has been made to provide logical argumentation in support of the empirical findings since this is deemed to enhance not only the external validity of the findings but also the quality of the overall research. Finally, the main research findings have been presented to and discussed with EIA experts from different developing countries at the annual conference of the International Association for Impact Assessment (IAIA), held in Puebla, Mexico from 2-6 June 2011. The feedback obtained from these experts helped to validate the findings of this research.

_

⁸ That is, the functioning of public participation in EIA has been studied on a meta- or system-level.
⁹ While this approach has some limitations (see chapter 6), it is the author's opinion that this particular approach is necessary if a more comprehensive and reflexive understanding of the practice of public participation in EIA in developing countries is to be achieved.

As mentioned in the Preface, this research has been carried out in conjunction with an internship at the Netherlands Commission for Environmental Assessment (NCEA). Between 2001 and 2009, the NCEA has been involved in two capacity development projects in Central America¹⁰ aimed at strengthening the EIA systems in the region. As a result, the NCEA could provide contacts of important EIA actors and first-hand information on EIA practice in the region. In order to take advantage of this opportunity, it has thus been decided to confine this research to Central America, which is, according to the United Nations Statistics Division, one of the seven developing regions of the world. 11 Given the limited time and resources available for this research, only two countries could be visited. Due to the security situation in the region and ongoing cooperation, the NCEA requested to select Costa Rica and Nicaragua from the seven Central American countries. Regarding case selection constraints, Denscombe (1998) states "on some occasions, researchers do not really have a great deal of choice when it comes to the selection of suitable cases for inclusion in the investigation" (p. 35). According to the author, this applies in particular to commissioned research, which "leaves the researcher little leeway in the selection of cases" (ibid.).

The primary method for data collection, which has been employed in this study, is interviews. In this research, fifteen semi-structured face-to-face interviews have been conducted per country. In this type of interview, the researcher has a list of key themes and (open-ended) questions to be covered in every interview. However, in contrast to structured interviews, the sequence and the wording of the questions as well as the level of probing for information can be changed depending on the direction of the interview. In addition, the researcher can explain or rephrase the questions if interviewees are unclear about the questions and, if indicated, ask the respondents for clarifications. This flexibility allows the researcher to be responsive towards each individual interviewee, which helps to create a relaxed atmosphere and thus makes it easier to talk about sensitive issues (Kajornboon Bhamani, 2008). Similarly, the Food and Agricultural Organisation of the United Nations (FAO) explains, "semi-structured interviews are conducted with a fairly open framework which allow for focused, conversational, twoway communication". 12 Generally, the validity of the data and information retrieved from semi-structured interviews is high because of the detailed insights this method provides (ibid.). However, the great flexibility of semi-structured interviews has also some drawbacks. First of all, the reliability of the results may be low because no interview is repeated one-to-one with other respondents (see above). Secondly, it may be quite difficult to compare answers from different respondents and to analyse answers to openended questions. Thirdly, any type of interview involves the risk that respondents might feel that they need to present themselves in a specific way in order to fit in with their perception of the researcher's requirements (social desirability bias), or (consciously or unconsciously) deviate from the research topic and talk about issues that do not fit easily with the aim of the interview.

The interviews conducted during the two-month fieldwork in Costa Rica and Nicaragua, lasted between 45 minutes and two hours and were recorded if possible. In cases where

¹⁰ Central America comprises seven countries: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

¹¹ Information available at: http://unstats.un.org (last accessed: 27.11.2011).

¹² Online publication, no page numbers.

recording was not possible - because interviewees did not give their permission or because of the setting - detailed notes were taken. In appendix A, a list providing an overview of the questions used to structure the interviews can be found. Based on the answers provided by the interviewees and the extent to which these answers coincide, conclusions have been drawn. The selection of interviewees has been based on several criteria. As mentioned, this research sought to include the perceptions and practical experiences of different EIA actors into the empirical analysis. Interviewees were asked to explain what objective(s) the participatory process ought to fulfil and to reflect upon the factors influencing the achievement of these objectives. According to Jantunen (2011) and Lawrence (2003), EIA authorities, consultants, proponents, civil society, and relevant knowledge actors are the central EIA actors. Thus, in order to cover a wide spectrum of EIA actors, the intention was to interview several representatives of each of these actor groups. Furthermore, the aim was to select interviewees with high expertise on public participation, due to their work experience and position. As regards government officials, it posed quite a challenge to find interviewees with sufficient work experience since staff fluctuation is usually high in government institutions in developing countries.¹³ Of course, other criteria such as people's willingness to cooperate on this research project and their availability in the given time period also had to be taken into account. Based on these criteria, a list of interviewees has been compiled before leaving for Costa Rica and Nicaragua. During fieldwork, this list has been complemented according to recommendations received from interviewees and personal experiences made during the first interviews. Looking back it can be concluded that the most important members of the actor groups mentioned above have been interviewed – the comparably small size of the Costa Rican and Nicaraguan EIA system made this possible. 14 Only the response rate of proponents was low (see Table 1).

The openness and the insights gained from the interviewees have led the author to the decision to keep them anonymous. Table 1 gives an overview of the number of interviewees per country and actor group. Table 2 contains a description of the role of the respective EIA actors as well as the type of information they could provide due to their role in EIA.

_

¹³ In this regard, various interviewees reported that public officials working in government institutions are poorly payed. For instnace, one interviewee from Nicargua explained that EIA officials working at MARENA earn between 300-400\$ per month – not enought for a decent living. Interviewees further reported that as soon as people acquire some knowledge trough their work in government institutions, they become interesting for private firms. Since jobs in the private sector are much better paid, most EIA officials seek employment in the private sector as soon as possible or try to establish themeselves as consultants. Evidently, this inhibits effective capacity building in government institutions.

¹⁴ For instance, Nicaragua's EIA agency consists only of approx. 15 employees.

Table 1: Overview of interviewees per country and actor group

	EIA actors					
Case study	EIA authority & other competent authorities	Proponent	Consultants	Civil Society	Academics & other knowledge actors	Total
Costa Rica	2	0	4	5	4	15
Nicaragua	6	1	4	2	2	15
Total	8	1	8	7	6	30

Table 2: Description of interviewed EIA actors

EIA actors	Description
EIA agency & other competent authorities	The EIA agency (often in co-operation with other government institutions) administers the EIA process. Thus, its staff can be assumed to have a comprehensive overview of all elements of the assessment process, incl. public participation, as well as over regulations and requirements.
Consultants	Consultants carry out the impact assessment, interact with the EIA agency and have to deal with public input. Hence they could provide important insights into the practice of EIA and public involvement in the assessment process.
Civil Society	In this research, members of important national environmental NGOs have been interviewed. Due to their first-hand experience with participation in EIA and their profound knowledge about the procedure, they could provide valuable information.
Academics & other knowledge actors	They provide training and/or advice to decision-makers and consultants, have done research and/or teach on the subject of EIA etc. Due to their theoretical understanding of the EIA process and profound knowledge of the subject they could enrich this analysis with important insights.
Proponent	The proponent of a project subject to EIA (this can be a private or public investor) is familiar with the procedural requirements for EIA. Moreover he/she has personal experience with EIA practice.

Besides people, documents (mainly legal documents) served as a source of information for the case study analysis. Documents were reviewed to get insight into the legal framework for EIA in Costa Rica and Nicaragua, including provisions for public participation in EIA. The latter define the content of participation and stipulate who is allowed to participate. Some of these documents are available online and could thus be analysed prior to the fieldwork period, others had to be requested from the respective EIA agencies on site. In this regard it should be emphasised that both in Costa Rica and Nicaragua, EIA legislation lays out the procedure for public participation in broad terms only. Hence, in order to supplement information contained in documents, interviewees

were asked for information about the way EIA legislation is interpreted and implemented.

1.6 Reading Guide

In chapter 2, a comprehensive review of the theoretical debate on public participation in EIA will be given. Before delving into details, a historical overview of the role of public participation in environmental decision-making will be presented in order to contextualise the topic of this research. In the last section of chapter 2, the main findings of the theory review will be synthesised. In chapters 3 and 4, the two case studies are presented: Costa Rica (chapter 3) and Nicaragua (chapter 4). In both chapters, background information on the country is given and the development and main features of the country's EIA system are described. Subsequently, the results of the case study analysis are presented. The last section of chapters 3 and 4 draws out the main conclusions from the empirical analysis. In chapter 5, the results of the two case studies are synthesised and discussed in light of the theoretical debate on public participation in EIA presented in chapter 2. In the sixth and last chapter, the limitations of this study are discussed, some recommendations for future research are made and the final conclusions are drawn out. In appendix A, an overview of the questions used to structure the interviews with EIA actors in Costa Rica and Nicaragua is given. Appendix B contains an illustration of the different stages of EIA (Figure 4).

Chapter II

2. Review of the Theoretical Debate on Public Participation in EIA

2.1 Introduction

In line with research objective 1, in this chapter a comprehensive review of the theoretical debate on public participation in EIA will be given. As indicated in the first chapter, this review focuses on the following key issues: (1) the meaning and scope of public participation; (2) the objectives of public participation; (3) the factors influencing the effectiveness of public participation in achieving its objectives. Before delving into details, a historical overview of the role of public participation in environmental decision-making will be presented in order to contextualise the topic of this research.

2.2 Public Participation in Environmental Decision-Making – A Historical Perspective

The form of participation relevant to the issue at hand is *political* participation, i.e. participation of citizens and social groups in political decision-making processes. Means of participation long established in democratic societies, such as the right to vote, to referendum etc., obviously fall under this definition. Yet what is of more relevance to environmental decision-making is the call for "new, more radical forms of participation, for a more direct influence on policy" (Leroy and van Tatenhove, 2001, p. 164) made in the late 1960s and early 1970s. This call was based on peoples' feeling that their influence on decision-making had become too indirect and that "the representative democracy (...) was often overruled by forms of (neo)corporatism in which a small number of interest groups in actual fact ran the whole show, important decisions being made after consultation among the elite of these groups" (ibid.). What should be noted is that peoples' demand for more participative decision-making has not been confined to environmental issues. However, it may be considered especially relevant for the latter because environmental decisions affect virtually everyone (Petts, 2003). Subsequently, the demand for more active involvement has been taken up by the environmental movement gaining strength in the 1970s, and combined with a call for better integration of environmental concerns in planning and decision-making. That is, objections were raised against the actual content of decisions (the omission of environmental interests) and the non-participatory way in which these decisions were reached. Ever since, "it would appear that the environment and participation are two inextricably linked aspects of the same 'green discontent' (Leroy and van Tatenhove 2001, p. 163). Against this backdrop, the important role of public participation in EIA is to be understood as a reflection of a wider socio-political trend towards democratization and increasing accountability in public policy-making (UNEP, 2004).

After having briefly described the *link* between public participation and environmental decision-making, an overview of the historical development of public participation in environmental decision-making will be given. Generally speaking, this overview applies both to developed and developing countries. However, in most developing countries participatory measures haven been adopted later, i.e. in response to Western initiatives and/or requirements related to external funding (Wood, 2003). Moreover, in some developing countries, although often formally required, public participation in environmental decision-making is not (yet) practiced (ibid.).

According to Leroy and van Tatenhove (2001), the first complaint of the environmental movement, that too little attention is being paid to environmental impacts, has led to the gradual institutionalisation of environmental policy. A well-known example is the National Environmental Policy Act (NEPA) of the United States, adopted in 1969. Also, existing decision-making tools where reformed and new ones developed with the aim to 'safeguard the interests of the environment' (Leroy and van Tatenhove, 2001, p. 166). Probably the most prominent example of innovation in the field of environmental instruments is the introduction of EIA. First applied in the United States in 1969, EIA spread around the world and developed into a widely accepted policy tool (Cashmore et al., 2004). What should be noted is that EIA was one of the first preventive environmental decision tools, i.e. one of the first tools aimed at tackling environmental impacts before they occur.

The second complaint raised by the environmental movement, that *decisions are made in a non-participatory manner*, equally resulted in several adjustments. On the one side, exiting regulations were revised in order to allow for more direct citizen participation, on the other hand, new, more participatory forms of policy emerged (among those EIA). Regarding the overall success of these new instruments for more participation in environmental policy, Leroy and van Tatenhove (2001) conclude: "despite all the good intentions, [they] failed to lead to more or better political participation" (p. 170). According to the authors this is because the new instruments gave those people and groups who were – by virtue of their interests, status etc. – already politically involved additional opportunities to participate while failing to mobilize the average, less interested citizen. At this point, practice results will not be discussed in more detail because this issue will explicitly be addressed in subsequent chapters (chapters 3 and 4). Instead, in order to complete the historical overview, the development of participation in environmental decision-making from the mid 1980s up to the present will be described.

First, it should be noted that during the 1970s, the core of debates and related policy reforms was to improve the relationship between government and citizens, i.e. people demanded a more direct involvement in *government* decisions. Yet, starting in the mid 1980s, gradually more actors became involved in environmental policy. More precisely, environmental policy has increasingly become a matter of government, civil society *and the market*. Leroy and van Tatenhove (2001) note that this change in the field of environmental policy has only to some extent been deliberate; partly it is a reflection of a wider process of political modernization that involves a redefinition of the relationship between the government, market, and civil society (for more information on this issue see also Elling, 2008; Dubbink, 2003).

From a participative perspective, the period from 1985 up to the present day has been characterized by two major trends: the 'societalisation' and 'marketisation' of environmental politics (Leroy and van Tatenhove, 2001, pp. 174-182). The societalisation of environmental policy implies mainly two things. First, top-down government-lead approaches to environmental policy are supplemented with more interactive forms of governance, involving civil society from the very beginning into planning activities (ibid.). Secondly, the group of actors involved in decision-making is extended beyond established interest groups (ibid.). For instance, increasingly unorganized citizens are consulted alongside (environmental) NGOs. Partnerships revolving around issues such

as natural resource management (e.g. forest management) are an example of this modification (see, e.g. Visseren-Hamakers and Glasbergen, 2007).

The 'marketisation' of environmental policy has manifested itself in several changes. Most importantly, it is reflected in the use of new, market-based policy instruments (e.g. marketable allowances) in addition to government regulation. Moreover, marketisation of environmental policy refers to a transfer of certain responsibilities from the government to market parties through privatisation and liberalization (Leroy and van Tatenhove, 2001). Two examples among many are waste treatment and energy generation. From a participative perspective, the process of marketisation within the field of environmental policy means that citizens wishing to influence environmental decisions can no longer address the government only. Increasingly, they need to find ways to influence the responsible market actors. Up to date, there are hardly any established instruments for the latter – often, citizens have no alternative but to rely on their consumer power.

All in all, it may be concluded that the role of public participation in environmental decision-making has considerably changed over the last forty years. Existing regulations have been improved and various new instruments, such as EIA, been introduced. Yet, besides this increase in opportunities for the public to influence environmental decisions, the transfer of responsibilities from government to market actors described above has made it more difficult to hold those accountable who take environmentally relevant decisions. Nevertheless, it can be concluded that, "public participation has become an integral part of environmental policymaking" (Beierle and Cayford, 2001, abstract).

2.3 The Meaning and Scope of Public Participation

2.3.1 What is Public Participation?

Even a cursory glance at recent writing on EIA and environmental policy-making generally reveals that 'public participation' is frequently invoked. However, the precise meaning of the term remains intangible. Almost two decades ago, Adnan (1992) noted: "it is often difficult to understand whether those talking about people's participation mean the same thing or simply use the phrase as a kind of magical incantation" (as cited in Hughes, 1998, p. 23). Despite, increasing popularity of participatory approaches to (environmental) policy making this seems not to have changed. In many cases, "authors talk about it [public participation] without really defining it" (Scott and Ngoran, 2003, p. 30). The few authors who do provide a definition of the concept have conflicting opinions about its meaning. For instance, the IAIA (2006) defines public participation in the context of environmental assessment as "the involvement of individuals and groups that are positively or negatively affected, or that are interested in, a proposed project, program, plan or policy that is subject to a decision-making process" (p. 1). Hence, according to the IAIA (2006), public participation is about 'involving' those affected by or interested in a decision into the decision-making process. The form and degree of involvement remain unclear. By contrast, according to Arnstein (1969), public participation is "a categorical term for citizen power. It is the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future" (p. 216). This view implies that public participation is a means to alter the distribution of power and structures of decision making with the aim of empowering formerly marginalised individuals. These two examples illustrate that there is no consensus on what public participation means and involves. Besides rhetoric, this has implications for practice too. Whereas the former definition implies that affected or interested members of the public should be given *some* opportunity to influence decision-making (decision-making power may rest in the hands of public officials), the latter definition entails a drastic reconstitution of decision making structures to the advantage of the least powerful.

Reflecting disagreement on the meaning of public participation, there seems to be great confusion in the use of the terms 'participation' and 'consultation' in EIA literature. Several authors perceive 'public participation' as a catch-all phrase for different types of involvement techniques regardless of the scope and purpose and, consequently, use the terms 'participation' and 'consultation' interchangeably (e.g. Aregbeshola, 2009; Scott and Ngoran, 2003; Del Furia and Wallace-Jones, 2000). Others criticise this imprecision given "important differences in the meaning of the terms" (Hughes, 1998, p. 22). Scholars such as Hughes (1998) and Bishop and Davis (2002) emphasise that the use of the term 'participation' is only justified when the public is actively involved and where authorities are significantly influenced by this involvement. 'Consultation', by contrast, denotes "a process with little share or control over the process for consultees" (Hughes, 1998, p. 22). Similarly, some authors suggest to distinguish between different forms of participation ranging, e.g. from information provision, to consultation, to shared decision-making. To this end, scholars such as Shand and Arnberg (1996), Adnan et al. (1992), Thomas (1990) and Arnstein (1969) developed frameworks, which allow differentiating between different forms of public participation. For instance, Figure 1 below illustrates a typology of participation originally proposed by Adnan et al. (1992), adapted to the context of EIA by Hughes (1998).

Figure 1: A Typology of Participation in EIA

Туре	Example of each type
1. Passive participation	Consultant or extension worker appears in village and tells villagers that an irrigation scheme will be constructed to 'improve' crop yields.
2. Participation in information giving	Consultant or extension worker appears in village and asks for information about their crops, and about seasonal water flows. Records their answers and leaves.
3. Participation by consultation	Consultant or extension worker explains that crop yields need to be improved, and that the government intends to build an irrigation scheme. They seek the views and responses of villagers (for example, how they feel it might increase soil erosion), and then leave.
4. Functional participation	Consultants or extension workers inform villagers that they intend to construct an irrigation project. The consultants then facilitate the development of a vil lage committee to discuss particular aspects of the project (such as minimising soil erosion, downstream impacts on fisheries; or to agree on arrangement for water management).
5. Interactive participation	Local villagers identify their own needs, and external facilitators work with them to assist in finding solutions to potential negative impacts - and improving positive effects. In some cases, new institutions will develop at the local level, which might then play a role in the management of their own project and its impacts. Villagers then have a real stake in maintaining structures or practices.
6. Self-Mobilization	Villagers plan and identify their own irrigation structures, perhaps learning from experience in a nearby village. They may develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used.

Source: Hughes (1998).

While this and similar frameworks have the advantage of directing attention to the various forms in which the public may be involved in decision-making, they have a major drawback: they imply that the different types of participation are separate categories, i.e. that interaction between them does not occur. However, EIA practice suggests that less active forms of participation, such as information provision, may actually trigger more genuine forms of public involvement (O'Faircheallaigh, 2010; Petts, 2003). For example, a community that is being informed about a project undergoing EIA may, by this means, become aware of the decision-making process and the issues at stake and, as a consequence, demand to be more actively involved in future decisions.

Among scholars who distinguish between different forms of public participation, there is no consensus regarding their respective importance. Some authors, such as Runhaar and Driessen (2007) or Thomas (1990) argue that no form of participation is inherently better than the other since the necessary extent of involvement depends on the characteristics of the policy problem at hand. To shortly illustrate this point, regarding Strategic Environmental Assessment (SEA) Runhaar and Driessen (2007) state that "interactions and negotiations with, and input from, stakeholders are required when the stakes of the various actors involved are high, norms and values diverge, and there is uncertainty about the causes of the policy problem or the impacts of alternative policy programmes — that is, when 'unstructured' policy problems are at issue (p. 5)". By contrast, "structured' policy problems (...) can be solved in a more traditional way. Here, policy can be left to public policy-makers" (ibid., p. 6). From a cost-benefit perspective it is certainly true that public participation is in some cases less necessary than in others.

However, O'Faircheallaigh (2010) highlights two drawbacks of this approach. First, it suggests that the decision regarding the characteristics of the policy problem at hand and the appropriate form of participation should be made by public officials. This indicates a certain attitude towards participation, which is not uncontroversial. Second, it assumes (though implicitly) that participants will accept the level of participation granted to them (ibid.). As has been touched upon above, this might not always be the case. Other scholars, such as Arnstein (1969), condemn less collaborative forms of public participation as an attempt of decision-makers to instrumentalise participants for their cause. Hence, Arnstein's (1969) 'Ladder of Citizen Participation', one of the most frequently invoked frameworks in literature on public participation in EIA and public participation generally, establishes a hierarchy of forms of participation (see Figure 2 below). Here, consultation is referred to as 'tokenism' because it fails to deliver citizen's 15 control over policy decisions. Arnstein (1969) suggests that people ought to refrain from 'lower' forms of participation in order to obtain control over decision-making. As mentioned above, authors such as O'Fairchellaigh (2010) or Devlin and Yap (2008) do not share this notion and claim that members of the public might successively increase their influence over decision-making. In this regard, Devlin and Yap (2008) highlight the importance of informal forms of participation in the context of environmental assessment as a means to open up decision-making processes: "Even quite closed and technocratic EA processes can be broken open if the public becomes aware of the project and begins to mobilize against it" (p. 19). Besides Devlin and Yap (2008), Clarke and Harvey (2008) also distinguish between formal and informal forms of public participation and point out that the latter has been rather influential in the context of EIA. 16 Despite this practical relevance, informal forms of public participation appear to be largely neglected in EIA literature.

⁻

¹⁵ As will be discussed in the follinwg section (section 3.3.2), the meaning of the term 'the public' is equally unclear as the meaning of 'participation'. As a consequence, terms such as 'citizens', 'the public' and 'stakeholders' are often used interchangeably in EIA literature. Here, Arnstein's terminology has been retained for reasons of consistency.

¹⁶ In Costa Rica, for instance, extensive social protest (including hunger strikes) led to the shut down of the 'Las Crucitas' gold mine and finally to a ban of any mineral open-pit mining in the country. More inforation on the 'Crucitas mine' and related protests can, e.g. be retrieved from: http://www.globalpost.com (last accessed: 7.09.2011).

Citizen Control

Delegated Power

Partnership

Placation

Consultation

Informing

Therapy

Nonparticipation

Figure 2: Arnstein's 'Ladder of Citizen Participation'

Source: Adapted from the original by Arnstein (1969).

2.3.2 Who Should Participate?

The public' is a recurrent term in EIA literature, but to whom are authors referring when talking about participation of the public? In fact, many authors do not define who shall be involved. Moreover, the terms 'the public', 'stakeholders' and 'citizens' are often used interchangeably in EIA literature (e.g. Scott and Ngoran, 2003; Hughes, 1998; Marzuki, 2009). For instance, Ngoran and Scott (2003) note that, "public involvement is a feature of nearly all EIA systems. The public involvement of stakeholders in EIA is widely recognized as a fundamental element of the process". (p. 27). Petts (2003) criticises this lack of precision and stresses that "a clear understanding of who 'the public' are and what their interests are is essential not only to the recognition of the benefits of participation in general but to the design of specific activities" (Petts, 2003, p. 150, emphasis in the orig.).

Among those scholars who address the question 'who should participate?' there seems to be broad consensus that 'the public' refers to anyone interested in or affected by a decision. For instance, Dietz and Stern (2008) argue that the public involves "people, groups, or organizations that may experience benefit or harm or that otherwise choose to become informed or involved in an environmental decision" (p. 15). However, some authors hold different views. For example, Doelle and Sinclair (2006) argue that the public should be defined broadly: "The purpose of the definition is only to eliminate parties who could not possibly contribute constructively to the public process. Anyone who may have something to contribute must be permitted to participate". Burton (2004), on the other hand, states that "everyone affected by a decision" should be given a chance to participate in public policy making (p. 194). Adding yet another perspective, Dietz and Stern (2008) suggest differentiating between different segments of the public: particularly between 'the general public' and 'stakeholders'. The former refers to the broader collectivity of individuals who are not directly affected by a decision but may have some interest in it. The latter involves organised and unorganised groups as well as individuals

that will be directly affected by a decision and thus have a strong interest in its outcome. The Dietz and Stern (2008) hold the view that "how much attention should be paid to involving (...) these publics depends on the context" (p. 15). For instance, the respective objectives pursued with public participation in EIA determine who should be involved: stakeholders, the general public, or any other segment of the public (ibid.). Accordingly, Dietz and Stern (2008) argue that "it would be inefficient and a waste of time and money to include the full scope of public actors in all environmental controversies" (p. 15).

2.4 The Objectives of Public Participation

What are the objectives of public participation in EIA? Again, there seems to be no consensus, i.e. different authors highlight different objectives of public participation in EIA (e.g. Momtaz and Gladstone, 2008; Chavez and Bernal, 2008; Stewart and Sinclair, 2007; Del Furia and Wallace-Jones, 2000). Dietz and Stern (2008), who recognised this problem, state that, "there is considerable dispute about what the goals of public participation should be" (p. 17). Thus, the literature review brought forth a long list of objectives of public involvement in EIA. However, on closer examination it was possible to break them down into nine objectives and to divide these according to the respective underlying rationale. The following rationales can be distinguished: a) normative rationale; b) substantive rationale; and c) instrumental rationale. In the following, a comprehensive overview of these nine objectives will be given, including the notions and assumptions associated with each objective.

When analysing the various objectives of public participation mentioned in EIA literature, it becomes apparent that some of these objectives require the involvement of different segments of the public than others. This fact has been emphasised by Dietz and Stern (2008) but has been widely ignored by other scholars (see previous section). In fact, the main difference seems to lie between involvement of individuals and groups who are directly affected by a decision vs. involvement of people who are not directly affected by a decision but may have some interest in it. As mentioned in the previous section, Dietz and Stern (2008) refer to the former as 'stakeholders' and to the latter as 'the general public'. Accordingly, it will be mentioned whether the respective objective for public participation in EIA implies involving stakeholders, the general public or any other segment of the public (see also Table 3 for an overview).

A. Normative rationale

Several authors highlight objectives of public participation that are derived from normative ideas and principles. Three of these objectives are closely associated with (different) democratic ideals (i-iii). Another one is based on the belief that the least powerful members of society ought to be emancipated (iv).

i) Influencing decisions

Public participation in EIA shall enable those that are affected by a decision to influence that decision.

An argument for public participation in EIA often found in literature is that – from a democratic point of view – the individual has "the right to be informed, to be consulted

¹⁷ It should be noted that Dietz and Stern's (2008) perception of the public challenges the notion of the public as a homogenous entity put forth in much of the EIA literature.

and to express his or her views on matters which affect them personally" (Petts, 2003, p. 146). Since environmental decisions literally affect everybody's quality of life, it would thus be undemocratic or unethical not to provide the public with opportunities to participate in EIA (Hartley and Wood, 2005; Leroy and van Tatenhove, 2001). Yet how much influence should the public have? Most authors agree that involvement should go beyond merely informing the public, i.e. involvement should be 'meaningful' (e.g. Sinclair et al., 2006) and allow people to actually *influence* the decision process. Yet how concepts such as 'meaningful participation' are to be translated into practice often remains unclear. Some scholars (e.g. Barton, 2002) go even a step further and suggest that people affected by a proposed project need to give their consent to that project. Whereas from a democratic perspective this might be desirable one should be aware of the far-reaching policy implications of such an approach. For instance, if affected people were allowed to *decide* on the siting of a planned landfill (e.g. by means of a referendum), the outcome would most likely be policy deadlock (Leroy and van Tatenhove, 2001; O'Faircheallaigh, 2010). ¹⁸

Evidently, the objective of public participation described above requires involving everyone affected by a decision. However, it needs to be determined who is affect and who is not. Burton (2004) holds the view that everyone directly affected by a project subject to EIA should get the opportunity to influence decision-making concerning the project. By contrast, Dietz and Stern (2008) argue that environmental decisions affect virtually everybody's quality of life, which would imply that all members of the public (within the respective jurisdiction) should be able to influence the decision-making process. Hence, the decision about who to involve depends on the interpretation of 'affected'.

ii) Enhancing democratic capacity

Public participation in EIA shall enable participants to develop their citizenship skills (such as interest articulation, communication and cooperation) and, at the same time, provide participants with an opportunity to actively exercise citizenship.

Several authors argue that public participation in EIA is a means to enhance democratic capacity among citizens. Seen from this perspective, public participation is "of value in its own right" (O'Faircheallaigh, 2010, p. 22). It "provides an opportunity for learning social responsibility and citizenship" (Petts, 2003, p. 146). The underlying assumption is that only through participation (a form of experiential learning) members of the public can "develop their full potential as citizens" (O'Faircheallgaigh, 2010, p. 22). Following this line of thinking, public participation in EIA fulfils an educative function, allowing participants to develop their capacities to articulate their interests and concerns and giving them insights into their system of government (ibid.). Thereby, so the argument goes, not only do participants develop their citizenship skills, but they also "fulfil the obligations which, along with rights, are associated with citizenship" (O'Faircheallaigh, 2010, p. 22). What is more, through participation in EIA, members of the public can learn how their interests relate to and depend on those of others (Dietz and Stern, 2008).

¹⁸ Such opposition is often referred to as the NIMBY (not in my backyard) syndrome (Petts, 2003, p. 151).

This objective of public participation implies the involvement of as much members of the public as possible. Hence, merely involving groups that represent (certain) public interests would not be sufficient.

iii) Social learning

Public participation in ELA shall enable deliberation among participants and thus lead to social learning.

There is no single definition of social learning (Webler et al., 1995) but the many descriptions of the concept all highlight the importance of dialogue among a group of people with the aim of better understanding different points of view and developing processes for collective action.¹⁹ Hence, in the context of EIA, social learning is geared towards "identifying effective, socially acceptable strategies to mitigate impacts and identify opportunities" (O'Faircheallaigh, 2010, p. 21). This implies that "social learning (...) involves a flow of ideas that is not unidirectional" (ibid.). What should be mentioned too is that the notion of social learning is closely connected with the concept of deliberative democracy²⁰ advocated by scholars such as Dryzek (1996), Eckersley (1995) and Meadowcroft (2004). According to Connelly and Richardson (2005) "the deliberative approach is characterised by an openness to different views, rational argument, and - usually - a presumption that the outcome should and will be a consensual decision, which incorporates gains for all those involved" (p. 398). To this end, social learning, i.e. deliberation among participants with the aim to "discover common ground between positions previously considered antagonistic or incompatible, and create new, shared understanding and common values" (ibid.) obviously plays an important role. What is more, many authors consider such deliberative processes as key to sustainable development planning and thus call for the development of participative processes that allow genuine deliberation and facilitate social learning (e.g. Carely and Christie, 2000). For instance, Sinclair et al. (2008) state that collective learning and social mobilisation are a prerequisite for "the perspective transformation necessary for changing unsustainable resource use patterns" (ibid., p. 425). Sneddon et al. (2006) argue that, "we each see different aspects of social and environmental reality from different positions in society and through different lenses of expertise. So deliberative democracy can also counter our fragmented understanding of reality and lead to richer collective knowledge (p. 264). What should be noted is that a focus on deliberation and social learning implies an emphasis of the process of participation rather than its outcomes. That is, as long as reached by means of genuine deliberation among participants, any outcome is legitimate.

Authors who emphasise the potential of public participation to facilitate social learning usually call for the involvement of stakeholders in decision-making (O'Faircheallaigh, 2010; Webler et al., 1995). This is because it is deemed important that those who are

¹⁹ See: Learning for Sustainability (LfS): http://learningforsustainability.net (last accessed 11.08.2011).

²⁰ For a comprehensive comparison between liberal democracy and deliberative democracy see, e.g. Eckersely (1995). A main difference between classical liberal democracy and deliberative demococracy is that in liberal democracy representation is based on political preferences that are formed in an isolationist manner and expressed through voting or opinion polling (Eckersley, 1995). In deliberative democracy, on the other hand, deliberative interaction is supposed to substitute representation as far as possible.

directly affected by a certain decision engage in deliberation with the aim of identifying a mutually acceptable course of action.

iv) Empowering marginalised individuals and groups

Public participation in EIA shall alter the distribution of power within society, thus empowering formerly marginalised individuals and groups.

According to some authors (e.g. Lawrence, 2003; Vanclay, 2003; Barton 2002; Gagnon, 1995) a major objective of public participation in EIA is to empower marginalised individuals and groups. Recall that according to Arnstein (1969), this is the ultimate objective of public participation. What needs to be mentioned is that approaches based on the application of democratic principles assume (though often implicitly) that the existing distribution of power in society allows members of the public to participate in decision making in 'meaningful' ways. By contrast, the notion that public participation in EIA shall serve as a mechanism to empower marginalised individuals and groups is based on the assumption that power is unevenly distributed in society, which means that certain groups of society are de facto excluded from any 'meaningful participation' in decision making. Hence, the objective of public participation in EIA is to achieve a more equitable distribution of (political) power through modifying existing decision structures (O'Faircheallaigh, 2010). This means, that marginalised groups can use ELA as a means to change the social order. For instance, according to Vanclay (2003), the role of EIA "encompasses empowerment of local people; [and] enhancement of the position of (...) disadvantaged or marginalised members of society" (p. 7). Whereas it is certainly desirable to improve the chances of marginalised groups to influence decision-making, the question remains how this may be realised in practice since "the powerless in society are in fact the least likely to participate in EIA, both because they lack the resources to do so and often find the processes involved alien and intimidating" (O'Faircheallaigh, 2010, p. 22).

It is self-evident that this objective requires the involvement of those members of the public who are most powerless. In developing countries, these are especially ethnic minorities such as native indigenous groups and women (UNDP, 2011). Besides gender and ethnicity, poverty (which particularly affects indigenous groups and women) is another marginalising factor throughout the world (UNDP, 2011; ECOSOC, 2011)²¹.

B. Substantive rationale

Many scholars emphasise the potential of public participation to improve the quality of the decision output (Dietz and Stern, 2008; Connelly et al., 2005; UNEP, 2005; Petts, 2003; Del Furia and Wallace-Jones, 2000). That is, public participation in EIA is supposed to lead to 'better' decisions. Or as O'Faircheallaigh (2010) puts it: "in this approach public participation is designed essentially to ensure that all relevant information, including input from those affected, is available so that the decision-maker can make the most informed and well-considered decision" (p. 21). In this regard, different objectives are mentioned in literature (i-iii).

-

²¹ ECOSOC: United Nations Economic and Social Council.

i) Harnessing local knowledge

Public participation in EIA shall enhance the quality of the decision output by providing decision-makers with environmentally and/or socially relevant information.

Several authors point out that decision-makers may want to fill (technical) information gaps by trying to retrieve environmentally and/or socially relevant information from local stakeholders (e.g. Morrison-Saunders and Early, 2008; Momtaz and Gladstone, 2008). For example, public participation may be used to obtain accurate demographic data on a population that would be affected by the construction of a dam. Or, inhabitants could be consulted in order to retrieve relevant information about the local flora and fauna, which would be affected by the proposed project.

ii) Incorporating experimental and value-based knowledge

Public participation in EIA shall increase the quality of the decision output by providing decision-makers with relevant experimental and value-based knowledge.

Some authors argue that a central objective of public participation in EIA is to improve the output of the EIA process by providing decision-makers with experimental and value-based knowledge.²² According to Glicken (2000) experimental knowledge "is based on common sense and personal experience and, again, is developed by individuals" (cited in Arnadottir, 2002, p. 13). Value-based knowledge is "moral or normative, is derived from social interests and is based on perceptions of social value. Such knowledge engenders debates about the 'goodness' of activities" (ibid.). The objective of public participation in EIA to complement cognitive²³ knowledge with experimental and valuebased knowledge is based on the premise that the "subjectivity and value-laden nature of all 'scientific' inputs needs to be scrutinised and balanced with other values and knowledge" (Connelly et al. 2005, p. 398). Similarly, van den Hove (2007) argues that public involvement is essential given "the irreducible plurality of stand-points that stems from the complex nature of [environmental] issues" (ibid., p. 12). This means that even if exact scientific predictions can be made (which is rarely the case) it is necessary to supplement and scrutinise this data with the values at stake (Bina, 2008; Delli Priscoli, 1989). Accordingly, Shepherd and Bowler (1997) state that "even when the scientific characterization of risk is thorough, complexities persist because what is 'acceptable' depends on more than scientific criteria; acceptability depends on public perception" (p. 729). On a related note, O'Faircheallaigh (2010) argues that consultants and decisionmakers need to make judgements regarding the significance of predicted impacts and the risks associated with different project alternatives. He notes, "in this regard knowledge regarding the aspirations and values of affected populations is critical, and public participation may be required to obtain this information" (p. 21). Furthermore, some authors argue that the incorporation of public values is not only essential for supplementing cognitive knowledge but also for balancing the rationalities of the proponent and decision-maker (Fischer, 2009; Elling, 2008) and thus lead to 'better' decisions. Elling (2008) claims that project proponents and decision-makers have

²² Clearly, this objective is closely related to the previous one ('Harnessing local knowledge').

²³ Glicken (2000) refers to cognitive knowledge as technical expertise generated by individuals: "This is the type of information presented by scientists and other experts, and involves factual arguments about issues such as nature and extent of potential environmental damage and the methodologies for assessing such damage" (cited in Árnadottir, 2002, p. 13).

predefined objectives, namely to make profit (proponent) and to increase legitimacy (public authority). Environmental protection *per se* is not a priority. Elling (2008) assumes that members of the public will bring environmental values to the assessment process and thus lead to a comprehensive representation of societal values: "The citizens' argumentation will be geared towards enhancing environmental values, and take a critical approach to any weakening of these" (p. 249).

iii) Testing the robustness of information from other sources

Public participation in EIA shall increase the quality of the decision output by testing the robustness of information from other sources.

Furthermore, some authors state that one objective of public involvement in EIA is to enhance the quality of the decision output by testing the robustness of information public officials have obtained from other sources (particularly from the Environmental Impact Statement (EIS) prepared by the proponent's consultant). This is considered important since proponents, whose priority is to get their project approved, "are likely to ignore or downplay negative impacts or risks and to exaggerate potential project benefits, and in particular may be prone to exaggerate the economic benefits that usually constitute the major justification for large industrial projects" (O'Faircheallaigh, 2010, p. 21). That is, public participation may be important if information provided by project proponents is to be contested.

The three substantive objectives outlined above, perceive public participation as input for decision-makers, i.e. as "an aid to decision making which remains separate from the participating public" (O'Faircheallaigh, 2010, p. 20). As regards the first objective 'harnessing of local knowledge' consequently only those members of the public need to be consulted who can provide decision-makers with relevant information. Concerning the second objective 'incorporating experimental and value-based knowledge' it seems necessary to involve all those who are directly affected by a decision (stakeholders). Regarding the third objective 'testing the robustness of information from other sources' it could be argued that all those who are able to evaluate and, if indicated supplement or correct, existing information (contained in the preliminary environmental assessment form and EIS) shall be consulted. This could be inhabitants of a local community, (environmental) NGOs, or knowledge actors such as independent experts.

C. Instrumental rationale

Finally, two objectives of public participation frequently referred to in EIA literature have an instrumental underpinning. These objectives are: generating legitimacy (i), and resolving conflict (ii).

i) Generating legitimacy

Public participation in EIA shall legitimise the decision-making process thus providing legitimacy to the EIA authority and facilitating project implementation.

Many authors stress that generating legitimacy is among the most important objectives of public participation in EIA (e.g. Morrison-Saunders and Early, 2008; Petts, 2003; Lawrence, 2003; Hughes, 1998). Primarily from the perspective of the EIA authority it is essential to enhance the (perceived) legitimacy of the decision-making process because

democratically elected governments and their institutions depend on support of the electorate. Runhaar (2009) notes that stakeholder involvement is essential these days because decision-makers – who are no longer able to steer society in a hierarchical way – depend on their support because they "control critical resources such as land, real estate or the ability to protest" (p. 201). As has been mentioned in Section 3.2, over the past decades different social and environmental movements have tried to achieve a role for the public as joint decision-makers in public policy making. In fact, "increasingly, it is normal practice to involve the public in the design, delivery and evaluation of government activities" (UNEP, 2004, p. 65). Hence, public policy-making processes that fail to involve the public are perceived as illegitimate (Fiorino, 1996). Through participation people may develop a sense of 'ownership' over the process and its outcome and thus consider it more legitimate. However, it is not sufficient to provide participants with an opportunity to express their ideas and values, their input needs to be taken into account by decision-makers, i.e. participants need to be able to influence decision-making. Furthermore, procedural transparency is key to increase legitimacy. In other words, it must be made transparent if/to what extent input from participants influenced decisions and based on which considerations and criteria decision-makers made their choices. Petts (2003) points out that for project proponents too it is crucial to increase the legitimacy of the decision output through public involvement. This is because a perceived lack of legitimacy may lead to protest against a decision and thus delay or hinder project implementation. If the visions, ideas or values of affected individuals or groups are not sufficiently represented within the assessment, there exists a chance that opposition will be provoked, which will hamper the implementation of the decisions (Runhaar and Driessen, 2007; Runhaar, 2009). Thus, in order to increase the legitimacy and acceptance of the EIA process and its outcome, relevant values and interests need to be taken into account, decision-makers need to be accountable and their choices need to be transparent and comprehensible.

For the pro-active resolution of conflicts through public participation it seems especially important to involve those individuals and groups who see their interests directly affected by a decision (stakeholders) and, in case of discontent, might thus engage in protest and litigation which hampers project implementation.

ii) Resolving conflict

Public participation in ELA shall contribute to the identification and resolution of conflict before final decisions are made and thus facilitate project implementation.

Another objective of public participation frequently invoked in EIA literature is conflict resolution (see e.g. Devlin and Yap, 2008; Petts, 2003; Lawrence, 2003; Del Furia and Wallace-Jones, 2000). In this regard, Shepherd and Bowler (1997) state, "because of the diversity of interests, citizens and project proponents will inevitably encounter conflict" (p. 729). Delli Priscoli (1988) mentions that, due to the complexity of the issues involved in environmental assessment, conflicting interests and opinions are inevitable. However, "the conflict resolution process can be productive, rather than destructive, and cooperative relationships and mutual interests can be discovered" (Shepherd and Bowler, 1997, p. 729). In this regard, public participation in EIA is supposed to provide mechanisms for the identification and resolution of conflicts before a final decision is taken (Shepherd and Bowler, 1997). According to Connelly et al. (2005), to achieve these

ends, "public *deliberation* is increasingly privileged over other forms of public involvement" (p. 398, accentuation added). Susskind and Cruikshank (1987) consequently argue that the aim is not necessarily to avoid conflict but to provide opportunities (in form of suitable participatory mechanisms) to publicly debate different interests and objectives. The pro-active resolution of conflict through public participation is in the interest of the project proponent because it helps to prevent opposition and litigation and thus facilitates project implementation. Shepherd and Bowler (1997) accordingly state that "public participation helps to develop support for the project, it reduces the alienation of the individual, and it takes an active, rather than reactive, role in resolving conflicts" (p. 729).

Table 3: Overview of objectives of public participation derived from EIA literature

Different objectives of public participation in EIA	Rationale			Who should be involved?			Direct effect on EIA	
	Normative	Substantive	Instrumental	Stakeholders	The general public	Other Segments ²⁴	Yes	No
Influencing decisions	X			X	X			X
Enhancing democratic capacity	X				X			X
Social learning	X			X				X
Empowering marginalised individuals and groups	X					X		X
Harnessing local knowledge		X				X	X	
Incorporating experimental and value-based knowledge		X		X			X	
Testing the robustness of information from other sources		X				X	X	
Generating legitimacy			X	X			X	
Resolving conflict			X	X			X	

2.5 Factors Influencing the Effectiveness of Public Participation

Lastly, the theoretical literature has been reviewed in view of factors supposed to influence the effectiveness of public participation. As touched upon in the first chapter, in several publications factors that are deemed to influence the effectiveness of public participation in EIA are mentioned. Most of these factors relate to the *process* of participation and overlap with 'best practice criteria' advertised in international EIA

²⁴ See respective sub-sections above for a description.

guidelines (e.g. World Bank, 1999; IAIA, 1999).²⁵ What remains unclear is how these factors relate to the various objectives of public participation highlighted in EIA literature (see previous section). Does a participatory process that fulfils certain procedural criteria automatically lead to substantive effectiveness and if so, which goals are being achieved? Moreover, it is not being discussed whether the factors associated with effective public participation in EIA are equally valid in developed and developing countries. However, it seems likely that in countries with authoritarian governments or countries in the process of democratic transition, public participation faces different constraints and challenges than in countries with an established participatory culture.

The central factors deemed to influence the effectiveness of public participation in EIA according to the literature, are:

Points in the policy process

Several authors make the claim that early involvement of the public is crucial for the success of the participatory process (Doelle and Sinclair, 2006; Del Furia and Wallace-Jones, 2000; Hughes, 1998; Shepherd and Bowler, 1997). Conversely, involving the public at late stages of the assessment process is deemed to decrease the effectiveness of public participation. For instance, Shepherd and Bowler (1997) claim that, "the later that public participation occurs in the EIA process, the higher the risk that public comments will only minimally influence the final decision" (p. 727). In Appendix B (Figure 4), an illustration of the different stages of EIA processes can be found.

Timing

Another factor associated with effective public participation in EIA is adequate timing. For instance, Dietz and Stern (2008) argue that, "participatory processes need to be designed so that closure is achievable and outcomes are available to decision makes in a timely manner" (p. 103). In Article 6(3) of the Aarhus Convention it is stated that "the public participation procedures shall include reasonable time-frames for the different phases, allowing sufficient time for informing the public and for the public to prepare and participate effectively during the environment decision-making" (UNECE, 1998).

Transparency

Another factor deemed to impact upon the effectiveness of public participation in EIA is the degree of transparency. However, the claim that high transparency is key to effective public participation in EIA seems to be based on normative rather than functional grounds. For instance, transparency is one of the key principles of 'good governance', a normative concept promoted by the World Bank, OECD and other donor agencies.²⁶

Responsiveness

A factor closely related to transparency, which is deemed to influence the effectiveness of public participation in EIA, is the responsiveness of the decision-making authority towards participants. Similarly, Aguilar et al. (2004) state that, "public participation is a

²⁵ It must be noted that the terminology used varies. For instance, reference is made to "conditions for effective public participation" (Rodrigues Rezende, 2009), "factors contributing to effective public participation" (Del Furia and Wallace-Jones, 2000), "principles for effective public participation" (Dietz and Stern, 2008) and "best-practice guidelines for public participation in EIA" (Palerm, 2000).

²⁶ For more information on the normative concept of 'good-governance', which includes aspects such as transparency, accountability and responsiveness, see for example: http://www.edrc.ro (last accessed: 12.11.2011).

two-way process in which communities not only express their view, but should also receive a response to their concerns" (p. 11). Dietz and Stern (2008) likewise note that people's interest in participation will decrease if participants are not being informed about how their input affected decision-making.

Furthermore, Dietz and Stern (2008) and Palerm (2000) argue that a suitable process design alone does not guarantee the success of public participation in EIA. The authors claim that both the capacity and attitude of participants and those who receive input from the public may influence the effectiveness of public participation.

Capacity of participants and government agencies

The authors emphasise that participants need to have sufficient capacity to participate successfully in EIA. First, depending on the type of participatory method used, participation in EIA requires a certain level of cognitive capacity. Secondly, participants who wish to participate in EIA need to afford both time and money. Again, the amount of time and money participants must afford depends on the applied participatory technique. This implies that the participatory method used, should match the capacity of those members of the public who are supposed to become involved. Moreover, both Dietz and Stern (2008) and Palerm (2000) emphasise that the capacity of government agencies involved in EIA may impact upon the effectiveness of public involvement in EIA. Dietz and Stern (2008) explain that the EIA authority as well as other government agencies involved in the participatory process must commit sufficient resources to the EIA process. In this regard, sufficient personnel and financial resources are key (Palerm, 2000). According to Dietz and Stern (2008), not only is this essential from a practical perspective but also as "a signal from the agency that the participatory process is important" (p. 101).

Attitude of participants and government agencies

Palerm (2000) explains that participants not only need to have sufficient capacity to participate, they must also be willing to participate. For instance, if members of the public who have many concerns over a project have sufficient capacity to participate but are afraid of repression, they will refrain from participation (ibid.). Dietz and Stern (2008) argue that public participation processes are more likely to be successful when government agencies responsible for the process are committed to support the participatory process and taking seriously the results. Similarly, Dietz and Stern (2008) argue that, "too little agency commitment can hamper a public participation process, as when agency officials are not available to provide information about the issues or the decision context or to build relationships with the participants" (p. 100).

2.6 Synthesis

What insights could be derived from theory on public participation in EIA concerning:

- a. the meaning and scope of public participation
- b. the objectives of public participation
- c. the factors influencing the effectiveness of public participation

This is the first question this research sought to address. Below, the key insights derived from the theory review are summarised (Box 1) and, subsequently, outlined in more detail.

Box 1: Key insights from theory review

Key insights:

- Participation' means different things to different people; some authors argue that the use of the term
 is only justified where the public is actively involved and where authorities are significantly influenced
 by this involvement, others use it as a catch-all phrase irrespective of the level and purpose of public
 involvement in EIA.
- The meaning of 'the public' remains blurry: some authors equate the public with everyone interested, some with everyone affected and still others highlight the existence of different segments of the public.
- The scope of objectives mentioned in EIA literature is broad, ranging from normative to substantive to instrumental goals; different authors highlight different (sets of) objectives.
- In the EIA literature, several (mainly procedural) factors deemed to influence the effectiveness of public participation are mentioned, yet most of these factors are prescriptive in nature rather than derived from empirical studies; it remains unclear if and how these factors are related to the various objectives of public participation described in EIA literature; moreover, it is not being discussed whether the factors associated with effective public participation in EIA are equally valid in developed and developing countries.

a. The meaning and scope of public participation in EIA

There seems to be great confusion in the use and understanding of key terminology and concepts. First of all, there is no consensus among scholars about the meaning of public 'participation'. Moreover, many authors appear to be inattentive towards different forms of participation and their respective implications for policy practice. As a result, the terms 'participation' and 'consultation' are often used interchangeably in EIA literature. Others criticise that "too often highly extractive forms of interrogation are camouflaged under the cloak of 'participation'" (Hughes, 1998, p. 28) and argue that the use of the term is only justified when the public is actively involved and where authorities are significantly influenced by this involvement. Still other authors draw attention to the various forms in which the public may be involved in decision-making. However, among this group there is disagreement as to the value of the respective forms of public participation. Lastly, the literature review revealed that the difference between formal and informal forms of public participation has hardly attracted any attention from scholars despite its proclaimed relevance for policy practice.

Another unclearity regards the meaning of 'the public', i.e. there is no consensus on who should participate. Some scholars argue that public participation is about involving everyone who might have something to contribute, others emphasise that those affected by a decision shall be given a chance to influence the decision-making process. Still others highlight different segments of the public and argue that which scope of participation is appropriate depends on the respective context. In fact, when analysing the various objectives of public participation mentioned in EIA literature, it becomes apparent that some of these objectives require the involvement of different segments of the public than others (see section 3.4). Given that public participation means different things to different people, the consensus implied in the literature concerning the benefits of public participation in EIA is in fact more apparent than real (Lawrence, 2003).

b. The objectives of public participation in EIA

The overview of the various objectives of public participation mentioned in EIA literature reveals several things. First of all, it stands out that the scope of objectives is broad, ranging from normative to substantive to instrumental goals. Thus, many of the objectives imply quite different activities and consequences. For instance, consulting the public in order to retrieve supplementary information for decision-makers is a very different matter to letting people influence government decisions. In this respect, it should also be noted that some objectives make public participation appear as a means to enhance the EIA process or outcome whereas others imply that EIA is a platform for public participation which is supposed to deliver results beyond EIA (e.g. a shift of power structures in society) or even convey that public participation is an end in itself. However, most authors list multiple objectives of public participation without distinguishing between them or without analysing how they relate to each other (e.g. Chavez and Bernal, 2008; Stewart and Sinclair, 2007; Del Furia and Wallace-Jones, 2000). O'Faircheallaigh, who recognised this problem, states: "it is difficult to see how one can pursue the issue of 'effective participation' without first differentiating clearly between different goals and considering what each involves and implies" (p. 20, emphasis in the orig.). Furthermore, despite significant differences between the objectives of public participation mentioned in EIA literature, it seems that they might interact in some cases. For instance, the fulfilment of one objective may contribute to the achievement of other goals. To briefly illustrate this point, if members of an affected community are consulted in order to retrieve additional information for decision-makers, this may also increase the legitimacy of the final decision and thus facilitate implementation. These potential relationships have thus far hardly received any attention but certainly deserve more careful analysis. Table 3 provides an overview of the objectives of public participation discussed in this section including the main features of each objective.

c. The factors influencing the effectiveness of public participation in EIA

The literature review revealed that understanding of the factors that influence the effectiveness of public participation in achieving its objectives is limited. First, most of the factors mentioned in EIA literature are not the result of stringent empirical research but rather prescriptive in nature. Moreover, it remains unclear how these mainly procedural factors are related to the various objectives of public participation described in EIA literature. The fact that there is dispute over the goals of public participation in EIA may be one of the reasons why these relationships have not been analysed in more detail. Lastly, it has also been noted that no distinction is made between factors influencing the effectiveness of public participation in EIA in developed and in developing countries. However, it seems likely that in countries with authoritarian governments or countries in the process of democratic transition, public participation faces different constraints and challenges than in countries with an established participatory culture.

Chapter III

3. Case Study I: Costa Rica



Pictures © A.N.Glucker / T. Loeper

3.1 Introduction

As mentioned in chapter 1, the second objective of this research has been to explore the practice of public participation in EIA in two developing countries concerning the meaning and scope of public participation, its objectives and the factors that influence the effectiveness of public participation in achieving its objectives. Accordingly, first it has been analysed what public participation in EIA involves and who is allowed to participate. For this analysis, legal documents served as the primary source of information. Secondly, it has been examined what objectives public participation is supposed to fulfil. As will be explained below, this information has been gathered by means of interviews. Thirdly, it has been sought to understand what factors influence the effectiveness of public participation in achieving its objectives. To this end, different EIA actors have been interviewed. The chapter is structured as follows: First, key information on the history, culture, and current political and economic situation of Costa Rica is given (section 3.2.1). Secondly, an overview of Costa Rica's EIA system is provided (section 3.2.2). Thirdly, the results of the case study analysis are presented (sections 3.3.1-3.3.3). The last section draws out the main conclusions from the empirical analysis (section 3.4).

3.2 Background Information

3.2.1 Country Background



Costa Rica (Spanish for "Rich Coast") is a Central American country, bordering in the north with Nicaragua and in the south with Panama. To the east it is bounded by the Caribbean Sea, to the west by the Pacific Ocean. Currently, Costa Rica has a population of 4.576.562 million people. The country, divided into seven provinces, covers a total area of 51.100 sq km. Costa Rica's population comprises the following ethnic groups: white (including mestizo) 94%, black (Afro-Caribbean) 3%, Amerindian (native Americans) 1%, Chinese 1%, other 1%.

Source: CIA, The World Factbook.²⁷

In 1563, the Spanish colonized Costa Rica.

After more than two centuries later, the country became one of the Central American provinces that jointly declared their independence from Spain. After the federation of Central American countries disintegrated in 1838, Costa Rica proclaimed its sovereignty and independence. Since that time the country's political situation has been characterized by considerable stability: "since the late 19th century, only two brief periods of violence have marred the country's democratic development" (CIA, The World Factbook)²⁸. Upon adoption of its Constitution in 1949, Costa Rica became a democratic republic and permanently abolished its army. Since May 8 2010 Laura Chinchilla Miranda – member of the same party²⁹ as previous president Óscar Arias – is the president of Costa Rica. The legislative branch of the country consists of a unicameral Legislative Assembly whose members are elected by direct, popular vote to serve four-year terms.

As regards the Costa Rican economy, in 2010 the country's GDP (purchasing power parity) was \$51.17 billion. The GDP (PPP) per capita was \$11,300. By way of comparison, the United State's GDP (PPP) per capita was \$47,200. In 2010, the agricultural sector accounted for 6.3% of the Costa Rica's GDP, the industrial sector for 22.9% and the service sector for 70.8%. Whereas the traditional agricultural exports – namely coffee, bananas, sugar and beef – are still the cornerstone of Costa Rica's commodity export trade, other agricultural and a number of industrial products have extended the country's export trade. For instance, in recent years Costa Rica became the World's primary pineapple exporter – which has taken a heavy toll on nature.³⁰ Nevertheless, ecotourism continuous to be Costa Rica's second largest source of income

²⁷ https://www.cia.gov (last accessed: 15.09.2011).

²⁸ Retrieved from: see footnote 27.

²⁹ Partido Liberación Nacional (PLN).

³⁰ Interesting information on the environmental impacts of the steadliy growing pineapple production in Costa Rica can be found at: http://www.guardian.co.uk/environment/video/2010/oct/01/pineapple-trade-costa-rica (last accessed: 16.09.2011).

after microchip production (Dulude, 2011). This is due to the country's impressive biodiversity, which attracts around one million visitors each year (Dasenbrock, 2002). Yet, as touched upon above, intensified agriculture, the expansion of touristic sites, industrial activities such as mining etc. are increasingly threatening the integrity of Costa Rica's natural environment (ICRA)³¹. Despite this development, in 2010 Costa Rica was still ranked third on Yale University's Environmental Performance Index (EPI).³² Due to its comparably high political stability, Costa Rica is one of the Central American countries that attract most foreign investors. However "many business impediments, such as high levels of bureaucracy, difficulty of enforcing contracts, and weak investor protection, remain" (Index Mundi)³³. For around 20 years, the proportion of the Costa Rican population living in poverty has remained at 15-20%. Social security, which has once been rather high in Costa Rica, has significantly decreased due to financial constraints on government expenditures. Furthermore, immigration from Nicaragua currently, estimated 300.000-500.000 Nicaraguans live legally and illegally in Costa Rica – places a heavy demand on the country's social welfare system. On January 1 2009, the US-Central American Free Trade Agreement (CAFTA) entered into force after severe protests. As will be discussed later, Costa Rica's accession to the CAFTA free trade agreement has had a significant influence on EIA practice in the country.

3.2.2 EIA in Costa Rica

The information provided in this section has been retrieved from legal documents (primary sources) and EIA system analyses (so-called Diagnósticos) compiled by the International Union for the Conservation of Nature (IUCN) in cooperation with the NCEA and private consultants (secondary sources) in 2002, 2006 and 2010.

First, a short summary of the development of EIA in Costa Rica will be given. Subsequently, some features of the EIA system and procedure will be described that are relevant for this research.

In 1982 the obligation to conduct an environmental impact assessment for mining activities was incorporated into the country's Mining Code (Código de Minería). Hence, EIA in Costa Rica is usually considered to date back to the year 1982. From 1982 to 1991 almost exclusively mining projects were subject to EIA. Only as a requirement bound to foreign investment, a small number of Environmental impact Studies on other types of projects (e.g. highways) had to be revised by the Commission. Consequently, in this period the governmental EIA commission (La Comisión Gubernamental de EIA) worked closely together with the Directorate for Geology, Mines and Hydrocarbons (Dirección de Geología, Minas e Hidrocarburos). The latter was renamed in Ministry for Natural Resources, Energy and Mines (Ministerio de Recursos Naturales, Energía y Minas, MIRENEM) and later – in connection with the adoption of the Environmental Organic Law (LOA) in 1995 – became the Ministry for the Environment and Energy (Ministerio del Ambiente y Engergía, MINAE). It is noted in the EIA system analysis from 2002 (Diagnóstico, 2002) that the first EIA Commissions were the object of an

³¹ Information retrieved from: http://www.icra-edu.org (last accessed: 24.11.2011).

³² http://epi.yale.edu/Countries/CostaRica (last accsessed: 17.09.2011).

³³ Information retrieved from: http://www.indexmundi.com (last accessed: 12.12.2011).

³⁴ Ley No. 6797.

evolutionary process from their formation until the adoption of the LOA (1984-1995). Nevertheless, these early Commissions were characterised by consisting of a multidisciplinary team of professionals mainly from governmental institutions. In 1994, MIRENEM published a new decree, which led to the formation of the National Commission for EIA (Comisión Nacional de Evaluación de Impacto Ambiental, CONEIA). With the adoption of the LOA in 1995, CONEIA was transformed into the National Technical Environmental Secretariat (Secretaria Técnica Nacional Ambiental, SETENA), which continues to be in charge of EIA in Costa Rica up to the present day. Starting from 1991, additional types of projects were required to undergo an EIA. First, energy related projects (Ley No. 7200), then (touristic) projects in Wildlife refuges (Ley No. 7317) and, finally, all types of public projects (Ley No. 7404). In 1994, the first EIA specific regulation (DE-23785) was adopted, which includes a list of all those types of projects that require an EIA before realisation. Thus, many people consider EIA in Costa Rica to date back to the year 1994. As mentioned, in 1995 the LOA was approved and adopted. With this law, EIA was juridically established as an obligatory requirement for "all human activities that alter or destruct elements of the environment or generate waste, toxic or hazardous materials" (LOA, Article 17). According to the LOA, in 1996 EIA in Costa Rica was reformed through a new decree (DE-23705). In this context, EIA procedures were amplified and developed, e.g. through determining the scoping and screening procedure (through a new categorization system, activity lists and a Preliminary Environmental Assessment Form, FEAP). Moreover, the new regulation set out the mechanisms for an environmental warranty and for public participation. Finally, it stipulated the creation of a registry of environmental consultants.

It should be noted that the regulations and laws described above are only the milestones of the development of the Costa Rican EIA system since its inception. Especially between 1994 and today, a large number of regulations, decrees etc. concerning EIA have been adopted.

Regarding the current EIA procedure in Costa Rica, the following aspects should be noted. First, during the so-called screening phase, all projects that are subject to EIA (see Executive Decree 31849, Annex 1) undergo a preliminary assessment. For projects of 1.000 m² or more a FEAP D1 needs to be filled in, for projects of a size between 300-999 m² a FEAP D2. Projects of the latter type are labelled as category D and do not require additional technical assessment (see below). The FEAP D1 serves to assess the Potential Environmental Impact (PIA) of projects ≥ 1.000 m². Based on the overall score of a project resulting from the preliminary assessment, projects are divided into the following categories:

- Category A: High Potential Environmental Impact
- Category B: Moderate Potential Environmental Impact Category B is further divided into B1: Moderately High Potential Environmental Impact; and B2: Moderately Low Potential Environmental Impact.
- Category C: Low Potential Environmental Impact

Moreover, based on the overall score (which denotes a project's PIA), SETENA determines which evaluation instrument needs to be employed. In Costa Rica, the following three instruments exist:

- Environmental Impact Study (EIS)
- Environmental Management Plan (P-PGA)³⁵
- Jurisdictional Oath of Environmental Compromises (DJCA)36

Only projects of category A require an EIS; for projects of category B a P-PGA needs to be presented, for projects of category C a DJCA.³⁷

Another aspect relevant for this research is the institutional setting for EIA in Costa Rica. As mentioned above, since 1995 SETENA has been the central EIA authority in Costa Rica. It administers all stages of the EIA process (from screening to monitoring and follow-up) irrespective of the project location (Costa Rica's EIA system is highly centralised). SETENA has been set up as an 'organ of maximum de-concentration of the Environmental Ministry' (LOA, Article 83). SETENA is composed of the Plenary Commission, the General Secretary, a Technical Department and an Administrative Department. The Plenary Commission, which is the highest decision-making body of the agency, consists of one representative of each of the following institutions: The Ministry of Environment and Energy (MINAE); the Ministry of Health (MS); the Ministry of Agriculture (MAG); the Ministry of Public Works and Transport (MOPT); the Costa Rican Institute of Aqueducts and Sewerage Systems (AyA); the Costa Rican Institute of Electricity (ICE); and the state universities. The Plenary Commission takes the final decision about projects of category A and B, which is conveyed in form of a Resolution. The Plenary Commission's decision shall be based on the recommendation made by the officer in charge of the EIA review process.³⁸ In this regard it seems worth mentioning that one single person conducts the review³⁹ and that no official procedure for the review process has been established yet.

3.3 Empirical Findings

In the following sections (3.3.1-3.3.3), the outcomes of the case study analysis are presented. These results are based on a document analysis as well as interviews with fifteen EIA actors (see chapter 1, section 1.5 for a detailed description of the research methodology).

3.3.1 The Meaning and Scope of Public Participation

Legal provisions for public participation in EIA established in Costa Rica define the content of participation and stipulate who is allowed to participate. In Costa Rica, public participation is a mandatory component of EIA since the adoption of the Environmental Organic Law in 1995 (see also previous section). In accordance with this law, different mechanisms for public participation in EIA have been established. In the first laws and regulations these mechanisms were described only in broad terms. However, in recent years the respective procedures have been defined in more detail (e.g. Regulation No. 31849). In Costa Rica, public participation in EIA comprises the following:

³⁵ P-PGA is the Spanish abbreviation for Environmental Management Plan.

³⁶ DJCA is the Spanish abbreviation for Jurisdictional Oath of Environmental Compromises.

³⁷ Strictly speaking, only the EIS and P-PGA are assessment instruments. The DJCA is a declaratory instrument requiring only an accurately filled in FEAP D2.

³⁸ This recommendation is part of a 'technical report' that has to be emitted by the officer in charge of the review process and presented to the Plenary Commission.

³⁹ Chosen among the staff of the Technical Department on a case-by-case basis.

First of all, 'each person, physical or legal, public or private, has the right to be heard by SETENA at any time during the evaluation process and during the operating phase of projects' (LOA, Article 22). To this end, the following three mechanisms have been established:

- Written observations which can be submitted to SETENA.⁴⁰
- Private hearings, which can be requested with SETENA's Plenary Commission or any unit of the secretariat's Technical Department. These hearings must be recorded and transcribed and the transcript needs to be appended to the respective project file.⁴¹
- Public hearings, which may be required for projects of category A if considered necessary by SETENA.⁴² If disposed by SETENA's Plenary Commission, a public hearing is held during the review process of the EIS. All comments made by participants have to be recorded and a transcript must be appended to the respective project file kept at SETENA.

Regarding the first mechanism it should be noted that written comments can be submitted concerning any project administered by SETENA (category A-C). The same applies to the second mechanism. However, as will be described below, the public is only informed about projects of category A (by means of a newspaper announcement and through publication of the Environmental Impact Declaration (EID), a summary of the EIS). This means, that people do not become aware of projects belonging to categories B and C until the start of construction works. Thus, *de facto* people only make use of their right to submit written comments and to request a private hearing regarding projects of category A. As regards the third mechanism, the extent of discretion granted to the EIA agency is eye-catching. To date, very few public hearings have been held in Costa Rica and only for EIAs relating to sanitary landfills and mining projects.⁴³

Secondly, within five working days after receipt of the EIS, the EID has to be submitted to the municipality where the project shall be realised. Within ten days after publication of the EID, any interested person may review the document and submit written comments to SETENA. Regulation No. 31849 stipulates that 'all written submissions (...) have to be taken into account during the EIS review process' (Article 42). However, there are no means of ascertaining whether these comments have actually been reviewed or if they were taken into consideration in the final decision. Depending on the relevance of submitted comments, SETENA may require the project proponent to conduct further work or studies, to supply more information, or to amend the EIS (e.g. in terms of suitable additional mitigation or compensation measures). Furthermore, it should be noted that there are no provisions set forth in legislation if the proponent fails to

⁴⁰ Regulation No. 31849, Article 55.

⁴¹ Regulation No. 31849, Article 61.

⁴² Regulation No. 25709, Article 35 stipulates that 'a public hearing on the subject of a proposed project may be held if considered necessary by SETENA'. In Regulation No. 31849, published in 2004, the above is reaffirmed, yet under 'General Dispositions' (Chapter I) it is mentioned that public hearings concern only projects of category A.

⁴³ This infromation has been obtained from interverwied EIA officials.

⁴⁴ The EID has to be provided by the project proponent (i.e. his or her consultant).

 $^{^{45}}$ As has been mentioned in the previous section, the relevance of public comments is determined by the EIA official in charge of the EIS review process.

respond to public comments and SETENA fails to enforce compliance. Lastly, it should be emphasised that SETENA has to announce in a daily nationwide newspaper (1) the entrance of the EIS into the review process at SETENA; (2) where and when the EID can be reviewed by the public; and (3) the formal opening period during which the EID may be reviewed and comments be submitted.

Thirdly, depending on the type of project (yet only concerning projects that require an EsIA or P-PGA) SETENA may ask the project proponent to consult stakeholders within the project area by means of opinion polls, face-to-face interviews and other techniques. However, there are no rules on how to carry out these inquiries. For instance, one interviewed consultant reported that usually no conditions are set concerning the number and type of people who have to be consulted or the consultation technique that has to be used.

Apart from the participatory mechanisms described above, EIA legislation establishes the right of public access to information as well as access to justice. Regarding the former, it is determined that anyone interested may access the project files and documents administered through SETENA and photocopy them. As regards the latter, the possibility exists to file a complaint against any activity, work or project that causes environmental degeneration or damage. If the complaint concerns projects administered by SETENA, the complaint is processed by the agency itself (within fifteen working days). Environmental complaints regarding activities, works or projects that are not administered by SETENA are forwarded to the Environmental Administrative Tribunal (TAA) in accordance with LOA, Article 111.

A last aspect that should be noted regards the question, who is allowed to participate in EIA? As stated above, each person, physical or legal, public or private has the right to submit comments to the EIA authority, to request a private hearing and to take part in a public hearing. This means that anyone interested is invited to participate. The same applies to the possibility to review the EID. However, the EID can only be viewed at two locations: the municipality where the project shall be realised and at SETENA's office in San José. As has been explained above, in some cases proponents are required to conduct opinion polls or some other type of inquiry during preparation of the EIS. Usually, these inquiries involve members of the public who live within the immediate or adjacent geographical area of the proposed project and will thus be directly affected by the project. In this context, it is worth mentioning that most of the fifteen EIA actors, who have been interviewed in Costa Rica, were using the terms 'the public', 'citizens' and 'civil society' interchangeably during the interviews. By contrast, the term 'stakeholder' is barely used by native Spanish speakers. Accordingly, interviewees referred to "people affected by a project" instead of 'stakeholders'.

3.3.2 Objectives of Public Participation

First of all, it must be emphasised that the goals of involving the public in EIA are not defined in Costa Rican EIA legislation. Existing laws and regulations merely lay out the procedures for public involvement (see previous section). Thereupon, interviewees were asked to give their opinion regarding the objective(s) of public participation in EIA and

⁴⁶ This is determined in the ToR.

to substantiate their point of view. Interestingly, all interviewees highlighted only one objective: according to all interviewees, the objective of involving the public in EIA is to provide people affected by a project with an opportunity to influence decision-making regarding that project. Clearly, this objective is in line with basic democratic principles (see chapter 2). On a related note, Fiorino (1996) states: "that people should have the opportunity to influence or at least voice an opinion on issues that affect them is a fundamental precept of democracy and inherent in the idea of citizenship" (p. 196). When asked to explain why the objective of public participation in EIA is to enable members of the public to influence decisions that affect their personal life, interviewees emphasised that it is the democratic right of citizens to participate in public policy-making. In this respect, several respondents emphasised that EIA is actually the only institutional lever available to affected members of the public who aim to influence environmental policy-making.

As has been touched upon in chapter 2, the perception that public participation should provide affected members of the public with an opportunity to 'influence' decisions that affect their lives, is widely shared. However, what is meant by 'influence' remains often unclear. How much influence over decision-making should the public have? Is it enough to provide affected members of the public with an opportunity to voice their concerns and articulate their interests? Or should they be involved in decision-making, i.e. determine the final decision? As has been touched upon before, in literature opinions diverge regarding the question of how much influence the public should have over decisionmaking. For instance, Kane and Bishop (2002) are critical of the "tendency to view consultation as an exercise in policy determination by the public rather than as public input (...) whose ultimate use is to be defined by the elected decision makers" (p. 87). On the contrary, Barton (2002) emphasises that EIA should be used to attain the consent of those affected by a proposed project by means of collaborative planning and decision-making. In order to take up this issue, interviewees were asked what - from their point of view - the concept 'influence over decision making' implies for practice. Interestingly, interviewees seem to be divided over this question. One the one hand, EIA officials as well as the majority of consultants argued that the public should be given the chance to communicate with decision-makers and the proponent concerning their needs and expectations but emphasised that it is on EIA experts to decide if and how to respond to this input. In this regard, one EIA official pointed out that people who make use of their right to participate in EIA are usually those who intend to block a project (see also section 3.3.3). Thus, he explained, if participants would have a direct impact on decision-making, countless projects, important for the development of the country, would never obtain the required permit. Commenting on the willingness of public officials to actually share decision-making power with the public, Lawrence (2003) points out that they generally prefer to keep public participation "within tightly circumscribed limits" and show a "propensity towards centralized control" (p. 273). On the other hand, interviewees representing environmental NGOs, academia and other knowledge actors argued that if public participation were to be taken seriously, affected members of the public should be actively involved in the different stages of the EIA process including final decision-making. In this regard, several interviewees emphasised the importance of developing and analysing different project alternatives in cooperation with important stakeholders. However, up to the present day, EIA legislation in Costa Rica neither obliges project proponents to develop project alternatives nor to involve the public in this process.

3.3.3 Factors Influencing the Effectiveness of Public Participation

When talking about the goals of public participation, all interviewees expressed the view that public participation in EIA is mostly ineffective in Costa Rica. More precisely, interviewees explained that several factors impact upon the public's influence on EIA processes and outcomes. In line with the respondents' assertion that public participation is an essential aspect of EIA, all interviewees emphasised that this ought to be changed. Some interviews even expressed the opinion that the improvement of public participation is the primary challenge regarding EIA in Costa Rica. One interviewee argued: 'If we don't want to jeopardise the future of this country, we need to ensure the well-functioning of Environmental Impact Assessment and, in my opinion, this requires to improve public participation in the process [of EIA]" (UCR⁴⁷ teacher). Another interviewee believes: "in Costa Rica instruments for public participation in ELA are being implemented in order to comply with international standards... decision-makers are not interested in the views and concerns of the public... if they could, they would avoid consulting the public" (NGO member). In line with their perception that public participation in EIA is largely ineffective in Costa Rica, respondents focused on barriers to effective public participation. Below, these barriers together with explanations and examples provided by the interviewees are resumed. In order to scrutinise the answers given by interviewees, relevant information from other sources has been examined and, if considered applicable, included in this report.

Interviewed EIA officials stated that one factor which decreases the effectiveness of public participation in EIA is that the participatory process is not sufficiently regulated. For instance, law stipulates that 'a public hearing on the subject of a proposed project will be held if considered necessary by SETENA' (Law on Biodiversity, Article 95). According to the interviewees, an unpublished guideline states that public hearings shall be held regarding projects of category A, i.e. projects with a high potential environmental impact (PIA). However, up to now public hearings have been required only for sanitary landfills and some mining projects.⁴⁸ Consequently, the interviewees stated that a directive is needed that (1) clearly defines which projects require public hearings and, (2) specifies the procedure for public hearings (duration; content; processing of public input etc.). The interviewee mentioned that in 2009 a reform to the LOA, requiring public hearings for all projects subject to EIA, was (almost anonymously) approved by the National Assembly but lastly rejected by the president because he envisaged excessive costs for project proponents. In this regard, one interviewee expressed the opinion that "the government and other EIA stakeholders lack a common vision regarding public participation; everyone wants something else and some don't even know what they want to achieve" (staff member of SETENA's law department). Another aspect that shows a lack of regulation is the 'right of each person (physical or legal, public or private) to be heard by SETENA at any time during the evaluation process and during the operating phase of the project. The comments from participants will be included in the project file and assessed for the final report' (LOA, Article 23). This formulation suggests that any input from the public is permitted and will accordingly be taken into account (although it is not clear how exactly the latter is done). However, interviewed officials explained that the observations presented by participants must have a "technical foundation" in order to be considered. For example, it would not be sufficient if someone would express concern regarding noise

⁴⁷ University of Costa Rica (UCR).

⁴⁸ This information has been obtained from EIA agengy officials.

exposure, he or she would have to provide (technical) evidence of this impairment and its significance.

Given the requirement that public input should be technically sound, it is little surprising that EIA officials argued that input from the public is often not sufficiently substantiated and thus of no use for decision-makers. Besides the fact that many comments lack a technical foundation, interviewees highlighted several other shortcomings. First, most people who make submissions to SETENA or request a hearing with SETENA's Plenary Commission are not sufficiently informed about the project at stake. Secondly, many individuals and groups do not inform themselves of the requirements for participation in EIA. Yet, as stated above, in this regard EIA officials acknowledged that existing regulations are not specific enough in detailing these requirements. Nevertheless, they expressed the view that it is the responsibility of individuals and groups who intend to participate in EIA processes, to inform themselves of the project and relevant procedural aspects before participating. Thirdly, interviewees pointed out that various participants have tried to misuse their right to participate in EIA for their personal benefit. For instance, EIA officials reported that community members threatened proponents with blocking construction works unless they would be given money for new roofs, a new community hall etc.

Another related issue that was raised by the interviewees is that **individuals and groups** who make use of their right to participate in EIA fail to provide constructive input. A staff member of SETENA's legal department has the impression that "people only participate if they want to block a project... there is no willingness to cooperate". However, as will be addressed below, the participatory methods established in Costa Rica do not allow for two-way communication between members of the public, decision-makers and proponents. This implies that there is hardly any opportunity for cooperation. In other words, it might be argued that the inadequacy of the institutional design is the source of the problem rather than a lack of willingness to cooperate on the part of participants.

Furthermore, the majority of interviewees pointed out that the information provided to the public is too technical and complex for laypeople. Hence, most members of the public are incapable of comprehending this information (e.g. the EID and other publicly accessible EIA documents) and thus unable to provide SETENA with substantiated comments. One interviewee mentioned: "It is not sufficient to provide the public with information, this information needs to be comprehensible for people" (lawyer and teacher). Another interviewee noted that poor people with lower levels of education are practically excluded from participation in EIA: "This is completely unrealistic... what do you think, is a simple farmer able to review the document [EID] and give substantiated comments on it? No... of course he is not" (UCR teacher). The interviewee further argued that, unless people have sufficient money to hire experts who can help them review relevant information and formulate adequate responses, they are hardly able to participate in EIA. Since most people cannot afford this, they have no other option but joining forces with other affected individuals or organisations that have a particular stake in the decision and are thus willing to provide necessary resources. On a related note, another interviewee argued that for NGOs it is easier to provide relevant comments on the EID than for affected individuals because, due to their financial resources, NGOs can draw on technical support from experts. However, the interviewee cautioned that the technical

expertise NGOs can resort to bears no proportion to the information available to proponents: "It's like David against Goliath... it is hardly possible for an NGO to prove an impact study wrong" (staff member of SETENA's legal department). Consequently, the interviewee argued that the public should be given the opportunity to ask independent experts for a comprehensible explanation of relevant technical information. This applies both to the consultation of the EID (and other EIA documents) and to information provided at public hearings. In fact, in some countries it has been recognized that a lack of human or economic resources on part of the public may impede public participation in EIA. For instance, "Canada offers an example where stakeholders may be funded by the government to engage in public participation" (Bond et al., 2004, p. 623).

Moreover, several interviewees perceive it as problematic that the methods employed to involve the public in EIA do not enable dialogue between affected members of the public, the project proponent and decision-makers: "People are not involved in decision-making, they are merely being informed about a project and given the right to comment on it" (NGO member). The interviewees perceived this as a major shortcoming since, in their opinion, sufficient room for discussion between the public and the project proponent is crucial for sound decision-making that takes the needs of affected members of the public into account. Evidently, the right to submit written comments to SETENA is a one-way form of public participation - an exchange of concerns and ideas cannot take place. Theoretically speaking, private hearings do allow for two-way communication. However, private hearings are not designed as a forum for dialogue; they merely provide members of the public with an opportunity to verbally express their thoughts and concerns. Moreover, project proponents are not involved in private hearings. By contrast, public hearings do allow for communication between participants, the proponent and the EIA authority. However, as has been mentioned, public hearings are hardly ever held in Costa Rica. Moreover, in practice public hearings do not provide much space for discussion. After a short presentation of the proposed project, given by the proponent or his/her consultant, participants may give short speeches indicating their thoughts and concerns. The interviewed consultants stated that during public hearings an attempt is made to answer questions raised by the public but that there is not enough time to engage in lengthy discussions (in Costa Rica, public hearings last between two and four hours). Similarly, an EIA official notes that, "the functionality of public hearings is pretty low... people who come to attend the hearings listen to the project proponent and leave".49

A further obstructing factor highlighted by the majority of interviewees is that participation occurs too late in the EIA process: "Civil society is consulted when the project has already been technically approved" (NGO member). In this regard, some interviewees pointed out that the public, especially people directly affect by a proposed development activity, should be involved in the project design (including the decision about the project location) and the scoping procedure. Scoping has been defined by Glasson et al. (1999) as "determining, from all a project's possible impacts and from all the alternatives that could be addressed, those that are key, significant ones" (p. 90) which should be subject to further assessment. According to Petts (2003), the goals of involving the public in the scoping process include the "identification of potential significant impacts

-

⁴⁹ It must be noted that at least one EIA official has to attend and monitor a public hearing.

which must be addressed and agreement on impact which can be excluded" as well as the "identification of potential mitigation measures which are likely to be required" (p. 155).

Moreover, the majority of interviewees stressed that it remains unclear for the public, whether or not their comments were considered and how they influenced decision-making. "There are no proper feedback mechanisms... SETENA is obliged to reply to comments received from citizens, but many people never receive an answer and, what is more, it is not clear if and how people's comments affected SETENA's decisions" (NGO member). In this regard, the interviewees mentioned that people's willingness to participate in EIA obviously decreases if they do not know if their effort paid off, i.e. if/to what extent their input has been taken into account by decision makers.

A major problem which has been pointed out by several interviewees is that in Costa Rica, all public input is evaluated by one single EIA official in charge of the EIS review process. As has been described in section 3.3.3, this official is chosen among the staff of SETENA's Technical Department on a case-by-case basis. Interviewed EIA officials stated that most staff of SETENA's Technical Department comes from an engineering or natural science background. Thus, it might indeed be questioned whether the EIA official in charge of assessing public input has the professional expertise to determine the relevance of this input let alone sufficient knowledge to come up with adequate responses. Furthermore, given the fact that no official procedure for the review process has been established Costa Rica, the outcome of this process largely depends on the discretion of the respective EIA official.

Several interviewees stressed that despite Costa Rica's 'green' reputation, environmental awareness is limited among most government officials and within the country's private sector. One interviewee pointed out that this is reflected in the fact that the budgets of central environmental institutions (such as the Environmental Ministry and TAA) have been significantly reduced despite increasing environmental destruction and the intensification of environmental conflicts (Kioscos Ambientales)⁵⁰. Furthermore, he is of the opinion that this lack of commitment to environmental protection leads to political interference in EIA and indiscretion on the part of EIA agency staff, which affects all components of the evaluation process, including public participation.

EIA and public involvement in government decisions among government officials and proponents, i.e. the public is being consulted merely to comply with procedural requirements. In this regard, one interviewee mentioned: "Sadly, in the minds of most politicians and EIA officials, EIA is nothing more than a necessary step towards project approval... what counts is the bureaucratic process, not the results of that process" (NGO member). Another interviewee likewise stated: "Environmental awareness is still very low among politicians and investors. Many perceive EIA as an obstacle to rapid economic development and, in the eyes of these people, public participation is just an additional obstacle... delaying project permission and realization even further" (NGO member).

⁵⁰ http://kioscosambientales.ucr.ac.cr (last accessed: 5.10.2011).

On a related note, many interviewees stated that SETENA's decisions are largely influenced by political interests and claimed that this is the single most significant barrier to effective public participation in EIA. Interviewees reported that the autonomy of the EIA agency has significantly been decreased over the past years. For instance, between August 2010 and May 2011 Andrei Bourrouet – at that time vice-minister of the environment (MINAE) - has been the secretary general of SETENA.⁵¹ Interviewees stressed that this was clearly against the Environmental Organic Law (1994) which stipulates the creation of SETENA as an 'organ of maximum de-concentration of the Environmental Ministry' (LOA, Article 83). Another example for the political pressure put on SETENA, that was given by several interviewees, is the following: Throughout his presidency, former president Óscar Arias has been advocating the construction of a new highway ('carretera a Caldera') connecting the capital with the Pacific coast. Consequently, Arias intended to inaugurate the highway before the national elections held in May 2010. In fact, the project obtained the required environmental permit upon completion of an unusually short assessment process and despite the fact that it was obviously not environmentally viable. It is worth mentioning that several consultants who were interviewed confirmed that the project was environmentally unviable. During the construction phase of the new route, legal complaints against the project led to independent inspections through the TAA, which detected 'serious environmental impacts' and, consequently, requested the implementation of a mitigation and reparation plan and prohibited construction works between two locations (Mata, 2010; Madriz, 2009). Despite these problems, the highway was opened early on in January 2011 (Morris Grey, 2009). Reparation works as well as protest against the project have been continuing until today. Interviewees further reported that especially since Costa Rica's accession to the CAFTA free trade agreement in 2006, EIA officials have been urged by the National Competitiveness Council (created in association with the Treaty) and other powerful political actors to protect investor interests. An interviewee stated accordingly: "Many cases have shown that SETENA acts in the interest of the proponent whose priority is to obtain the environmental permit as fast as possible" (NGO member). Another interviewee is of the opinion that "in Costa Rica, EIA processes are highly politicised... SETENA's decisions are not determined by technical considerations let alone public input" (NGO member). Another interviewee believes that "from an environmental perspective, the pressure put on SETENA to speed up and simplify the issuing of environmental permits, is a terrible threat" (URC teacher). Against this background, SETENA is being induced to restrict public participation (which may prolong the issuing of the environmental permit) as much as possible. In this regard, one interviewee emphasised that the discretion granted to SETENA by law (see above) makes the agency vulnerable to this type of political interference. Another interviewee has the impression that "the interests of the investor have clear priority and are defended at the expense of the public interest" (UCR teacher).

Another constraining factor identified by several interviewees is that most people in Costa Rica have less and less confidence in government institutions in general and SETENA in particular. As regards the former, data published by the Latinobarómetro confirms that people's trust in government institutions has

_

⁵¹ More information (in Spanish) can be retrieved from: http://kioscosambientales.ucr.ac.cr (last accessed: 20.09.2011).

considerably decreased in Costa Rica over the last 10-15 years.⁵² As regards the perceived trustworthiness of SETENA, several people the author had informal conversations with during the one-month field work period (among them students and people working in the environmental sector), hold the view that SETENA has discredited itself through week performance and dubious practices. Deputy Rojas Valerio likewise claimed that STENA has "suffered from an image loss" (own translation).⁵³ Similarly, in an online contribution of 'Kioskos Ambientales', an environmental project of the University of Costa Rica (UCR), the following is stated: "SETENA has not been able to provide follow-up on approved projects, which creates a lack of confidence on the part of citizens and the social sectors" (own translation).⁵⁴ The interviewee is of the opinion that peoples' distrust in SETENA's abilities and integrity decreases their willingness to cooperate with decision-makers – a problem that has been identified by EIA officials themselves (see above). This may also explain why the number of environmental complaints is steadily increasing while the number of people (formally) participating in EIA has remained low (Walcott, 2011).

3.4 Interim Conclusion

The most significant findings to emerge from the case study analysis are the following. First of all, the analysis of legal provisions (section 3.3.1) has revealed that public 'participation' is mainly consultative. That is, communication between the public and decision-makers is mainly one-way. Only public hearings allow for two-way communication between the public, decision-makers and the proponent. However, it is left to the discretion of the EIA agency whether public hearings are held or not. Evidently, this flexibility makes the agency vulnerable to political interference and indiscretion on the part of staff members - a problem that has been pointed out by several interviewees.⁵⁵ Concerning the scope of participation, the analysis revealed that anyone interested in the EIA process is invited to participate. As has been mentioned, it could be argued that environmental decisions affect virtually everybody's quality of life since the world's ecosystems are interlinked, which means that the impacts of a project on the local environment have far-reaching repercussions. Thus, from a democratic point of view, an inclusive approach to participation in EIA seems reasonable. However, allowing everybody to participate also bears a risk. As has been mentioned in chapter 2, several authors emphasise that 'the public' is no homogenous entity, i.e. the public interest does not exist (see Petts, 2003). Instead, different members of the public have different interests resulting in different expectations towards participation (ibid.). Thus, the more people and groups are allowed to participate, the more difficult it will be to meet their various expectations. Belied expectations, in turn, may cause frustration and, eventually, decrease people's willingness to participate in EIA. In fact, as has been touched upon above, interviewees reported that many participants are disappointed with the effects of their input and feel that they are facing attempts to coopt them into a process over which they have no control.

⁵² Information retreived from: http://www.latinobarometro.org (last accessed: 10.12.2011).

⁵³ Information retrieved from: http://kioscosambientales.ucr.ac.cr (last accessed: 6.10.2011).

⁵⁴ Available at: http://kioscosambientales.ucr.ac.cr (last accessed: 6.10.2011).

⁵⁵ For instance, EIA officials who have close ties to the private sector to take decisions in the interest of project proponents without crossing the line of legality. In this regard it should be noted, that project proponents have to bear the full costs of public hearings, opinion polls and other means of consultation, which have to be applied upon request of the EIA agency.

Secondly, it has been found that the goals of involving the public are not defined in EIA legislation (section 3.3.2). Again, this lack of clarity may fuel expectations that cannot be fulfilled given restrictions on statutory provisions for participation in EIA, the type of available methods for participation, limited capacity of government agencies, etc. In this respect, Dietz and Stern (2008) point out: "explicit, honest agency statements about what it wants from the [participatory] process and how the results will be used ensure realistic assessment by the other parties of the reasons for them to participate and reasonable expectations about results" (p. 98). All fifteen EIA actors (representing different EIA actor groups) who have been interviewed expressed the view that the purpose of public participation is to provide people with an opportunity to influence decisions that will affect their personal lives. Given the wide range of objectives described in EIA literature, this outcome was somewhat surprising.

Thirdly, all interviewees explained that, up to now, public participation in EIA has been rather ineffective. This result too was quite surprising since EIA officials, who are responsible for conducting the participatory process, were expected to make the process appear in a (more) positive light. When asked about the factors, which have impacted upon the effectiveness of public participation, interviewees identified a broad range of barriers. This list involves several procedural factors, such as late involvement and a lack of responsiveness towards participants. As mentioned in chapter 2, these factors are also highlighted in the existing EIA literature. However, most interviewees emphasised that procedural and institutional shortcomings are not the primary problem and, moreover, could be quite easily remedied. In their opinion, the major and underlying problem is a lack of environmental awareness and commitment to sound EIA, including meaningful public involvement, among government officials and private actors. This lack of commitment has led to political interference in EIA processes and the (ab)use of judicial discretion to the advantage of economic interests and at the expense of environmental protection and public interests. Table 4 gives an overview of all the barriers to effective public participation that have been identified by the interviewed EIA actors in Costa Rica.

Table 4: Overview of barriers to effective public participation in EIA identified by different EIA actors in Costa Rica

Barrier to effective public participation in EIA	Explanation provided by interviewees			
Lack of clear regulations	The participatory process is not sufficiently regulated. Thus, it is not clear what participants can (and cannot) expect from their engagement.			
Late involvement of the public	Consultation occurs too late in the evaluation process, i.e. during the EIS review process. Thus, affected members of the public have no influence on the planning process.			
Lack of responsiveness towards participants	It remains unclear for the public, whether or not their comments were considered and how they influenced decision-making.			
Provision of unsuitable information	The information provided to the public is too technical and complex for lay people.			
Lack of room for discussion between the public, decision- makers and proponent	Currently employed methods for public participation do not enable dialogue between affected members of the public and the project proponent.			
Attitude of participants	Individuals and groups who make use of their right to participate in EIA fail to provide constructive input.			
Lack of capacity on the part of participants	Input from the public is often not sufficiently substantiated and thus of no use for decision-makers.			
Lack of institutional capacity of government agencies: mainly lack of personnel	All public input is evaluated by one single EIA official in charge of the EIA review process, who – in many cases – has a natural science or engineer background.			
Lack of environmental awareness among government officials & proponents	Environmental awareness is limited among most government officials and, in particular, within the country's private sector.			
Lack of commitment to EIA and public involvement among government officials and proponents	The public is being consulted merely to comply with procedural requirements, i.e. there is no genuine interest in the concerns and ideas of the public.			
Political pressure & interference	There is a lack of environmental awareness and commitment to sound EIA among government officials and private actors. This lack of commitment has led to political interference in EIA processes and the (ab)use of judicial discretion to the advantage of economic interests and at the expense of environmental protection and public interests.			
Lack of trust in government institutions	People in Costa Rica have no confidence in government institutions in general and SETENA in particular.			

Chapter IV

4. Case Study II: Nicaragua



Pictures © T. Loeper

4.1 Introduction

As mentioned in chapter 1, the second objective of this research has been to explore the practice of public participation in EIA in two developing countries concerning the meaning and scope of public participation, its objectives and the factors influencing the effectiveness of public participation in achieving its objectives. Accordingly, first it has been analysed what public participation in EIA involves and who is allowed to participate. For this analysis, legal documents served as the primary source of information. Secondly, it has been examined what objectives public participation is supposed to fulfil. As will be explained below, this information has been gathered by means of interviews. Thirdly, it has been sought to understand what factors influence the effectiveness of public participation in achieving its objectives. To this end, different EIA actors have been interviewed. The chapter is structured as follows: First, key information on the history, culture, and current political and economic situation of Nicaragua is given (section 4.2.1). Secondly, an overview of Nicaragua's EIA system is provided (section 4.2.2). Thirdly, the results of the case study analysis are presented (sections 4.3.1-4.3.3). The last section draws out the main conclusions from the empirical analysis (section 4.4).

4.2 Background Information

4.2.1 Country Background



Source: CIA, The World Factbook.⁵⁶

Nicaragua is the largest of the seven Central American countries with a total area of 130,370 sq km. The Pacific Ocean lies in the west, the Caribbean Sea in the east. In the north, Nicaragua borders with Honduras, in the south with Costa Rica. Currently, Nicaragua has a population of 5,891,199 million people. Nicaragua comprises 15 departments and two autonomous regions (RAAN and RAAS). Nicaragua's population comprises the following ethnic groups: mestizo (mixed Amerindian and white) 69%, white 17%, black 9%, Amerindian (descendants of the country's indigenous inhabitants) 5%.

In the early 16th century, Nicaragua's Pacific coast was settled as a Spanish colony from Panama. In 1821, Nicaragua declared independence from Spain and became member of the Federal Republic of Central America in 1923. In 1838, Nicaragua became an independent republic. Until the mid 19th century, the British occupied Nicaragua's Caribbean Coast but step by step ceded control of the area during the latter half of the century. Since independence in 1821, Nicaragua's history has been characterized by political instability, military interventions (on behalf of the US), dictatorship and fiscal crises. The Somoza dynasty ruled the country in form of a dictatorship for more than 40 years (1936-1979). By 1978, violent opposition to the Somoza regime had spread throughout society, which lead to a civil war (also known as the Nicaraguan Revolution). This war brought the Marxist Sandinista (Sandinista National Liberation Front, FSLN) to power, which governed the country until 1990. US President Reagan (elected in 1981) who was concerned about Nicaragua's support of Marxist movements in other Latin American countries, as well as the growing Soviet and Cuban presence in the country authorized the CIA to train and financially support anti-Sandinista rebels in Nicaragua throughout the 1980s. These guerrillas became known as the 'Contras' because they were branded as 'contrarevolucionarios' by leftists. In the Nicaraguan general election from 1990, the FSLN was defeated by an anti-Sandinista coalition consisting of left- and rightwing parties. After also losing elections in 1996 and 2001, former Sandinista President Daniel Ortega Saavedra was elected president in 2006. The president of Nicaragua is head of the state and head of the government at the same time. The legislative branch of the country consists of a unicameral National Assembly (Asamblea Nacional) whose members are elected by proportional representation and party lists to serve five-year terms. "The 2008 municipal elections were marred by widespread irregularities". All in all, democratic institutions have been weakened under the Ortega administration.

⁵⁶ https://www.cia.gov (last accessed: 15.09.2011).

As regards the Nicaraguan Economy, in 2010 the country's GDP (purchasing power parity) was \$17.71 billion. The GDP (PPP) per capita was \$3.000. By way of comparison, the United State's GDP (PPP) per capita was \$47,200. The agricultural sector accounted for 17.6% of the Nicaragua's GDP, the industrial sector for 26.5%, and the service sector for 56%. Nicaragua is primarily an agricultural country; agriculture constitutes about 60% of its total exports. Traditional export products are coffee, beef, sugar, tobacco and cash crops such as banana. Recently, shrimp has become another important export product. Just as Costa Rica, Nicaragua is member of the US-Central American Free Trade Agreement (CAFTA), which entered into force in April. Within the free trade zone, Nicaragua mostly exports textiles and apparel (US Bureau of Public Affairs)⁵⁷. President Ortega's promotion of 'mixed business initiatives' owned by the state oil firms of Nicaragua and Venezuela, as well as weak law enforcement "could undermine the investment climate for domestic and international private firms in the near-term" (CIA, The World Factbook)⁵⁸. To meet dept-financing obligations, Nicaragua heavily relies on international economic assistance. However, due to the irregularities in the November 2008 elections (see above), foreign donors have limited this funding. "In early 2004, Nicaragua secured some \$4.5 billion in foreign debt reduction under the Heavily Indebted Poor Countries (HIPC) initiative, however, the government still struggles with a high public debt burden" (CIA, The World Factbook)⁵⁹. Nicaragua is the poorest of the seven Central American countries and the second poorest Latin American country after Haiti (Rural Poverty Portal)60. According to the World Bank's Nicaragua Poverty Assessment, "extreme poverty in Nicaragua continues to be overwhelmingly rural, where more than 25 percent of the population struggle to survive on less than one dollar per day" (World Bank, 2004). According to the UNDP's Human Development Report from 2009, 47.9% of the Nicaraguan population lives under the poverty line (the poverty line deemed appropriate for a country by its authorities). All in all, a devastating earthquake in 1972 (which destroyed nearly 90% of Managua), the civil war and subsequent guerrilla warfare in the 1980s as well as Hurricane Mitch (which caused more than 4.000 deaths and a damage of \$1 billion) severely damaged Nicaragua's economy. Prior to the revolution in 1979, Nicaragua was one of Central America's wealthiest and most developed countries.

4.2.2 EIA in Nicaragua

The information provided in this section has been retrieved from legal documents (primary sources) and EIA system analyses (so-called Diagnósticos) compiled by the International Union for the Conservation of Nature (IUCN) in cooperation with the NCEA and private consultants (secondary sources) in 2002, 2006 and 2010.

First, a short summary of the development of EIA in Nicaragua will be given. Subsequently, some features of the EIA system and procedure will be described that are important to understand the

The approval of the 'Regulations for Permits and Environmental Impact Assessment'

⁵⁷ Retrieved from: http://www.state.gov (last accessed: 29.09.2011).

⁵⁸ Retrieved from: https://www.cia.gov (last accessed: 29.09.2011).

⁵⁹ See footnote 58.

⁶⁰ Retrieved from: http://www.ruralpovertyportal.org (last accessed: 27.09.2011).

(RPEIA) in 1994 (Decree No. 45-94) marks the beginning of EIA in Nicaragua. Interestingly, these regulations were adopted previous to the development of The General Law of Environment and Natural Resources (Law No. 217), which was signed in 1996. As a consequence, The General Law of Environment and Natural Resources incorporated the RPEIA, and recognized it as one of the instruments for environmental management. Furthermore, it stipulated the decentralization of EIA – this will be described in more detail below. Decree No. 45-94 served as a framework for EIA for ten years. In 2006, it has been replaced by Decree No. 76-2006, which up to the present regulates Nicaragua's EIA system.

During the screening phase, the respective project is classified as falling into one of the following categories:

- Category I
 - Projects belonging to this category are considered 'special projects' due to their national, bi-national or regional importance, their economic, social and environmental significance and their high potential environmental impact (PIA). Projects of category I require an EIS in order to obtain an environmental permit.
- Category II
 Projects pertaining to this category are projects, which involve a high PIA and thus require an EIS in order to obtain an environmental permit.
- Category III
 Projects falling into category III are projects that involve moderate environmental impacts. Yet since projects of category III may generate accumulative environmental impacts, they necessitate an 'Environmental Valuation' in order to obtain an environmental permit.

Different than in Costa Rica, the PIA of a project is not determined for each project separately based on a set of indicators. Instead, projects belonging to the respective categories are listed in chapter IV of Decree No. 77-2006. Project types that are not included in this list are projects with a low PIA, which do not require any environmental assessment; proponents merely need to present a so-called Environmental Form (Formulario Ambiental) to the respective municipality (Decree 76-2006, Article 7).

As has been mentioned above, Nicaragua has a highly decentralised EIA system. Accordingly, depending on the category to which a project belongs, it is administered at different administrative levels:

Projects of category I are administered by the Central Ministry of Environment and Natural Resources (MARENA) through the Directorate General of Environmental Quality (DGCA) in cooperation with the relevant Sectoral Environmental Units (UGAs), MARENA's Territorial Delegations and the municipal governments depending on the case and type of project. As regards the autonomous regions (RAAS and RAAN), the respective Regional Council in coordination with the municipal authorities and communities involved, in form of a Resolution of the Regional Council, for inclusion into the corresponding administrative Resolution.

Projects of category II are administered by MARENA Central through the DGCA in coordination with the relevant Sectoral Environmental Units (UGAs), MARENA's

Territorial Delegations and the municipal governments depending on the case and type of project. As regards the autonomous regions (RAAS and RAAN), the assessment process is administered by the respective Regional Council through the Secretatiat of Natural Resources and the Environment (SERENA) in coordination with MARENA.

Projects of category III are administered by MARENA through the Territorial Delegations in coordination with the municipal Sectoral Environmental Units depending on the project. As regards the autonomous regions (RAAS and RAAN), the process is administered by the respective Regional Council through the Secretariat of Natural Resources and the Environment (SERENA) in coordination with MARENA.

Furthermore, regarding projects of category I and II, an interdisciplinary and interinstitutional working group is assigned by MARENA on a case to case basis. The composition of this group depends on the type of project, the professionals required, and the respective work-load of the former. This group is assigned with all technical aspects of the EIA process, which include the elaboration of the Terms of Reference (ToR), the review of the EIS (including the analysis of public comments) and the elaboration of the technical report (Dictamen Técnico) which contains a résumé of the EIS review and serves as a basis for the environmental permit which is issues by the head of DGCA. Figure 3 illustrates the distribution of administrative competences described above.

RAAS & RAAN Other regions MARENA Category I Central Environmental MARENA Impact Study Central (EIS) Category II SERENA MARENA's Environmental Territorial Valuation Category III Delegations Environmental Without Municipality Form category

Figure 3: Administrative competences regarding EIA in Nicaragua

Source: adapted from Chinchilla (2009).

4.3 Empirical Findings

In the following sections (4.3.1-4.3.3) the outcomes of the case study analysis are presented. These results are based on a document analysis as well as interviews with fifteen EIA actors (see chapter 1 for a detailed description of the research methodology).

⁶¹ A 'tecnical guide' for the formation of this group seems to exist, yet interviewees stated that the criteria established in this guide can often not be taken into account due to a lack of personnel. Thus, usually representatives of the respective UGAs together with DGCA personnel constitute the interdisceiplinary and inter-institutional working group.

4.3.1 The Meaning and Scope of Public Participation

First of all, it is important to note that in Nicaraguan EIA legislation the term public 'consultation' is used instead of public 'participation'. However, various EIA actors who have been interviewed for the purpose of this research, referred to 'participation' when talking about public involvement in EIA. For reasons of consistency and because it could be argued that consultation is just one of the various forms of participation (see chapter 2), in the remaining parts of this chapter the term 'participation' will be used.

The legal provisions for public participation established in Nicaragua define the content of participation and stipulate who is allowed to participate. Public participation is a mandatory component of EIA in Nicaragua since the publication of the first EIA specific regulation in 1994 (Decree No. 45-94). In accordance with this Decree, two different mechanisms for public participation have been established. However, it must be noted that there is a lack of comprehensive legislative provisions, which clearly define these procedures and a reliance on discretionary internal guidelines. One interviewee stated that, back in the year 2000, an Annex to Resolution No. 03-2000 was drafted which established precise procedures for public participation, yet this Annex has never been published. In fact, in Resolution No. 03-2000 it is stated that 'the procedures for public consultation are established in Annex II of this document' (Article 12). Moreover, Executive Decree No. 76-2006 stipulates that 'MARENA shall establish a special legislation that regulates public consultation in EIA processes' (Article 33). Up to the present day several attempts have been made in this regard yet without any result (see also Fuentes Ramírez and Blandón García, 2011). Below the two mechanisms applied in Nicaragua to involve the public in EIA are described. As mentioned above, partly these mechanisms are defined in EIA legislation; partly they are implemented according to informal rules. Information regarding the latter has been retrieved from interviews with EIA officials and consultants. Which of the two mechanisms needs to be applied – only the first or both - is determined by the EIA agency and stated in the Terms of References (ToR).

First, in any case a summary of the EIS, the EID needs to be available for public review in the municipality where the proposed project shall be realised. *Anyone interested* may review the EID and submit written comments to the DGCA within five working days after publication of the document. MARENA is responsible for announcing in a daily nationwide newspaper the possibility to review the EID and to submit written comments. Any written comments are assessed by an interdisciplinary and interinstitutional working group (see previous section) and included in the technical report emitted by the group. However, it appears that MARENA is neither obliged to respond to individual submissions nor to give feedback on how public input influenced the final decision. What should be noted is that, unless initiated by the proponent, communities that are affected by a proposed project are not being informed about the planning and assessment process until the availability of the EID is announced.

Secondly, interviewed EIA officials reported that public hearings on the subject of a proposed project might be held if considered necessary by the DGCA. As is the case with Costa Rica, this regulation leaves plenty of discretion to the EIA authority. Public hearings – if required – are held before the final decision about a project is taken, i.e. at a very late stage of the EIA process. It is required that (at least) one representative of the

DGCA attends the public hearing. According to interviewed EIA officials, public hearings are announced in a daily nationwide newspaper and/or by means of radio or loudspeaker announcements in the respective community. *Anyone interested* is allowed to attend these hearings. Interviewees further reported that public hearings begin with a presentation by the project proponent (i.e. the consultant in charge of the impact assessment) about the proposed project, its benefits and potential impacts. Then, participants are given the opportunity to give short speeches indicating their thoughts on the project. The proponent is responsible for taking notes of and/or record the public hearing and for submitting these transcripts and/or records to the DGCA. As is the case with written submissions (regarding the EID), the DGCA is neither obliged to respond to observations presented during public hearings nor to give feedback on how this input influenced the final decision.

Apart from the participatory mechanisms described above, in accordance with The General Law of Environment and Natural Resources (Law No. 217), the public has access to all EIA related information available at MARENA's Documentation Centre (Centro de Documentación) located in Managua. As regards access to justice in environmental matters, no specific provisions have been established yet.

4.3.2 Objectives of Public Participation

First of all, it must be emphasised that the goals of involving the public in EIA are not defined in Nicaraguan EIA legislation. Existing laws and regulations merely describe the procedures for public involvement in broad terms (see previous section). Therefore, interviewees were asked to give their opinion regarding the objective(s) of public participation in EIA and to substantiate their point of view. Interestingly, all interviewees unanimously stated that the objective is to provide people affected by a project with an opportunity to influence decision-making regarding that project. As was the case in Costa Rica, interviewees emphasised that it is an important democratic right of citizens to be involved in public policy making. When asked to describe how much influence the public should have over decision making, the great majority of interviewees stated that directly affected members of the public should be consulted regarding their needs and concerns and that these interests shall be taken into account by public officials during (final) decision-making. Merely two interviewees (members of environmental NGOs) feel that the public should be granted a prominent role in decision-making. Yet they cautioned that many participants - especially from poor communities, which often suffer most from environmental degradation - might lack capacity to meaningfully participate. Therefore, the interviewees argued, it is important to come up with participatory methods appropriate to local circumstances (see also section 4.3.3) and to invest in capacity development among participants.

4.3.3 Factors Influencing the Effectiveness of Public Participation

When talking about the goals of public participation, all interviewees expressed the view that, up to now, public participation in EIA has been largely ineffective. More precisely, interviewees feel that several factors impact upon the public's influence on EIA processes and outcomes. One interviewee claimed: "In Nicaragua, public consultation is a fiasco" (consultant). Another respondent argued: "When EIA was introduced in Nicaragua,

provisions for public consultation were established... there are regulations on public participation... the problem is that they are unsuitable. No... public consultation is not effective in Nicaragua, not at all" (proponent). In line with their perception that public participation in EIA is ineffective in Nicaragua, respondents focused on barriers to effective public participation. Below, these barriers together with explanations and examples provided by the interviewees are resumed. In order to scrutinise the answers given by interviewees, relevant information from other sources has been examined and, if considered applicable, included in the overview below.

The majority of interviewees pointed out that the process of public involvement in EIA is not sufficiently regulated. In this respect, interviewees mainly criticised the wide discretion given to the EIA authority. One interviewee stated, "the participatory process depends on the discretion of a few people who are heavily influenced by the government and its interest... no surprise that this is not turning out well, right?" (consultant). Accordingly, several interviewees emphasised that EIA regulations in Nicaragua should be reviewed and 'tightened' and that new regulations should involve the duty to give reasons and responses to public comments (see also below).

All interviewees reported that public consultation takes place too late in the EIA process, which decreases people's interest in participating. For instance, one interviewee stated: "People have the feeling that decisions are already made when they are consulted" (UGA-MEM staff)⁶². However, inadequate timing not only reduces people's interest in participating, it also decreases the perceived legitimacy of the assessment process – a problem that has been mentioned by several other interviewees. In Nicaragua, it is common practice that project proponents request an environmental permit when the project has already been designed and the project location been determined. Moreover, project proponents do not have to present different project alternatives, which could be opened up to public scrutiny and debate. Lastly, the public is being consulted upon completion of the technical review process, i.e. public participation is an immediate precursor to decision-making. Thus, theoretically speaking, participants can merely induce the development of mitigation or compensation measures, which have not been considered yet or, alternatively, try to prevent project approval. However, EIA officials hold the view that the objective of EIA is to mitigate environmental impacts associated with a proposed project not to prevent projects with significant environmental impacts from being implemented. Consequently, so far no project permission has been denied due to public opposition.⁶³

Several interviewees mentioned another important aspect, namely that **people are not used to directly participate in political decision-making**: "There is a lack of a culture of participation in Nicaragua... people are not used to be asked about their opinion" (UGA-MIFIC staff)⁶⁴. Nevertheless, interviewees reported that more and more people become aware of their right to participate in EIA. While this is certainly a precondition for active public participation in EIA, interviewees criticised that those who do participate in EIA instrumentalise their right to participate in EIA to bargain concessions instead of

⁶² Sectoral Environmental Management Unit – Ministry of Enegery and Mines.

⁶³ This information has been obtained from interviewed EIA officials.

⁶⁴ Sectoral Environmental Management Unit - Ministry of Development, Industry and Commerce.

providing relevant input to decision-makers. According to the interviewees, this problem applies particularly to poor and very poor communities, which have come to understand that EIA provides them with an opportunity (most likely the only opportunity) to voice their interests and demand concessions from investors that may slightly improve their living conditions.

Furthermore, most of the interviewees emphasised that the methods used to involve the public in EIA are not suitable given widespread illiteracy, poverty and other restraining factors. Regarding the publication of the EID for public review, one interviewee explained: "the problem is that it does not work... people do not come to review the document and comment on it because most of them have never heard of it... for companies this is very comfortable of course" (proponent). As has been described in section 5.2.3, in Nicaragua the public is informed about the availability of the EID and the convocation of a public hearing via a daily nation-wide newspaper. The problem is that newspapers do not serve to reach the public. According to several interviewees, most people do not buy the newspaper in which EIA related information is distributed - many because they cannot afford it (the costs are approx. 2\$) some because they cannot read. Moreover, one interviewee pointed out that the announcements are very difficult to find among all the other information: in an example the interviewee presented, the availability of the EID for public review was announced on one of the last pages of the newspaper, printed in tiny letters and 'hidden' between commercial advertisements. Furthermore, interviewees mentioned that the information presented to the public in form of the EID is hardly comprehensible for laypeople. Moreover, reviewing the EID and submitting written comments on the assessment does not only require specific knowledge but, obviously, also literacy. This is another impediment since illiteracy is still widespread in Nicaragua – especially among poor people (the current illiteracy rate for the population aged ten and above is approximately 23%). This implies that a considerable part of the population is virtually excluded from participation in EIA. Lastly, one of the interviewees reported that many of the few written comments that are submitted to the DGCA are considered invalid because they lack a signature. According to the interviewee, people are hesitant to sign any 'government-related documents' due to negative experiences, e.g. in the context of land expropriation throughout the 1980s. Evidently, the design of the participatory process does not account for these issues.

Moreover, most interviewees highlighted that the time permitted to review the EID and present comments is far too short (during five days after the document becomes available). One interviewee pointed out that this even deprives NGOs (who may have the necessary technical expertise) of the chance to respond to the EID in a proper way. It seems worth mentioning that EIA experts from different developing countries who attended the presentation⁶⁵ of the results of this analysis shared the view that allowing merely five days for public review of the EID is unusual and inadequate.

Another problem that was mentioned by several interviewees is that **communication between the EIA authority and the public is mainly one-way**. The public is provided with (unsuitable) information and may respond to this information in written form – room for dialogue between the public, the proponent and decision-maker does

⁶⁵ Results were presented at the IAIA 2011 conference in Puebla, Mexico.

not exist. Merely during public hearings attendants may ask questions to the proponent and/or representatives of DGCA. However, public hearings are hardly ever required by the DGCA and public hearings do not provide much room for discussion either (see also previous chapter). In fact, several authors criticise public hearings for their inability to stimulate dialogue among attendants, although they "remain the most common form of face-to-face public involvement" in environmental policymaking (Beierle, 1998, p. 20). Petts (2003) for example notes: "in practise public hearings can easily be highjacked by people who want to air grievances, many people will be unwilling to speak or express a view in a larger gathering and there is a very brief time for those communicating to get their message right" (p. 165).

Several interviewees claimed that international and most national investors do not recognise the value and importance of environmental assessments since environmental awareness is limited within the private sector. According to interviewees, proponents perceive EIA as an inconvenient bureaucratic requirement needed to obtain the mandatory permit. Accordingly, proponents urge the DGCA to keep the procedural requirements (specified in the ToR) as simple as possible. The fact, that public hearings have hardly ever been required by the DGCA implies that the agency defers to the wishes of project proponents.

On a related note, many interviewees argued that there is a lack of commitment to EIA and public involvement in decision-making among government officials. When asked about the reasons for this perceived lack of commitment, several interviewees reported that back in the 1990s, when Nicaragua opened its boarders for international investment after a long period of isolation, international finance institutes, especially the Inter-American Development Bank (IADB) and the World Bank, put great pressure on the government to establish EIA procedures, including measures for public involvement. One interviewee stated, "the message was simple: no EIA, no money" (consultant). Respondents further explained that within the country, environmental awareness was virtually non-existent at that time. "The truth is that the initiative for EIA didn't emanate from within the country... the government even tried to prevent the introduction of EIA because it perceived it as an obstacle to economic development. In fact, EIA has never been seen as an useful tool for environmental management, this is a problem in all Central American countries" (professor). Apparently, this lack of ownership persists until today.

The great majority of interviewees mentioned another barrier to effective public participation in EIA, which is closely related to the previous two factors: **EIA is a highly politicised process in Nicaragua**. Due to the fact, that EIA is not recognised as a valuable tool for environmental protection but rather seen as an inconvenient bureaucratic requirement, according to interviewees, political actors frequently interfere in EIA and try to influence the procedure according to political and economic interests. Interviewees provided several examples of political interference in EIA processes. One of the examples that were given is the following: In accordance with Executive Decree 68-2011, Nicaragua's EIA system has been systematically decentralised. As a result, projects of category III (projects with a moderate PEI) are dealt with at the municipal

_

⁶⁶ Interviewed EIA officials emphasised that public hearings serve to *inform* the public about a proposed project.

level. The environmental assessment and issuing of an environmental permit is administered by the respective 'Departmental Delegation' of the Environmental Ministry (MARENA) and the respective municipal government and needs to be finalised within thirty days. However, currently it is practice that upon completion of the assessment, the final report is send to the Environmental Minister who decides (based on political interests) whether the project will be approved or not. The interviewee who gave this example emphasised that this a clear violation of law with the aim to "re-concentrate" the EIA system in order to facilitate central government control over decisions. Several interviewees concluded that decisions about projects subject to EIA are not sufficiently based on technical considerations and stakeholder needs. On the contrary, "for the government, EIA is not a decision tool, it is simply a bureaucratic requirement... if a project will be approved and under which conditions is decided on a political level... and this decision depends on whether the investor is a friend or enemy of the Sandinista government" (professor). Regarding public hearings the same interviewee claimed, "if they are held, which hardly ever happens, then they are used as a political arm". He explained that several cases have been reported where participants were 'bought in' by the government to attend a public hearing and make the proponent believe that they strongly oppose the proposed development - only to provide the government with a reason to reject the unwanted project. Addressing the problem of indiscretion on part of public officials, another interviewee reported that it has been common practice that proponents pay officials of the municipality where the respective project shall be realized for not publishing the EID for public review.

Lastly, several interviewees emphasised that **trust in government institutions is generally low in Nicaragua**. Interviewees described that there is an atmosphere of resignation among people. For instance, one interviewee reported that the few public audiences which have been convoked up to today were poorly attended: "People think, even if we come and talk about our concerns, thy will never be taken into account" (consultant). The interviewee showed understanding for this attitude yet pointed out that that "people automarginalise themselves" through non-participation. He further reported that not even the few environmental NGOs active in Nicaragua have attended public hearings. They feel that their chances to influence EIA processes via formal ways of participation are small and thus prefer to engage in media campaigns and lawsuits if they intend to influence project decision-making. This notion has been confirmed by interviewed members of two environmental NGOs.

4.4 Interim Conclusion

Several insights can be derived from the analysis of participatory practice in EIA in Nicaragua. The most important of these lessons are the following.

First of all, the analysis of legal provisions (section 4.3.1) has revealed that public 'participation' has a purely consultative character. This is also reflected in terminology: in EIA legislation the term 'consultation' is used instead of 'participation'. The availability of the EID for public review is supposed to enable people interested in or affected by a proposed project to review the assessment results and to comment on them. However, the review period is restricted to five days and people can only comment on the EID in written form. Given relatively high rates of illiteracy in Nicaragua, this deprives a considerable part of society from the chance to participate in EIA – a problem that has been highlighted by several interviewees. As has been described in section 4.3.1, a second

mechanism for public participation in EIA established in Nicaragua are public hearings. As opposed to the right to review and comment on the EID, public hearings allow for two-way communication between the public, decision-makers and the proponent. However, in Nicaragua it is left to the discretion of the EIA agency whether public hearings are held or not. As a result, a negligibly small number of public hearings have been convoked up to this point. Consequently, in Nicaragua public involvement in EIA has come down to the right to review the EID and to comment on it. As described in the previous section, the EID is published after the project has already been technically approved (at the end of the EIS review process). As mentioned in chapter 2, late involvement of the public in EIA is regarded as detrimental to effective public participation. The main problem is that proponents and government officials are understandably hesitant to reconsider the project design late in the EIA process (Doelle and Sinclair, 2006). This problem too has been identified by several interviewees. Concerning the scope of participation, the analysis revealed that anyone interested is invited to participate. However, the EID is only published in the municipality where the respective project shall be realised. The same applies to public hearings. Thus, practically speaking, the scope of participation is confined to members of the public who live within the immediate or adjacent geographical area of the proposed project.

Secondly, the analysis of legal documents revealed that the objectives of public participation are not defined in EIA legislation (section 4.3.2). Yet, all interviewees argued that public participation ought to provide people affected by a project with an opportunity to influence decision-making regarding that project. Clearly, there is quite some discrepancy between this objective and the existing means for participation. The provision that interested members of the public are allowed to review the EID and to comment on it does not indicate if and how this input will be taken into account during decision-making, i.e. this is left to the discretion of decision makers. Nevertheless, people seem to expect that their comments be taken into account and refrain from further involvement if they feel that their input went unnoticed (see previous section).

Thirdly, all interviewees (including government officials) claimed that public participation in EIA is mostly ineffective. When asked about the factors, which have impaired the effectiveness of public participation, interviewees identified a broad range of barriers. Table 5 below provides an overview of these barriers along with a short description. Two of the most important findings are the following. First, the method(s) applied to involve the public in EIA are obviously incompatible with local circumstances. For instance, inhabitants of poor communities are presented with complex and highly technical information in form of the EID and are given five days to submit substantiated comments on it in written form. Perhaps even more problematically, the availability of the EID for public review is announced in a daily newspaper, which many people cannot afford to buy. Secondly, the majority of interviewees argued that a lack of candid political commitment to environmental protection and public involvement in government decision-making is among the most significant barriers to effective public participation. Anyhow, the opportunities for public participation in EIA are very limited in Nicaragua. However, political interference and indiscretion on the part of EIA staff reduce the available room for participation even further and make the participatory process appear like a collusive affair, whose aim is merely to comply with legal requirements.

Table 5: Overview of barriers to effective public participation in EIA identified by different EIA actors in Nicaragua

Barrier to effective public participation in EIA	Explanation provided by interviewees
Lack of clear regulations	Too much discretion is given to the EIA authority, which makes the process and outcomes of public participation unpredictable.
Late involvement of the public	Public consultation takes place too late in the EIA process, which diminishes the chance for participants to actually influence the decision-making process and, as a consequence, decreases people's interest in participating.
Inadequate timing	The time permitted to review the EID and submit comments on it is far too short, especially given fact that the information provided in the EID is highly complex.
Participatory methods incompatible with local context	The methods that are used to involve the public in EIA are not suitable given widespread illiteracy, poverty and other restraining factors.
Lack of room for discussion between the public, decision-makers and proponent	Communication between the public, decision-makers and the proponent is mainly one-way.
Lack of participatory culture	People are not used to directly participate in political decision-making, i.e. to be asked about their opinion.
Attitude of participants	People instrumentalise their right to participate in EIA to bargain concessions instead of providing relevant input to decision-makers.
No recognition of the value and importance of environmental assessments on the part of international and most national investors	Environmental awareness is limited among private sector actors; the view prevails that EIA is simply another bureaucratic requirement to obtain project approval.
Lack of commitment to EIA and public involvement in decision-making among government officials	EIA procedures, including measures for public involvement, were established in Nicaragua due to pressure from international finance institutes (mainly IADB and World Bank). (Political) support for EIA within the country has been, and continues to be, low.
Political pressure & interference	EIA is a highly politicised process in Nicaragua; most decisions are made on political rather than technical grounds.
Lack of trust in government institutions	Trust in the integrity of government institutions is generally low and has been further decreasing over the past years.

Chapter V

5. Synthesis of and Reflection on Empirical Findings

In this chapter, the results of the two case studies are synthesised (section 5.2), and discussed in light of the theoretical debate on public participation in EIA presented in chapter 2 (section 5.3).

5.1 Synthesis of Empirical Findings

What insights could be derived from the practice of public participation in EIA in Costa Rica and Nicaragua concerning:

- a. the meaning and scope of public participation
- b. the objectives of public participation
- c. the main factors influencing the effectiveness of public participation

This is the second question this research sought to address. Below the key insights derived from both case studies are summarised (Box 2) and, subsequently, outlined in more detail.

Box 2: Key insights from the case study analysis

Key insights:

- Both in Costa Rica and Nicaragua public participation has a consultative character.
- Both in Costa Rica and Nicaragua the goals for involving the public in EIA are not specified in legislation. However, all interviewees in both countries emphasised that the objective of public participation is to provide people affected by a proposed project with an opportunity to influence decisions regarding that project.
- All interviewees in both countries are of the opinion that public participation in EIA has been largely
 ineffective up to now, i.e. they feel that the public's ability to influence EIA processes and outcomes is
 seriously constrained.
- Both in Costa Rica and Nicaragua, interviewees identified a diverse list of factors that have impacted
 upon the effectiveness of public participation in EIA. Among these are process factors (e.g. lack of
 feedback mechanisms), capacity-related factors (lack of institutional capacity), context factors (political
 pressure & interference) and many more. The latter are deemed to pose the greatest barrier to effective
 public participation in EIA.

a. The meaning and scope of public participation

In both Costa Rica and Nicaragua, public participation in EIA has a consultative character. That is, members of the public are given the opportunity to comment on the assessment results and proposed activities, however, they are not directly involved in decision-making, e.g. through involvement in advisory committees. Furthermore, it has been found that the provisions for public participation established in EIA legislation leave a considerable amount of discretion to the Costa Rican and Nicaraguan EIA agency respectively. Thus, the extent of participation may change from case to case depending on the judgement of EIA agency staff. In Costa Rica, some measures for participation are confined to projects belonging to category A (see section for more details), others relate to all projects administered by SETENA (see chapter 3, section

3.2.2 for more details). In Nicaragua, on the other hand, public participation is confined to projects with a high PIA, which require an EIS (see chapter 4, section 4.2.2 for more details). Moreover, both in Costa Rica and Nicaragua, *de facto* public participation is confined to the review phase of the EIA process, which precedes the final decision about a project. In Nicaragua this is determined in internal guidelines. By contrast, in Costa Rica the public has the right to be heard by SETENA at any time during the evaluation process and during the operating phase of projects. However, due to inconsistencies in EIA regulations, in practice this right is not being fully embraced. The reason is that the public is only informed about projects of category A, and only once the EIS enters into the review process.

As regards the scope of participation, it has been found that access to participation is legally unrestricted. That is, anyone who is interested in the EIA process is allowed to participate. However, practically speaking, in Nicaragua the scope of participation is confined to members of the public who live within the immediate or adjacent geographical area of the proposed project (the EID is only published in the municipality where the respective project shall be realised; public hearings take place at the location where the proposed project shall be constructed). In Costa Rica, this is different because anyone is permitted to submit written comments to SETENA or to require a private hearing with SETENA's Plenary Commission or any unit of the agency's Technical Department, which are located in San José, the capital of Costa Rica.

b. The objectives of public participation

In both Costa Rica and Nicaragua, the objectives of public participation are not defined in EIA legislation. Remarkably, though, all interviewees in both countries argued that the objective of public involvement in EIA is to provide people affected by a proposed project with an opportunity to influence decisions regarding that project. As outlined in chapter 2, influencing decisions can mean quite different things. Hence, all interviewees were asked to specify what 'influence over decision making' means to them and what it implies for practice. In Costa Rica EIA officials as well as the majority of consultants argued that the public should be given the chance to communicate with decision-makers and the proponent concerning their needs and expectations but emphasised that it is on EIA experts to decide how to incorporate this input. On the other hand, members of environmental NGOs, academics and other knowledge actors argued that if public participation were to be taken seriously, affected members of the public would have to be actively involved in decision making at different stages of the EIA process, including the final decision about a proposed project. In Nicaragua, the great majority of interviewees stated that affected members of the public should be consulted regarding their needs and concerns and emphasised that public officials should be obliged to take these comments into account during (final) decision making. Merely two interviewees (members of environmental NGOs) feel that the public should be granted a prominent role in the EIA process, including direct involvement in decision making in form of community advisory groups, workshops with the proponent and decision-makers at early stages of the planning process etc.

c. Factors influencing the effectiveness of public participation

Interestingly, all interviewees in both countries expressed the view that public participation is largely ineffective, i.e. they feel that several factors impact upon the public's influence on EIA processes and outcomes. The openness of public officials

regarding the ineffectiveness of public participation was quite surprising given the fact that they are responsible for conducting the process. When asked about the factors, which have been influencing the effectiveness of public participation, all respondents highlighted various constraints. Strikingly, the barriers identified by Costa Rican EIA actors closely correspond to those identified by Nicaraguan EIA actors (see Tables 4 and 5 for a complete overview). In both countries, a major problem seems to be that the process of public participation is not comprehensively regulated. On the one hand, unclear regulations may lead to false expectations among the public. On the other hand, the great extent of discretion given to SETENA and the DGCA makes the agencies vulnerable to political pressure as well as indiscretion on the part of EIA agency staff. Moreover, EIA actors in both countries are of the opinion that the methods applied to involve the public in EIA are unsuitable. For instance, interviewees argued that they do not provide sufficient room for dialogue between participants, decision-makers and the project proponent, i.e. communication is mainly one-way. Several interviewees in Nicaragua furthermore emphasised that the applied method(s) for participation are incompatible with the local context (widespread illiteracy and poverty). Furthermore, in both countries many interviewees criticised that there is a lack of (effective) feedback mechanisms, which causes that participants do not know if and how their input has been taken into account. Another barrier to effective public participation pointed out by many interviewees in both countries is a fundamental lack of trust in government institutions, which decreases people's willingness to participate. Moreover, the majority of interviewees in Costa Rica and Nicaragua emphasised that there is a lack of commitment to EIA and public involvement in government decisions among government officials and proponents, which significantly impacts upon the effectiveness of public participation. This lack of commitment, induced by a lack of environmental awareness and ownership, leads to significant political interference in EIA processes. Several respondents in both countries argued that political interference in EIA is among the most significant barriers to effective public involvement in EIA. Correspondingly, many interviewees highlighted that a suitable participatory process alone does not suffice since the public's opportunity to influence decision-making lastly depends on the willingness of decision-makers to take this input into account.

5.2 Reflection on Empirical Findings in Light of the Theoretical Debate on Public Participation in EIA

As has been explained above, in Costa Rica and Nicaragua public participation has a consultative character. Hughes (1998), Doelle and Sinclair (2006) as well as Dietz and Stern (2008) explain, that this is the rule in EIA rather than the exception. Moreover, the primary methods for public participation employed in Costa Rica and Nicaragua (publication of the EID for public review; public hearings) belong to the most frequently applied techniques for public involvement in EIA (Dietz and Stern, 2008; Petts, 2003). As discussed in chapter 2, among scholars, views on the concept of participation diverge, i.e. there is disagreement about what participation implies and requires. For instance, Arnstein (1969) distinguishes between different levels of public participation and describes consultation as a tokenistic form of participation, which does not grant any power to the public. From this perspective, participatory practice in Costa Rica and Nicaragua leaves much to be desired. Other scholars, such as Thomas (1990) and Dietz

and Stern (2008) appear to be less judgemental. They hold the view that no form of participation is inherently better than the other since the necessary extent of involvement depends on the characteristics of the policy problem at hand. Yet, irrespective of the type of project, in Costa Rica and Nicaragua public involvement in EIA does not go beyond consultation. As mentioned above, this also applies to most other countries applying EIA.

As stated, the case study revealed that access to participation is legally unrestricted in Costa Rica and Nicaragua, i.e. anyone who is interested in the EIA process is allowed to participate. As mentioned in chapter 2, opinions on the right scope of public participation in EIA differ substantially. For instance, Doelle and Sinclair (2006) hold the view that the public should be defined broadly, i.e. anyone who has something to contribute shall be invited to participate. From this point of view, regulations in Costa Rica and Nicaragua seem adequate. However, other authors stress that the objective(s) pursued with public participation determine who (i.e. which segments of the public) should be involved in EIA. Both in Costa Rica and Nicaragua, the goals of involving the public are not specified in EIA legislation. However, all interviewees in both countries argued that the objective of public participation is to provide people affected by a proposed project with an opportunity to influence decisions regarding that project. If one considers environmental decisions to affect everybody's quality of live (see chapter 3, section 3.4 for more details), then inviting everyone to participate seems appropriate. Otherwise, the scope of public involvement in EIA in Costa Rica and Nicaragua could be considered too broad.

Whereas the objectives of public participation are not specified in Costa Rican and Nicaraguan EIA legislation, all interviewees claimed that the goal of public involvement in EIA is to provide members of the public affected by a project with an opportunity to influence decisions regarding that project. Given the wide range of objectives mentioned in EIA literature and the widespread belief that clarity of purpose is essential for effective public participation (e.g. Dietz and Stern, 2008; O'Faircheallaigh, 2010), this is quite remarkable. As mentioned in chapter 2, the normative objective highlighted by interviewees in Costa Rica and Nicaragua is frequently invoked in EIA literature (e.g. Fiorino, 1996; Petts, 2003; Lawrence, 2003; O'Faircheallaigh, 2010). However, authors usually point out many more objectives besides the goal to enable affected members of the public to influence decision-making. These other objectives, including other normative as well as substantive and instrumental objectives, appear to be of no relevance for EIA actors in Costa Rica and Nicaragua. This implies a great discrepancy between the theoretical debate on the one hand and practice in developing countries on the other hand.

As has been mentioned in chapter 2, in EIA literature several factors deemed to influence the effectiveness of public participation, are highlighted. However, in most cases assumptions about the relevance of these factors are based on speculation and it remains unclear to which of the goals of public participation these factors are related and how. Moreover, no distinction is made between factors influencing the effectiveness of public participation in EIA in developed and in developing countries. Therefore, it is not possible to compare the empirical evidence gathered through case studies in Costa Rica and Nicaragua one-to-one with existing assumptions and research results. Nevertheless, it must be noted that some of the barriers to effective public participation in EIA identified by interviewees in Costa Rica and Nicaragua correspond to factors mentioned in existing EIA literature. For instance, interviewees in both countries regard the

involvement of the public at late stages of the EIA process as detrimental to effective public participation. Moreover, respondents identified a lack of commitment to EIA and public involvement on the part of government officials as one of the key barriers to effective public participation in EIA (see Tables 4 and 5 for details). However, EIA actors in Costa Rica and Nicaragua also described factors as highly influential that are widely neglected in the existing literature. The most important of these factors seems to be the relative autonomy of government agencies responsible for conducting the assessment and participatory process. That is, if the EIA process is captured by political and economic interest, this will not only influence the outcome of the impact assessment but also the effectiveness of the participatory process embedded in EIA.

Chapter VI

6. Discussion & Conclusions

Before drawing the final conclusions of this study, the limitations of this study are discussed (section 6.1) and some recommendations for future research are made (section 6.2).

6.1 Reflection on the Research Design

The limited time and resources available for this research, together with perceptions between different EIA actors influenced the nature of the research methodologies that could be employed. The overall structure of the research methodology stood up well to the practical issues faced, however the following limitations were identified.

- Due to the limited time and resources available for this research, only two case studies could be carried out. As has been mentioned, a well-known weakness of the case study method is the limited empirical generalisability of the findings. This implies that the knowledge gained from the empirical analysis has most relevance for the cases included in the analysis: Costa Rica and Nicaragua. Beyond these two countries, the insights gained are most applicable to Central America, as countries belonging to this region share important socio-cultural, historical and geographical features and are thus structurally similar (see Hillebrand et al., 2000). However, it must be emphasised that the two case studies raised several issues that are relevant to the wider theoretical study of public participation in EIA. Furthermore, several interviewees both in Costa Rica and Nicaragua had considerable knowledge on participatory practice in other Central American countries and could thus comment on differences and similarities. Lastly, the main research findings have been presented to and discussed with EIA experts from different developing countries at the annual conference of the International Association for Impact Assessment (IAIA), held in Puebla, Mexico from 2-6 June 2011. The feedback obtained from these experts helped to validate the findings of this research concerning their applicability to other contexts.
- As explained in chapter 1, practical issues as well as requirements of the NCEA determined the selection of countries for the case study analysis. As a result, two rather similar countries have been included in the analysis. This further impacts upon the generalisability of the research results. However, while Costa Rica and Nicaragua share key characteristic such as the socio-cultural, geographic and broader historical background, they also differ in some aspects. Most importantly, Costa Rica is regarded as one of the few established democracies in the developing world and as one of the world's 'greenest' countries while democracy is "under attack" (Daremblum, 2009)⁶⁷ in Nicaragua and environmental issues do not play a major role in the country. Against this background, the high correspondence between the research results from Costa Rica and Nicaragua is quite remarkable. Furthermore, the

⁶⁷ Online publication, no page numbers. Retrieved from: http://www.american.com (last accessed: 30.11.2011).

⁶⁸ See: http://www.nccr-democracy.uzh.ch (last accessed: 12.12.2011).

similarity of the case study findings might be an indication that these results imply wider trends.

- The validity of the results will be affected by the research techniques employed. Due to the fact that semi-structured interviews were conducted, no interview could be repeated with other respondents, which decreases the reliability of the research findings. Moreover, as is common in social science research, the information given to me in interviews is clouded by the individual's perceptions, memories and the particular image the interviewees would like me to receive. Through triangulation of sources, the impact of these factors was limited as far as possible.
- Concerning the examination of factors, which influence the effectiveness of public participation in EIA in Costa Rica and Nicaragua respectively, it should be emphasised that this analysis fully rests upon the perception and practical experience of different EIA actors, i.e. no independent analysis has been conducted. While it was considered important to include the perception of key actors into the analysis (see chapter 1), a shortcoming of this approach is that responses may be biased by selectivity of recall by interviewees and because interviewees might try to display other actors in a certain light or give answers they think are favourable (social desirability bias). In order to account for this shortcoming, whenever possible, the answers given by interviewees were cross-checked with relevant information from other sources.

6.2 Recommendations for Future Research

Based on the limitations of this study discussed above as well as the issues raised by this research, some recommendations for further research can be made:

- This research indicates, that there is broad consensus among different EIA actors involved in public participation in developing countries, regarding the objective of the participatory process. However, their perception of the objective of public participation does not correspond with views found in EIA literature, i.e. in the literature many more objectives are highlighted. Hence, building upon the results of this research, further case studies should be conducted in other developing countries regarding the objective(s) pursued with public participation in EIA. These results would enable to assess to what extent the findings of this research also apply to other developing countries and thus strengthen the informative value of this research. Moreover, it would be interesting to extend the analysis to developed countries in order to find out what type of objectives EIA actors envisage in these countries and to explore whether similarities or differences exist between different developing and developed countries.
- The literature survey conducted as part of this study revealed, that many of the objectives of public participation mentioned in EIA literature imply quite different activities and consequences. However, the analysis showed that there might be interrelationships between the various identified goals. As has been mentioned, these potential relationships warrant more careful investigation both on a theoretical and practical level.

-

⁶⁹ For instance, in form of EIA case studies based upon the analysis of predifined indicators.

- Furthermore, this research has shown, that there is great confusion in the use and understanding of key terminology and concepts both in the literature and practice: different authors and EIA actors understand different things by 'participation', 'the public' etc. Thus, it seems necessary that future empirical studies on public participation start with a disambiguation. That is, it should be clarified what different actors included in the analysis understand by key concepts such as 'participation' and 'the public'.
- The case study analysis identified a set of factors, which according to different EIA actors in Costa Rica and Nicaragua influence the effectiveness of public participation in EIA. Yet, according to these actors, the single goal of the participatory process is to enable members of the public to influence project decisions that affect their lives. Hence, the barriers to effective public participation in EIA identified by these actors (Tables 4 and 5) are to be seen in relation to this specific objective. Future research could investigate to what extent these factors also matter with regard to other objectives pursued with public participation.
- Finally, the case study results suggest that in the real world the issue of public participation is contested and highly political. Similarly, the results imply that political factors may have a huge impact on the effectiveness of public participation in EIA. Thus, future research should seek to understand in what ways the political context in which participatory processes are embedded shapes and influences its functioning and outcomes. This particularly applies to developing countries where direct participation in public decision-making is a recent development mainly induced by external actors.

6.3 Conclusions

The aim of this research was to gain insight into the theoretical debate on public participation in EIA as well as the practice of public participation in two developing countries - Costa Rica and Nicaragua. Both the theory review and the case study analysis have focused on the meaning and scope of public participation, the objectives of public participation, and the factors influencing the effectiveness of public participation in achieving its objectives. Among scholars, there seems to be broad consensus that public participation is key to effective EIA. However, if one delves deeper into EIA literature, it becomes clear that there is large disagreement concerning the meaning and adequate scope as well as the objectives of public participation in EIA. This means that the consensus implied in the literature regarding the benefits of public participation in EIA is in fact more apparent than real. What is more, varying definitions of public participation and perceptions of its objectives have affected the advancement of scientific knowledge since existing studies each focussed on different elements and outcomes of public participation in EIA, which implies that their results are difficult to compare. However, whereas empirical research would certainly benefit from greater consistency, it is questionable whether definitions should be aligned since there is no single right perspective on public participation in EIA. Moreover, a broad theoretical debate may provide an important impetus for future research and reflection. Nevertheless, in order to capitalise on different ideas and approaches and to advance the research agenda, it is of utmost importance to make differences between definitions and expectations explicit

and to reflect on their implications for research and practice. As mentioned in the previous section, this is a major task for future research on the subject of public participation in EIA.

The case study analysis revealed that EIA actors in Costa Rica and Nicaragua perceive public participation in EIA as a means to democratise decision-making processes. Accordingly, public participation in EIA is considered effective when members of the public are able to influence project decisions that affect their lives (see chapters 3 and 4 for more details). This is easily comprehensible, given the fact that both in Costa Rica and Nicaragua EIA provides one of the few, if not the only, opportunity for public participation in government decision-making. As mentioned before, this also applies to other developing countries (Rothman, 2001). However, in EIA literature public participation is often described as a means to enhance the quality of the decision output or a process aimed at avoiding conflict and project delay. What is the reason for this gap between the theoretical literature and practice in developing countries and what does it imply for practice? The literature review revealed that scholars from developing countries have only minimally contributed to the theoretical literature on public participation in EIA, which is dominated by authors from the US, Canada and the UK. In these countries, democracy is well established, i.e. there are several avenues for public participation in environmental decision-making besides EIA (Leroy and van Tatenhove, 2001; Boyco, 2010). This might explain why, from a western perspective, public participation ought to fulfil other objectives alongside strengthening of democratic practice. Concerning practice, it must be emphasised once more that different objectives of public participation require different approaches and activities. Similarly, Hanchey (1998) explains, "there are many objectives which can be achieved by public participation and there is no single procedure (...) which is effective in achieving all of them" (cited in Scott and Ngoran, 2003, p. 27). This means that the design of the participatory process must fit in with the objectives the process is supposed to fulfil. As has been mentioned, in most developing countries measures for public participation in EIA have been developed in accordance with procedural standards promoted by western donor institutes such as the World Bank and OECD. This might imply, that the participatory techniques applied in developing countries are not consistent with the objective of public participation uphold by local EIA actors. In fact, both in Costa Rica and Nicaragua the design of the participatory process hardly suits the goal of enabling people affected by a project to influence decision-making regarding that project (see sections 3.4 and 4.4). Moreover, interviewees pointed out that the participatory methods are incompatible with the local context (e.g. widespread poverty and illiteracy). These findings suggest that donor agencies should abstain from promoting a standard model for public participation in EIA. Instead, participatory processes should be developed in accordance with local circumstances and the respective objective(s) of public participation. In fact, other authors also highlight the problem of promoting certain EIA (and SEA) standards without considering the specific national context in which the instruments shall be applied (Kolhoff et al., 2009; Fischer and Gazzola, 2006).

Furthermore, the case study findings recall to the mind that EIA, which is often depicted as a technical exercise, is a politically contested arena. While this certainly applies to all countries, it is assumed that political pressure and interference pose a particular challenge for EIA in developing counties, because most developing countries introduced EIA due to pressure from donor agencies rather than as a response to indigenous demand for

more environmental protection. These findings suggest that much more attention should be paid to the way the political context in which participatory processes are embedded shapes and influences its functioning and outcomes.

References

AGUILAR, G., OROZCO, J. & ASTORGA, A. (2004). Environmental Impact Assessment in Central America. Public Participation Handbook. San José: IUCN.

AREGBESHOLA, M. T. (2009). Public participation in Environmental Impact Assessment: An effective Tool for Sustainable Development. A South African perspective (Gautrain). Master Thesis, University of South Africa.

ARNADOTTIR, K.L. (2002). Participation in the Environmental Impact Assessment Process. Analysis of two cases studies from the energy sector in Iceland. Master Thesis, Lund University.

ARNSTEIN, S.R. (1969). A Ladder of Public Participation. *Journal of the American Institute of Planners*, 35(4), pp. 216–224.

BARTON, B. (2002). Underlying concepts and theoretical issues in public participation in resources development. In: D. Zillman, A. Lucas & G. Pring (eds.): *Human rights in natural resources development: public participation in the sustainable development of mining and energy resources*, Oxford: Oxford University Press, pp. 77–119.

BEIERLE, T.C. & CAYFORD, J. (2001). Evaluating Dispute Resolution as an Approach to Public Participation. Resources for the Future: Discussion Paper 01–40. Available at: http://www.rff.org/documents/RFF-DP-01-40.pdf

BICKERSTAFF, K. & WALKER, G. (2005). Shared Visions, Unholy Alliances: Power, Governance and Deliberative Processes in Local Transport Planning. *Urban Studies*, 42(12), pp. 2123–2144.

BINA, O. (2008). Context and Systems: Thinking More Broadly About Effectiveness in Strategic Environmental Assessment in China. *Environmental Management*, 42, pp. 717–733.

BISHOP, P. & DAVIS, G. (2002). Mapping public participation in policy choices. *Australian Journal of Public Administration*, 61(1), pp. 14–29.

BISSET, R. (2000). Methods of consultation and public participation. In: N. Lee & C. George (eds.): *Environmental Assessment in Developing and Transitional Countries*, Chichester: John Wiley and Sons.

BOYCO, W. M. (2010). Political Opportunity and Public Participation: ELA in Northern Canada and South Africa. Master Thesis, University of Guelph.

BURTON, P. (2004). Power to the People? How to Judge Public Participation. *Local Economy*, 19(3), pp. 193–198.

CAJIAO JIMÉNEZ, M.V. (2003). Los espacios de participación ciudadana en los procesos de evaluación de impacto ambiental. El caso de Costa Rica. Master Thesis, Universidad Popular de Nicaragua.

CARLEY, M. & CHRISTIE, I. (2000). *Managing Sustainable Development*. 2nd edition, London: Earthscan.

CASHMORE ET AL. (2004). The interminable issue of effectiveness: substantive purposes, outcomes and research challenges in the advancement of environmental impact assessment theory. *Impact Assessment and Project Appraisal*, 22(4), pp. 295–319.

CLARKE, B. & HARVEY, N. (2008). Formal vs informal participatory EIA methods: a South Australian Case Study. Conference paper. Available at: http://www.iaia.org/iaia08perth/pdfs/concurrentsessions/CS2-3 community Clarke.pdf

CHAVEZ B., & BERNAL, A. (2008). Planning hydroelectric power plants with the public: a case of organizational and social learning in Mexico. *Impact Assessment and Project Appraisal*, 26(3), pp. 163–76.

CHERP, A. (2001). EA legislation and practice in Central and Eastern Europe and the former USSR A comparative analysis. *Environmental Impact Assessment Review*, 21, pp. 335–361.

CONNELLY, S. & RICHARDSON, T. (2005). Value-driven SEA: time for an environmental justice perspective? *Environmental Impact Assessment Review*, 25, pp. 391–409.

DAREMBLUM, J. (2009): *Democracy is under attack in Nicaragua*, The American, Febraury 3, 2009. Retrieved from: http://www.american.com

DASENBROCK, J. (2002): *The Pros and Cons of Ecotourism in Costa Rica*. TED Case Studies Number 648, January, 2002. Available at: http://www1.american.edu

DEL FURIA, L. & WALLACE-JONES, J. (2000). The effectiveness of provisions and quality of practices concerning public participation in EIA in Italy. *Environmental Impact Assessment Review*, 20, pp. 457–79.

DELLI PRISCOLI, J. (1988). Alternative conflict management techniques in land-use decisions: Sanibel Island case study. In: B.C. Dsart III & M. Clawson (eds.): *Managing Public Lands in the Public Interest*, New York: Praeger.

DENSCOMBE, M. (1998). The good research guide for small-scale social research projects. Berkshire: Open University Press.

DEVLIN, J.F. & YAP, N.T. (2008). Contentious politics in environmental assessment: Blocked projects and winning coalitions. *Impact Assessment and Project Appraisal*, 26(1), 17–27.

DIETZ, T. & STERN, P.C. (2008). Public Participation in Environmental Impact Assessment and Decision Making. Washington D.C.: The National Academies Press.

DOELLE, M. & SINCLAIR, J. (2006). Time for a new approach to public participation in EA: promoting cooperation and consensus for sustainability. *Environmental Impact Assessment Review*, 26, pp. 185–205.

DRYZEK, J.S. (1996). Strategies, of Ecological Democratization. In: W.M. Lafferty & J. Meadowcroft (eds.): *Democracy and the Environment. Problems and Prospects*, Edward Elgar.

DUBBINK, W. (2003). Assisting the Invisible Hand. Contested Relations Between Market, State and Civil Society. *Issues in Business Ethics*, 18, Dordrecht: Kluwer Academic Publishers.

DULUDE, J. (2000). Trouble in Paradise: Critics say lack of Protection Endangers Costa Rica's Famed Nature Preserves. The San Francisco Chronicle, December 28, 2000. Retrieved from: http://articles.sfgate.com

EARTH CHARTER COMMISSION (2002). *Earth Charter: values and principles for a sustainable future.* Retrieved from: www.earthcharter.nl

ECKERSLEY, R. (1995). 'The Limits of the Liberal Democratic State' and 'From Liberal to Ecological Democracy. In: R. Eckersley (eds.): *The Green State. Rethinking Democracy and Sovereignty*, MIT Press.

ECOSOC (2011). Permanent Forum on Indigenous Issues, Tenth Session 8th Meeting (AM), May 2, 2011. Retrieved from: http://www.un.org/News/Press/docs/2011/hr5058.doc.htm (last accessed: 27.11.2011).

ELLING, B. (2008). Rationality and the Environment. Decision-making in Environmental Politics and Assessment. London and Washington DC: Earthscan.

FIORINO, D. J. (1996). Environmental policy and the participation gap. In: W. M. Lafferty & J. Meadowcroft (eds.): *Democracy and the Environment, Problems and Prospects*. Cheltenham and Brookfield: Edward Elgar.

FISCHER, T.B. (2009). On the role(s) of (strategic) environmental assessment in 'greening' decision making. Copernicus Lecture: Utrecht University.

FISCHER, T.B. (2003). Strategic environmental assessment in post-modern times. *Environmental Impact Assessment Review*, 23, pp. 155-170.

FISCHER, T.B. (2005). Rationality and SEA. Effective tiering – useful concept or useless chimera? IAIA conference Paper. Available at: http://www.iaia.org/Fischer.pdf

FISCHER, T.B. & GAZZOLA, P. (2006). SEA effectiveness criteria – equally valid in all countries? The case of Italy. *Environmental Impact Assessment Review*, 26, pp. 396–409.

FUENTES RAMÍREZ, I.R. & BLANDÓN GARCÍA, A.L. (2011). Análisis de la Eficacia Jurídica de la Consulta Pública en el Sistema de Evaluación Ambiental en Nicaragua como Mecanismo de Participación Ciudadana. Master Thesis, Universidad Católica Redemptoris Mater, Facultad de Ciencias Jurídicas y Sociales.

GAGNON, C. (1995). Social impact assessment in Quebec: issues and perspectives for sustainable community development. *Impact Assessessment*, 13, pp. 273–88.

GERRING, J. (2004). What is a case study and what is it good for? *American Political Science Review*, 98(2), pp. 341–354.

GLASSON, J., THERIVEL, R. & CHADWICK, A. (1999). *Introduction to Environmental Impact Assessment*. London, UCL Press, 2nd Edition.

HARTLEY, N. & WOOD, C. (2005). Public participation in environmental impact assessment—implementing the Aarhus Convention. *Environmental Impact Assessment Review*, 25, pp. 319–340.

HILLEBRAND, B., KOK, R.A. & BIEMANSET, W.G. (2001). Theory-Testing Using Case Studies. A Comment on Johnston, Leach, and Liu. *Industrial Marketing Management*, 30, pp. 651–657.

HOVE, S. VAN DEN (2007). A rationale for science-policy interfaces. Futures, 39, pp. 807–826.

HUGHES, R. (1998). Environmental Impact Assessment and Stakeholder Involvement. *Environmental Planning Issues*, 11, no page numbers. Available at: http://pubs.iied.org/pdfs/7789IIED.pdf

IAIA (2006). *Public participation. International Best Practice Principles. Special Publication* Series No. 4. Available at: http://www.iaia.org/publicdocuments/special-publications/SP4%20web.pdf

IAIA (1999). Principles of Environmental Impact Assessment Best Practice. Online publication. Available at: http://www.iaia.org/publicdocuments/specialpublications/Principles%20of%20IA web.pdf

JESSE, K.D. (2008). Een Hernieuwd Perspectief op Milieueffektrapportage. Dissertation, Tilburg University.

KAJORNBOON BHAMANI, A. (2008). *Using interviews as research instruments*. Language Institute Chulalongkorn University. Available at: http://www.culi.chula.ac.th/e-Journal/bod/Annabel.pdf

KAKONGE, J.O. (1996). Problems with public participation in EIA process: Examples from sub-Saharan Africa. *Impact Assessment*, 14, pp. 309–320.

KIDD, S. & FISCHER, T.B. (2007). Towards sustainability: is integrated appraisal a step in the right direction? *Environmental and Planning C: Government and Policy*, 25, pp. 233–249.

KOLHOFF, A.J., RUNHAAR, H.A. & DRIESSEN, P.P. (2009). The Contribution of capacities and context to EIA system performance and effectiveness in developing countries: towards a better understanding. *Impact Assessment and Project Appraisal*, 27(4), pp. 1–12.

LAWRENCE, D. (2003). Environmental impact assessment: practical solutions to recurrent problems. New Jersey: John Wiley and Sons.

LEE, N. & GEORGE, C. (2000). Environmental Assessment in Developing and Transitional Countries. Chichester: John Wiley and Sons.

LEROY, P. & VAN TATENHOVE, J.P. (2001). Environment and Participation – The Shifting Significance of a Double Concpet. In: P.P. Driessen and P. Glasbergen (eds.): *Greening Society. The Paradigm Shift in Dutch Environmental Politics*, Dordrecht: Kluwer Academic Publishers.

LOON, VAN ET AL. (2010). An analytical framework for capacity development in EIA - The case of Yemen. *Environmental Impact Assessment Review*, 30, pp. 100–107.

MADRIZ, L. (2009): *Paralizarían carretera a Caldera por daños ambientales*. Costa Rica Hoy, Septiembre 2, 2009. Retrieved from: http://costaricahoy.info

MARZUKI, A. (2009). A Review on Public Participation in Environmental Impact Assessment in Malaysia. *Theoretical and Empirical Researches in Urban Management*, 3(12), pp. 126–136.

MATA, E. A. (2010). *Arias adelanta apertura de carretera a Caldera*, La Nación, Enero 17, 2010. Retrieved from: http://www.nacion.com/ln_ee/2010/enero/17/pais2228895.html

MEADOWCROFT, J. (2004). Deliberative Democracy. In: R. F. Durant, D.J. Fiorino and R. O'Leary (eds.): *Environmental Governance Reconsidered: Challenges, Choices, and Opportunities*, MIT Press.

MOMTAZ, S. & GLADSTONE, W. (2008). Ban on commercial fishing in the estuarine waters of New South Wales, Australia: community consultation and social impacts. *Environmental Impact Assessment Review*, 28, pp. 319–42.

MORRIS GRAY, K. (2009). Frenan parcialmente carretera a Caldera. La Prensa Libre, Septiembre 25, 2009. Retrieved from: http://www2.prensalibre.cr/pl/nacional/10151-frenan-parcialmente-carretera-a-caldera.html

MORRISON-SAUNDERS, A. & EARLY, G. (2008). What is necessary to ensure natural justice in environ- mental impact assessment decision-making. *Impact Assessment and Project Appraisal*, 26(1), pp. 29–42.

MORRISON-SAUNDERS, A. & FISCHER, T.B. (2006). What is wrong with EIA and SEA anyway? A sceptic's perspective on sustainability assessment. *Journal of Environmental Assessment Policy and Management*, 8(1), pp. 19–39.

O'FAIRCHEALLAIGH, C. (2010). Public participation and environmental impact assessment: Purposes, implications, and lessons for public policy making. *Environmental Impact Assessment Review*, 30, pp. 19–27.

PALERM, J.R. (2000). An Empirical–Theoretical Analysis Framework for Public Participation in Environmental Impact Assessment. *Journal of Environmental Planning and Management*, 43(5), pp. 581–600.

PETTS, J. (2003). Public participation and Environmental Impact Assessment. In: J. Petts (eds.): Handbook of Environmental Impact Assessment, Volume 1, London: Blackwell Science.

POPE, J., ANNANDALE, D. & MORRISON-SAUNDERS, A. (2004). Conceptualising Sustainability Assessment. *Environmental Impact Assessment Review*, 24, pp. 595–616.

RODRIGUES REZENDE, R. (2009). Navigating the Turbulent Waters of Public Participation in Brazil. A Case Study of the Santo Antônio and Jirau Hydroelectric Dams. Master Thesis, Utrecht University, Faculty of Geosciences.

RUNHAAR, H.A. (2009). Putting SEA in context: A discourse perspective on how SEA contributes to decision-making. *Environmental Impact Assessment Review*, 29, pp. 200–209

RUNHAAR, H.A. & DRIESSEN, P.P. (2007). What makes strategic environmental assessment successful environmental assessment? The role of context in the contribution of SEA to decision-making. *Impact Assessment and Project Appraisal*, 25(1), pp. 2–14.

SADLER, B. (1996). *International Study of the Effectiveness of Environmental Assessment*. Hull, Quebec: Canadian Environmental Assessment Agency.

SCOTT, J. & NGORAN, J.M. (2003). Public Participation in Environmental Impact Assessment (EIA). With case studies from: England, Denmark and New Zealand. Master Thesis, Roskilde Universitets Center, Department of Environment, Technology and Social Studies.

SHAND, D & ARNBERG, M. (1996). Background paper. In: OECD (eds.): Responsive government: service quality initiatives, Paris: OECD.

SHEPHERD, A. & BOWLER, C. (1997). Beyond the Requirements: Improving Public Participation in EIA. *Journal of Environmental Planning and Management*, 40(6), pp. 725–738.

SINCLAIR, A.J., DIDUCK, A. & FITZPATRICK, P. (2006). Conceptualizing learning for sustainability through environmental assessment: critical reflections on 15 years of research. *Environmental Impact Assessment Review*, 28, pp. 415–428.

SNEDDON, C., HOWARTH, R.B. & NORGAARD, R.B. (2005). Sustainable development in a post-Brundtland world. *Ecological Economics*, 57, pp. 253–268.

STEWART, J, & SINCLAIR, A. (2007). Meaningful public participation in environmental assessment: perspectives from Canadian participants, proponents and government. *Journal of Environmental Assessment Policy and Management*, 9(2), pp. 161–83.

SUSSKIND, L. & CRUIKSHANK, J. (1987). Breaking the Impasse: Consensual Approaches to Resolving Public Disputes, New York: Basic Books.

THOMAS, J. (1995). Public involvement in public management: adapting and testing a borrowed theory. *Public Administration Review*, 50(4), pp. 435–45.

UN (1992). Rio Declaration on Environment and Development. Rio de Janeiro, Brazil, 3 to 14 June 1992. Available at:

http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163

UNDP (2011). *Poverty Reduction: Gender and Poverty*. Retrieved from: http://www.undp.org/poverty/focus gender and poverty.shtml

UNECE (1998). Convention on Access to Information, Public participation in Decision-making and Access to Justice in Environmental Matters. Aarhus, Denmark, June 25 1998. Available at: http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf

UNEP (2004). Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach. Available at: http://www.unep.ch/etu/publications/textONUbr.pdf

VANCLAY, F. (2003). International principles for social impact assessment. *Impact Assessment and Project Appraisal*, 21(1), pp. 5–11.

VERSCHUREN, P. & DOOREWAARD, H. (1999). Designing a Research Project. LEMMA: Utrecht, The Netherlands.

VISSEREN-HAMAKERS, I.J. & GLASBERGEN, P. (2007). Partnerships in forest governance, *Global Environmental Change*, 17, pp. 408–419.

WALCOTT, K. (2011). Aumentan las denuncias ambientales ante el Tribunal Ambiental Administrativo. Enero 17, 2011. Retrieved from: http://walcottconsultora.blogspot.com/2011/01/aumentan-las-denuncias-ambientales-ante.html

WCSD (1987). Our Common Future. Chapter: from one earth to one world. Oxford University Press.

WEBLER, T., KASTENHOLZ, H. & RENN, O. (1995). Public Participation in Impact Assessment: A Social Learning Perspective. *Environmental Impact Assessment Review*, 15, 443–463.

WOOD, C. (2003). Environmental Impact Assessment in Developing Countries: an Overview. EIA Centre, School of Planning and Landscape, University of Manchester.

WORLD BANK (2004). *Nicaragua Poverty Assessment*. Managua, June 2, 2004. Available at: http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/0, contentMDK: 20405857~pagePK:146736~piPK:146830~theSitePK:258554,00.html

WORLD BANK (1999). Environmental Assessment. Operational Policy, Bank Procedure and Good Practice 4.01, Washington, DC: World Bank.

Internet sources

CIA – The World Factbook: https://www.cia.gov/library/publications/the-world-factbook/ (last accessed: 26.12.2011).

Environmental Performance Index (EPI): http://epi.yale.edu/ (last accessed: 12.11.2011).

Index Mundi: http://www.indexmundi.com (last accessed: 12.11.2011).

Latinobarómetro: http://www.latinobarometro.org/latino/latinobarometro.jsp (last accessed: 10.10.2011).

Learning for Sustainability (LfS): http://learningforsustainability.net (last accessed 11.08.2011).

United Nations Statistics Division: http://unstats.un.org (last accessed: 27.11.2011).

Rural Poverty Portal: http://www.ruralpovertyportal.org (last accessed: 9.10.2011).

US Bureau of Public Affairs: http://www.state.gov (last accessed: 12.09.2011).

Appendix A

Interview Questions

As mentioned in chapter 1, the interviews conducted in Costa Rica and Nicaragua were semi-structured, i.e. they did not follow a strict order of questions. Nevertheless, a list of key questions has been compiled at the beginning of the fieldwork, to provide guidance during interviews. Depending on insights derived from previous interviews, new questions have been added and existing ones adapted.⁷⁰ The list below provides an overview of the key questions addressed during interviews with EIA actors in Costa Rica and Nicaragua.

Introduction:

Prior to the interviews, interviewees were provided with a short description of the research project and their desired contribution to it via e-mail. At the beginning of each conversation, interviewees were given a more detailed introduction to the research topic and were informed about the researcher's expectations regarding the interview.

General questions:

- 1. How much time do you have for the interview?
- 2. May I record the interview?⁷¹
- 3. What is your current occupation (exact work title; name of organisation/institution)?
- 4. What kind of (work) experience do you have with EIA?
- 5. What kind of (work) experience do you have with public participation in EIA?
- 6. How long have you been involved with EIA?

Questions on the research topic:

- 1. What kinds of mechanisms for public participation in EIA are being applied in Costa Rica/Nicaragua?
- 2. How are these mechanisms being applied?
- 3. Who is allowed to participate in EIA and who is *de facto* participating?
- 4. In your opinion, what is the objective/are the objectives of public participation in EIA?
- 5. Could you substantiate your point of view?
- 6. In your opinion, to what extent is this objective/are these objectives being fulfilled in Costa Rica/Nicaragua?
- 7. According to your personal experience, what factors have contributed to/obstructed the effectiveness of public participation in achieving its objective(s)?
- 8. Could you give specific examples?
- 9. Do you have any other comments to add, information or insights relevant for this research project?

The mechanisms for and scope of public participation are determined in EIA laws and regulations. However, as mentioned, in Costa Rica and Nicaragua EIA legislation lays out the procedure for public participation in broad terms only. Therefore, EIA actors

⁷⁰ All interviews were held in Spanish.

⁷¹ Interviewees were reassured that their answers will be treated with confidentiality and, if requested, with anonymity.

who had sufficient knowledge about legal provisions for public participation in EIA as well as their implementation were asked questions 1-3 listed above.

Appendix B

Figure 4 illustrates the different stages of an EIA process. The content and extent of these stages may vary between different countries and in some cases there are no legal requirments for each stage. However, according to Petts (2003), the nine stages illustrated in Figure 4 are typical elements of an EIA process.

Figure 4: The different stages of an EIA process

- · Project design and site selection
- · Screening
- Scoping
- · Baseline survey
- · Impact prediction and evaluation
- · Reporting
- Review
- Decision
- Monitoring

Source: adapted from Petts (2003).