

Dissertationes Forestales 91

Facilitating resolution of forest conflicts through
understanding the complexity of the relationship between
forest industry and environmental groups

David Gritten

Faculty of Forest Sciences
University of Joensuu

Academic dissertation

To be presented, with the permission of the Faculty of Forest Sciences of the University of Joensuu, for public criticism in auditorium Borealis 100 of the University of Joensuu, Yliopistokatu 7, Joensuu on 30 May 2009, at 12 noon.

Title of dissertation: Facilitating resolution of forest conflicts through understanding the complexity of the relationship between forest industry and environmental groups

Author: David Gritten

Dissertationes Forestales 91

Thesis supervisors:

Prof. Olli Saastamoinen

Faculty of Forest Sciences, University of Joensuu, Finland.

Prof. Seppo Sajama

Department of Law, University of Joensuu, Finland.

Pre-examiners:

Dr. Martti Varmola

Finnish Forest Research Institute, Rovaniemi Research Unit, Finland.

Dr. Romain Pirard

Institut du Développement Durable et des Relations Internationales, Paris, France.

Opponent:

Dr. Eeva Hellström

Sitra, the Finnish Innovation Fund, Helsinki, Finland.

ISSN 1795-7389

ISBN 978-951-651-271-9 (PDF)

(2009)

Publishers:

The Finnish Society of Forest Science

Finnish Forest Research Institute

Faculty of Agriculture and Forestry of the University of Helsinki

Faculty of Forest Sciences of the University of Joensuu

Editorial Office:

The Finnish Society of Forest Science

P.O. Box 18, FI-10301 Vantaa, Finland

<http://www.metla.fi/dissertationes>

Gritten, D. 2009. Facilitating resolution of forest conflicts through understanding the complexity of the relationship between forest industry and environmental groups. *Dissertationes Forestales* 91. 79 p.
Available at: <http://www.metla.fi/dissertationes/df91.htm>

ABSTRACT

Conflict over the utilisation of forest resources is ubiquitous, often as a result of clashing interests and values regarding their use. Though there are positive dimensions to these conflicts, they often result in the inefficient use of the resource on which many livelihoods and societies rely. Therefore, management of these conflicts is vital. A prominent feature of these conflicts are the roles played by environmental non-government organisations (ENGOS) campaigning against the operating practices of forestry industry.

The main objective of this research is to analyse the various dimensions of conflicts between ENGOS and forestry related industries, culminating in the creation of a tool to facilitate resolution. The study achieves this through examining the impact of ENGO campaigns against the operating practices of Asia Pacific Resources International Holdings Ltd (APRIL), a pulp and paper company in Indonesia (paper I), and the roles of legitimacy in this arena (paper II). It also examines the motivations of ENGOS, with regards to campaigns against corporations (paper III). The final paper presents a tool for facilitating resolution of complex forest conflicts (paper IV) of which relationship between ENGOS and forest industry is a key part.

The research was conducted in two stages, the first stage involved interviewing and questioning various stakeholders regarding the campaigns against APRIL in order to determine their impact as well as examine the roles of legitimacy. The second stage primarily involved over 40 ENGOS completing a questionnaire to determine how they define a successful campaign, in addition this stage also involved questioning various ENGO campaign leaders related to the APRIL campaigns, and interviewing leaders of ENGO campaigning against the Finnish Forest and Park Service, a State owned enterprise, related to its operation in Upper Lapland, Finland.

The interviews and questionnaires, as well as analysis of published and unpublished documents from the various organisations showed that there is a high level of complexity in conflict between the ENGOS and APRIL, as well as in the Upper Lapland conflict, based on the differing perspectives of the situation which has foundations in the interests and values of the different parties. This complexity makes resolution of the conflict very difficult, leading to the creation of a tool, ethical analysis, which may facilitate the resolution of conflicts of these types.

The findings of this research have theoretical and practical implications not least the ethical analysis tool for helping to resolve conflict, but also the need, for example, of ENGOS to take measures to protect their legitimacy.

Keywords: Corporate responsibility, ENGOS, environmental conflict, forest industry, Indonesia, legitimacy theory, social movement theory, stakeholder theory, Upper Lapland.

ACKNOWLEDGEMENTS

Various people have made significant professional and personal contributions to my PhD. I would like to express my heartfelt thanks to all of you for the parts you have played in helping me finish this marathon.

I would like to firstly thank my supervisors Prof. Olli Saastamoinen for his commitment, guidance and support throughout my research, as well as to Prof. Seppo Sajama for his ability to open my eyes to the world of philosophy. Additionally, I would also like to express my warmest gratitude to Prof. Paavo Pelkonen who has inspired so many through their research and study life; I count myself as one of those lucky ones. Without them none of this research would have been possible, let alone be such a rewarding experience.

I have received extensive advice in different phases of the work from various people. I would like to thank Dr. Blas Mola, Dr. José Ramón González, Dr. Jordi Garcia-Gonzalo, Dr. Ane Zubizarreta, Prof. Timo Pukkala, Dr. Jakob Donner-Amnell, Dr. Mirja Mikkilä, Dr. Celeste Lacuna-Richman, Prof. Reijo E. Heinonen, Dr. Antti Erkkilä and especially to Prof. Promode Kant and Dr. Heikki Hassi. I am very grateful to those who took part in the research, as well as the reviewers of the papers. Additionally, I am extremely grateful to Ville Hallikainen, Timo Helle, and Mikko Hyppönen at the Finnish Forest Research Institute, Rovaniemi Unit and Jarmo Valkonen of the University of Lapland for their input to the ethical analysis paper. Also I wish to convey my deepest gratitude to Dr. Romain Pirard and Dr. Martti Varmola for their invaluable comments and suggestions that have greatly improved this thesis.

The work has received funding from the Finnish Cultural Foundation (Suomen Kulttuurirahasto), as well as the Faculty of Forest Sciences, University of Joensuu. I feel very lucky, as well as honoured for this support.

Special thanks to my parents, sister and grandparents for their tireless support of their eternal student. I would also like to thank my friends here in Joensuu for their encouragement and who have often shown an incredible patience with my antics, as well as making so much of my time during my PhD full of so many memorable moments. Saving the best for last, Mireia, there are countless reasons why I feel so lucky and grateful to have you.

Joensuu, May 2009

David Gritten

LIST OF ORIGINAL ARTICLES

This thesis is based on the following papers, which are referred to in the text by their Roman numerals, I-IV.

- I Gritten, D., Kant. P. 2007. Assessing the impact of environmental campaigns against the activities of a pulp and paper company in Indonesia. *International Forestry Review*. 30(4). doi: 10.1505/ifor.9.4.819
- II Gritten, D., Saastamoinen, O. 2009. The Roles of Legitimacy in Environmental Conflict: an Indonesian Case Study. *Society & Natural Resources*. In Press
- III Gritten, D. Environmental campaigns against corporations: What are the campaigns trying to achieve? Submitted manuscript.
- IV Gritten, D., Saastamoinen, O., Sajama, S. The role of ethical analysis in the resolution of complex forest conflicts: a structural approach to dealing with intractability. Submitted manuscript.

David Gritten had the main responsibility in regard to the entire work done for the papers in the PhD. The co-authors of the papers commented on the relevant manuscripts. Additionally the ethical analysis (paper IV) was developed through conversations with the co-authors as well as with Ville Hallikainen, Timo Helle, and Mikko Hyppönen at the Finnish Forest Research Institute, Rovaniemi Unit and Jarmo Valkonen at the University of Lapland.

TABLE OF CONTENTS

ABSTRACT.....	3
ACKNOWLEDGEMENTS.....	4
LIST OF ORIGINAL ARTICLES	5
TABLE OF CONTENTS.....	6
ACRONYMS AND ABBREVIATIONS	7
1. INTRODUCTION.....	9
1.1 Aims of the study	11
2. THEORETICAL AND CONCEPTUAL BACKGROUND	12
2.1 Stakeholder theory	12
2.2 Legitimacy theory	13
2.3 Social movement theory.....	14
2.4 Environmental conflict with special focus on relationship between forestry companies and ENGOs	15
3. BACKGROUND FOR PAPERS.....	20
3.1 Impact of ENGO campaigns Paper I.....	20
3.2 Legitimacy in environmental conflict Paper II.....	20
3.3 Successful ENGO campaigns Paper III.....	21
3.4 Ethical analysis (EA) Paper IV	21
3.5 Background of the two example conflicts	23
4. MATERIAL AND METHODS.....	27
4.1 Thesis framework.....	27
4.2 Papers I and II	28
4.3 Paper III	31
4.4 Paper IV	33
5. SYNTHESIS OF RESULTS.....	37
5.1 Physical and perceived impacts of campaigns (Paper I)	37
5.2 Roles of legitimacy in environmental conflict (Paper II)	38
5.3 What ENGO campaigns are trying to achieve (Paper III).....	40
5.4 Ethical analysis: a tool for facilitating conflict resolution (Paper IV).....	42
6. DISCUSSION AND CONCLUSIONS	46
6.1 Summary of findings and the theoretical implications.....	46
6.2 Review of material and methods.....	57
6.3 Recommendations	59
REFERENCES.....	64
APPENDIX 1. ENGOS CAMPAIGNING AGAINST APRIL (PAPERS I-IV).....	77
APPENDIX 2. ENGOS CAMPAIGNING AGAINST THE FINNISH FOREST AND PARK SERVICE (PAPERS I-IV).....	79

ACRONYMS AND ABBREVIATIONS

AHP	Analytical Hierarchy Process
APP	Asia Pulp and Paper
APRIL	Asia Pacific Resources International Holdings Ltd
CBD	Convention on Biological Diversity
CIFOR	Centre for International Forest Research
CR	Corporate Responsibility
CSR	Corporate Social Responsibility
DTE	Down to Earth
EA	Ethical Analysis
ENGO	Environmental Non-Governmental Organisations
FANC	Finnish Association for Nature Conservation
FLEGT	Forest Law Enforcement, Governance and Trade
FoE	Friends of the Earth
FoE EWNl	Friends of the Earth England, Wales and Northern Ireland
FSC	Forest Stewardship Council
FWI	Forest Watch International
GATT	General Agreement on Tariffs and Trade
GM	Genetically Modified
HCVF	High Conservation Value Forest
IP	International Paper
LEI	Lembaga Ekolabel Indonesia (Indonesia Ecolabelling Institute)
METLA	Finnish Forest Research Institute
Metsähallitus	Finnish Forest and Park Service
NGO	Non-Governmental Organisations
PEFC	Programme for the Endorsement of Forest Certification
RAN	Rainforest Action Network
RAPP	Riau Andalan Pulp and Paper
RHC	Reindeer Herding Cooperative
RVS	Rokeach Value Survey
SGS	Société Générale de Surveillance
SVS	Schwartz Value Survey
TN	Tesso Nilo
TNC	The Nature Conservancy
TNCs	Transnational Corporation
UL	Upper Lapland
UNHRC	United Nations Human Rights Committee
UPM	UPM-Kymmene
WRM	World Rainforest Movement
WSSD	World Summit on Sustainable Development
WWF	World Wide Fund for Nature

1. INTRODUCTION

In recent times forestry and forest industry throughout the world have been under increased scrutiny regarding their operating practices (Sonnenfeld 2002, Dauvergne 2005, Sharma and Henriques 2005), for example, Asia Pulp and Paper (APP) in China and Indonesia, Stora Enso also in China and Indonesia, MacMillan Bloedel in Clayoquot Sound, Canada and MetsäBotnia and Ence in Uruguay. Despite the industry's resource being renewable, and therefore being able to meet the central criterion of sustainability (Sharma and Henriques 2005), it has been dogged by accusations of unsustainable practices. These accusations are levelled not only at the activities of the industry in developing nations but throughout the world. There are several reasons for the increased scrutiny including:

1. Forests cover large geographical areas, over 30% of the world's land area (FAO 2006).
2. Forests often have many overlapping values and non-complementary end uses (e.g. Hellström 2001, Mikkilä 2006).
3. Global concerns regarding deforestation, biodiversity and land rights (as demonstrated in, for example, Convention on Biological Diversity (CBD), Forest Principles).
4. Previous occurrences of exploitative practices by the industry.
5. Changes to how the public view forests (Bengston 1994).
6. Growth of power of forestry corporations (Humphreys 2006, Mikkilä 2006), the reasons for which include pressure on developing nations from, for example, the Group of Eight Developed Countries (G8) to enable private investment in their forests (Humphreys 2006).
7. Globalisation of the industry has seen increased corporate responsibility in the sector (Panwar et al. 2006), in addition to increased interest in the responsibility of corporations in general (e.g. Zadek 2001, Sethi 2003, Mikkilä 2006).

The scrutiny is reflected in the campaigns by environmental non-governmental organisations (ENGOS), such as Greenpeace and World Wide Fund for Nature (WWF), who are campaigning to get the industry to operate in a more sustainable manner (e.g. Sonnenfeld 1998, 2002, Zietsma and Vertinsky 1999). As a result of the growth in the power of corporations the focus of campaigns has increasingly been on their activities, as opposed to governments (John and Thomson 2003). The ENGOS can have a significant impact on the operations of corporations (and governments) through the campaigns (Deegan 2000, Handy 2001, Sonnenfeld 2002, Barbosa 2003, Spar and Mure 2003). For example, one of the most prominent could arguably be the Brent Spar campaign by Greenpeace in 1995 which not only caused Shell to reverse its plans to dump the Brent Spar oil platform in the sea, and the UK Government to re-evaluate its policy, it also sent shockwaves through the business world (Grolin 1998). Additionally it set a precedent, to varying degrees, regarding the disposal of oil rigs, radioactive waste and all other waste in the sea (Huxham and Sumner 1999).

The original motivation behind the research conducted for this PhD came from three sources: Firstly, the World Summit on Sustainable Development (WSSD) in Johannesburg 2002, where one of the many proposals put forward in one of the satellite meetings included one for the development and application of a forest ethic regarding the

management of the world's forests. One of the ideas was that one of the many problems facing forests throughout the world included the fact that the minorities and their interests / values, in their many forms, were being ignored by those in power (Heinonen et al. 2002). This often led to conflict where those that were suffering, as a result of their interests and values being ignored, attempting, through numerous methods, to get their voices heard. Often their cause finds support from ENGOs, for example, Greenpeace supporting the reindeer herders in Upper Lapland, Finland in their struggle against the Finnish State, in the form of its forestry enterprise the Finnish Forest and Park Service (Metsähallitus in Finnish) (e.g. Kyllönen 2006, Lawrence 2007, Raitio 2008) and various groups (Friends of Clayoquot Sound, Greenpeace Canada, Greenpeace International, the Natural Resources Defense Council, Sierra Club, and Western Canada Wilderness Committee) opposing the operating practices of MacMillan Bloedel in Clayoquot Sound, Canada (e.g. Lertzman and Vredenburg 2005).

The second motivation came from reading the Greenpeace publication "The turning of the 'Spar'" (Rose 1998) and other documents relating to Greenpeace's Brent Spar campaign. Reading the differing material left me with several feelings that inspired my research; firstly, the power of Greenpeace to get both the British Government and Shell to conduct such a visible and apparently embarrassing volte-face over the disposal of the Brent Spar platform. Secondly, the campaign and its aftermath, including allegations of falsehoods by Greenpeace (regarding the amount of toxic substances the 'Spar contained), in addition to accusations by scientists and Shell that the ENGO was acting irrationally (Huxham and Sumner 1999), in combination with the various claims and counter claims that permeated the campaign, made it very difficult to determine the reality of the situation even more than five years after the 'Spar was towed to Norway. Other ENGO campaigns had a similar issue regarding the different realms of reality that seemed to exist dependent on the interests and values of the organisations involved.

The third motivation was the apparent universal approach that ENGOs take with regards to forest industry companies, regardless of their track record. In other words, there appears to be no difference, in terms of campaigns, between companies. When targeted the companies are seemingly criticised in equally strong levels. Is this because, as some feel, that some ENGOs are anti-forest industry? Or is it that this tactic is the optimal way of conducting a successful campaign? If the latter is the case then how can the public differentiate between the companies if they are all being seemingly criticised in the same strong language?

These motivations have led to a desire to find what makes environmental conflicts so complex. In other words, the campaigns by the ENGOs often lead to intense conflicts where it is frequently difficult to determine what the campaigns have achieved and what the reality is amongst the claims and counter claims of the ENGOs and companies, in addition to ascertain what is necessary to resolve the conflicts.

1.1 Aims of the study

The main objective of the research was to focus on the different dimensions to conflicts between ENGOs and forestry related industries using example conflicts set in Indonesia (papers I-III) and Finland (papers III-IV). More specifically, this study has the following research tasks:

1. To analyse the perceptions of some of the parties involved of the impacts and actual results of environmental campaigns against a pulp and paper company in Indonesia (paper I).
2. To investigate the roles of legitimacy in environmental conflict through examining the actions and perceptions of different actors involved in an environmental conflict in Indonesia (paper II).
3. To determine whether ENGOs have a common perception of what deems a campaign against a corporation to be successful (paper III).
4. To create a tool that facilitates the resolution of long standing environmental conflicts (paper IV).

The results of the research will contribute to the work on social movements, specifically ENGOs, legitimacy and stakeholder theories, in addition to applications for facilitating the resolution of environmental conflicts, as well as for the operating practices of ENGOs and forest industry.

2. THEORETICAL AND CONCEPTUAL BACKGROUND

Numerous theories are relevant when studying environmental conflicts with a specific focus on the relationship between corporations and ENGOs. These theories provide an insight into understanding and investigating the different dimensions of this subject.

2.1 Stakeholder theory

Stakeholder theory is highly relevant to the work as it is a key area of environmental conflict, particularly ones where the central players are ENGOs and corporations. This is because both groups are fighting for stakeholder support. There are numerous, sometimes contradictory, definitions of stakeholders; for example Friedman and Miles (2006) provide 55 definitions for the concept. They believe one of the most popular and pre-eminent definitions is by Freeman (1984: 46) that stakeholders are defined as “any group or individual who can affect or is affected the achievement of the organisation’s objectives.” However, this definition may be viewed as being too general for determining who the stakeholders are.

Phillips (2003) puts forward the concept of normative (stakeholders to whom the organisation has a moral obligation) and derivative (groups whose actions and claims must be taken into account for their potential impacts on the organisation) stakeholders. In other words a company is morally legitimate when it has the support of employees, financiers, customers, suppliers and communities (normative stakeholders), whilst it makes sense, from a business efficiency point of view, to also consider ENGOs, media and competitors (derivative stakeholders). His definition reflects that corporations have to prioritise certain stakeholders in their decision making. This definition is particularly pertinent when examining the roles of legitimacy in environmental conflict (paper II).

The theory of stakeholder salience (Mitchell et al. 1997) provides a framework for determining the prominence of the stakeholders which is particularly relevant in this research. They categorise stakeholders according to their salience based on their legitimacy, power and urgency which will be reflected in the priority that the corporation places on each of these stakeholders. Mitchell et al. (1997) define legitimacy, using Suchman’s (1995: 574) definition, as “a generalised perception or assumption that the actions of an entity are desirable or appropriate within some socially constructed system of norms, values, beliefs and definitions”. While they define power, in this case, as being when a party in the relationship with the corporation has power, in that it can gain access to impose its will on the organisation. Finally they define urgency, using the Merriam-Webster dictionary, as “calling for immediate attention” or “pressing”. Mitchell et al. (1997) go on to create seven categories of stakeholders (and a non-stakeholder category) (Figure 1). The stakeholder’s position in this model is not fixed, in other words changing circumstances dictate changes in the power, legitimacy and urgency of their claim. This definition is particularly valid when examining the impact of ENGO campaigns (papers I-II) as well as for determining the actors in a conflict (paper IV).

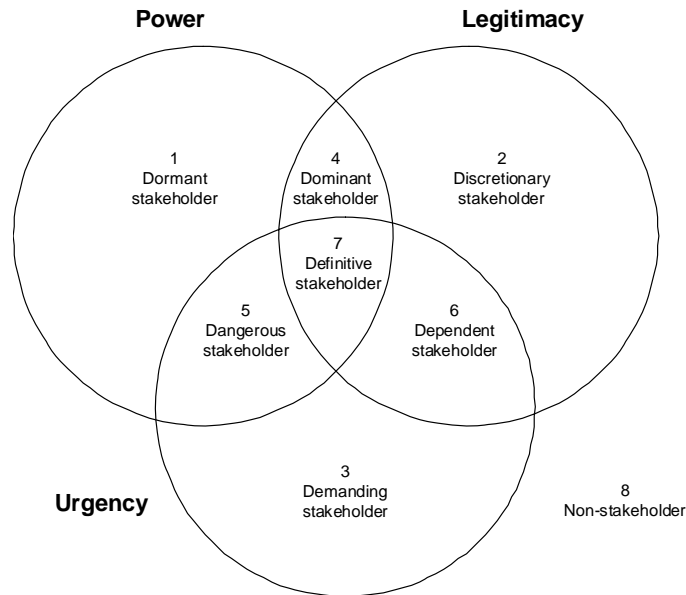


Figure 1. Stakeholder salience (Mitchell et al. 1997: 874) based on the presence of three attributes (power, legitimacy and urgency). Low salience (1-3), moderately salient classes (4-6), highly salient stakeholder (7) and non-salient stakeholder (8).

2.2 Legitimacy theory

Stakeholder and legitimacy theory are closely linked regarding the external focus corporations have in relation to society. According to organisational legitimacy companies exist on the proviso that they must operate in line with society's values and norms (e.g. Parsons 1960, Suchman 1995). Dowling and Pfeffer (1975) use this to explain why organisations make changes in relation to their environment, in order to attain legitimacy or remain legitimate.

When a corporation's legitimacy is questioned it may adopt different strategies to defend its position (Dowling and Pfeffer 1975, Linblom 1994):

1. Change its operating practices to meet the expectations of society, and inform society of these changes.
2. Not change its operations, but, through education and information, demonstrate the appropriateness of its operations.
3. Attempt to change the perceptions of society through association with highly legitimate symbols and try to change society's expectations of its performance.

A great deal of importance in each of these is placed on how the organisation portrays itself to society, emphasising the role of corporate reporting.

Suchman (1995) puts forward three types of legitimacy conferred by stakeholders: 1) Pragmatic legitimacy; where legitimacy is given by key stakeholders motivated by self-interest. 2) Cognitive legitimacy; affirmative support or acceptance by the stakeholders. 3)

Moral legitimacy, the organisation gains legitimacy from the stakeholders if they deem its actions to be the right things to do. In other words organisations are judged on their legitimacy based on these elements.

Keeping in mind the types and strategies involved in legitimacy it is clear the role that organisational legitimacy has, in conjunction with stakeholder theory, as a theoretical basis for the present work, especially in relation to paper II (see Figure 4).

2.3 Social movement theory

Social movement theory examines the collective action taken by outsiders to challenge the dominant societal institutions (e.g. corporations and the state) and how this facilitates change. According to McAdam (1982: 25) social movements make “organised efforts, on the part of excluded groups, to promote or resist changes in the structure of society that involve recourse to non-institutional forms of political participation.” In other words groups that do not have access to formal policy making avenues have to adopt alternative methods, often in the form of protest, to attain their goals, hence the role of ENGOs. The protest can be in numerous forms (e.g. boycotts, rallies) with the aim to get the target to adopt the group’s recommendations. ENGOs fall within the social movement grouping; campaigning on issues on behalf of the voiceless, whether it is endangered species or indigenous peoples. There have, however, been different stages, relevant to the work presented here, in how social movements have been viewed by academia.

In the early to mid-twentieth century, social movements were seen to represent a form of collective behaviour that emerged when there was a significant social and cultural breakdown. As the movement occurs in a highly charged environment, characterised by mass enthusiasm and hysteria, it could be categorised as being unorganised and unstructured. Collective behaviour theory supposed a direct relation between emotions (mass enthusiasm and hysteria) and non-rationality (Morris 2000). This belief in the lack of structure in social movements weakened as the century went on, to be replaced by resource mobilisation theory (e.g. Cress and Snow 1990) and political process theory (e.g. Tarrow 1994, McAdam et al. 1996).

The political process model puts forward the notion that certain political situations facilitate social movement activity. In other words social changes that weaken the established political order make them more conducive to challenges (McAdam et al. 1996). A key component of this is that the movement needs to be organised in a way to take advantage of these situations (Tarrow 1994).

If the political opportunities exist they cannot be used if resources are lacking to take advantage (McAdam et al. 1996). According to resource mobilisation theory, which is the dominant viewpoint regarding social movements, social movements fluctuate as level of resources change (Swaminathan and Wade 2001). These resources are, according to Cress and Snow (1990):

1. People (volunteers, staff, leaders)
2. Expertise (activist experience, understanding of the issues)
3. Financial and information resources (support for goals of the movement)
4. Legitimacy.

Social movement theory, in the form of resource mobilisation theory as well as political process model, is particularly relevant to paper III.

2.4 Environmental conflict with special focus on relationship between forestry companies and ENGOs

Conflict is inevitable in natural resource management (e.g. Daniels and Walker 1997, Hildyard et al. 1997), for example as a result of conflicting uses and / or interests. These conflicts have a long and varied history (e.g. Sidaway 1997, Buckles and Rusnack 1999, Hellström 2001), though the level, actors and intensity of the conflicts vary significantly (Buckles and Rusnack 1999, Hellström 2001). For instance, conflicts regarding forest management may be based on conflicting land uses and land ownership, for example the conflict in Upper Lapland, Finland (papers III-IV), while the conflicts regarding the operations of the pulp and paper industry in Sumatra, Indonesia not only involve such issues as human rights and conflicting land uses, but also various others including deforestation and threats to biodiversity (papers I-III). Often the central players in environmental conflicts are companies on one side and ENGOs on the other.

It should be noted that though, as Buckles and Rusnak (1999: 3) point out, the results of conflict over resources “often lead to chaotic and wasteful deployment of human capacities and the depletion of the very natural resources on which livelihoods, economies, and societies are based”, its importance as a catalyst for positive social change should be acknowledged. For example, playing a vital role in creating pressure for forest policy and management revisions (Krott 2005), as a result there has been a large amount of work done in this area (Hellström 2001).

Though each conflict is unique in intensity, protagonists involved, geographical scale and so on (Buckles and Rusnack 1999, Hellström 2001), there are many common issues, such as their complexity (Walker and Daniels 1997, Kearney et al. 1999, Wittmer et al. 2006) and intractability (Putnam and Wondolleck 2003). The complexity, according to Wittmer et al. (2006), is based on the intricacy of both the ecological systems (with a high level of uncertainty and ignorance regarding these systems) as well as society (with differing claims, including those of future generations and outsiders). The intractability is often centred on the fact that these conflicts are based on identity and values, rather than interests (Rowley and Moldoveau 2003). Despite the unique nature of each conflict there have been numerous attempts to define the types of conflicts (Table 1). It is of value to briefly illustrate a few of the definitions of the types of environmental conflicts as they are useful when examining the various aspects of environmental conflicts including the roles of legitimacy (paper II), and complexity (papers I-IV).

Table 1. Definitions of types of environmental conflicts (chronological).

Date	Author	Conflict type
1979	Wehr	<ol style="list-style-type: none"> 1. Fact based (disagreement over what are the facts of an issue) 2. Values based: disagreement over what should be the determinants of a policy decision, a relationship, or some other issue in conflict. 3. Interest-based: disagreement over who will get what in distribution of scarce resources, whether tangible or intangible (e.g. land, economic benefits, rights, privileges, control and respect) 4. Jurisdiction based: disagreement over who has authority or jurisdiction concerning the problems and issues of the conflict. 5. Person based: disagreement pertaining to personal factors. 6. History based: disagreement related to the history of the issue(s), the conflict and the conflict relationship as perceived by the parties of the conflict.
1989	Dietz et al.	<p>Definitions of conflict are based on the values and interests of the organisations with which they work:</p> <ol style="list-style-type: none"> 1. Differential knowledge – that there is an imbalance of knowledge when it comes to situations. 2. Vested interests – risks and benefits are not equally distributed throughout society. 3. Value differences – decisions are often based on value systems naturally leading to conflict. 4. Mistrust of expert knowledge – is related to definitions based on values and interests, emphasising the effects of these on knowledge. Conflict occurs as people realise that expert knowledge cannot be trusted as it is based on interests.
1996	Chandra-sekharan	<p>According to the actors involved and the value associated with the conflict and the resources.</p> <ol style="list-style-type: none"> 1. conflicts over access 2. conflicts due to change in resource quality and availability 3. conflicts regarding authority over resource 4. conflicts that are value based 5. conflicts associated with information processing and availability 6. conflicts occurring for legal / policy reasons.
1996	Floyd et al.	<ol style="list-style-type: none"> 1. (Class A) conflicts over non-renewable resources (geo-commodity e.g. non renewable mineral resource) 2. (Class B) over renewable resources (bio-commodity e.g. timber or livestock forage) 3. (Class C) over amenity use (e.g. outdoor recreation) 4. (Class D) amenity preservation (maintenance of biodiversity). <p>Intensity is determined by what is competing: AD conflict is harder to resolve than a AA conflict, additionally a conflict can be various types: e.g. AD and AC.</p>
2001	Hellström (adapted from Walker and Daniels 1997)	<ol style="list-style-type: none"> 1. Conflict themes (substantial aspect) <ol style="list-style-type: none"> I. Forest protection II. Forest management (emphasis on utilisation) III. Social impacts of forest protection (e.g. employment, regional economy) IV. Amenity use of forests V. Private ownership rights. 2. Conflict intensity (procedural aspect) <ol style="list-style-type: none"> I. Existence of on-site protests II. Litigation III. Strong campaigning IV. Milder types 3. Conflict actors (relationship aspect) <ol style="list-style-type: none"> I. Forest industry II. Different administrations III. Media IV. Other diverse interests

2001	Jackson	Conflict based on: 1. Conflicting land uses. 2. Conservation. 3. Those excluded from decision making.
2001	Tait	1. Interest based conflicts – Likely to be related to specific developments, and to be location specific. Resolution lies through information provision, compensation or regulation. 2. Values based conflicts – Likely to be much larger in scale (national or international) and to spread in related areas. Very difficult to resolve. Information is thought of as propaganda, compensation is seen as bribery, while negotiation is viewed as betrayal.
2002	Schmidtz	1. Conflict in use. 2. Conflict in values. 3. Conflict in priorities.
2003	Nie	Wicked and tame conflicts: Distinction hinges on whether there is a right or wrong answer. 1. A tame conflict contains broad agreement on what is right and wrong, whilst in a wicked conflict there is no easy way to tell whether (and in what respects) a solution is "right" or "wrong". 2. Wicked conflict there are few fixed points onto which a resolution of the conflict could be built.
2003	Putnam and Wondolleck	Tractable disputes and intractable conflicts: 1. Tractable disputes: disputes can be resolved as (i) it is in all the parties' interests to do so, and (ii) they can do so without compromising their core values. 2. Intractable conflict: long-standing and evading resolution typified by repeated and unsuccessful attempts at resolution. Intractable conflicts – "engage adversaries in vivid and volatile interactions, involve strategic behaviours that are often confusing, frustrate the parties involved and exist in a seemingly irresolvable stalemate" (Putnam and Wondolleck 2003: 36)
2004	Jackson and Pradubraj (adapted from Amy 1987:177)	Models (and sources) of environmental conflict: 1. Misunderstanding model - Agents have similar worldviews. Conflict (dispute) is mainly as a result of misunderstanding, personality clashes etc. 2. Conflicting interest model - Caused by conflicting interests of stakeholders. 3. Basic principles model - Deep rooted conflict. Based on fundamental differences in values, principles and worldviews.

The inclusion of Dietz et al. (1989) in the limited summary of definitions of the types of environmental conflicts (Table 1) may appear misleading in that they are focussing on conflict regarding environmental health and safety issues (i.e. environmental risk). However, its inclusion is validated by the fact that it helps to illustrate the complexity of environmental conflicts through its emphasis on the social construction basis of how conflicts are approached. In other words that participants in a group (or society) created their own interpretation of a situation. Dietz et al. (1989) provide examples of other research to illustrate this. For example, energy can be defined, depending on the group, as a commodity, a social necessity or a resource with ecological repercussions. Each definition legitimises the position of one set of actors (e.g. ENGO), supporting a different course of action and favours different interests.

The tractability of a conflict is based on numerous factors, which are categorised as intensity or wickedness (Figure 2). An intense conflict with high levels of media coverage, ENGO involvement and sometimes violence will likely make the conflict more intractable. It is often the case that each party is attempting to out ‘shout’ the other, while at the same time ignoring what the other is saying, this maybe the case even if the conflict appears tame (conflicting parties having similar world views). This type of intense conflict invariably takes place in the media as each attempt to get their message across and prove its legitimacy, for example, the conflict over the old growth forests and the spotted owl (*Strix occidentalis caurina*) in Northwest USA (Lange 1993). This is applicable to both the environmental conflicts used as examples in the research.

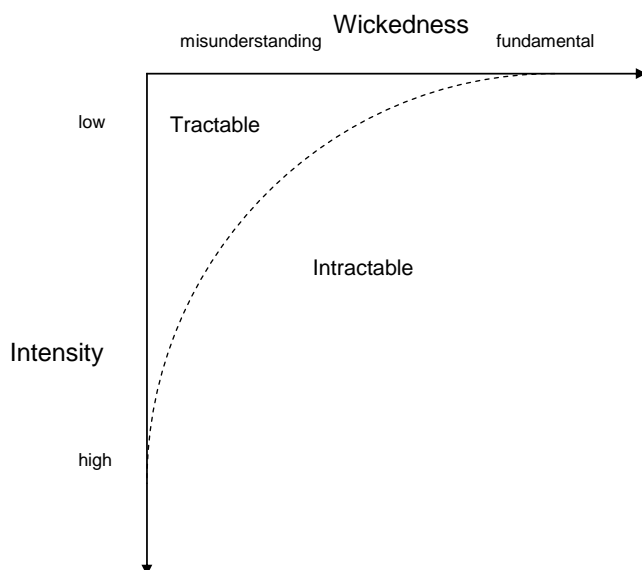


Figure 2. Tractability of environmental conflict. Intensity is based on: levels of violence, media coverage, blockades / on-site protests, ENGO involvement and litigation. Wickedness is based on sources of conflict (Nie 2003, Jackson and Pradubraj 2004) starting from misunderstanding (agents have similar worldviews and broad agreement on what is right and wrong) which is defined as tame, to conflicting interests of stakeholders, to a wicked conflict which is based on fundamental differences in values and principles.

Schmidtz (2002: 423) refers to environmental conflict as “conflict in which at least one party is voicing concerns about the environmental impact of the other party’s projects”. Often it is the case that the party with the grievances is unable to get their voice heard or their grievances resolved to their satisfaction; as a result they often turn to ENGOs in order to take their case forward.

One of the main triggers for the growth of the modern environment movement (Murphy and Bendell 1997, Rucht 1999), and increased interest in environmental matters (Handy 2001), was the publication of Rachel Carson’s *Silent Spring* in 1962. The chemical industry, which was the target of Carson’s book, responded with a scathing attack on

environmentalists (Hoffman 1996, Murphy and Bendell 1997). Industries when criticised by ENGOs sometimes respond in this manner. Spar and Mure (2003) believe that companies, when targeted by ENGOs respond in three ways: 1) Capitulation (accepting the demands of the ENGOs, likely if the potential costs of the campaigns outweigh the costs of changing) 2) Resistance (this is more likely when the costs of capitulation outweigh the potential benefits), or 3) Pre-emption (capitulate before targeted by ENGOs, based on the assumption that the costs of being targeted outweigh the costs of changing the operations). Each of these three responses are explored in the papers making up this research, with each having differing impacts on the nature of the conflict, for example, in the strategies and responses of the ENGOs (papers I-III).

The ENGOs take varying positions defending their values and representing various stakeholders (Rootes 2004). These positions may be ones based on confrontation; continuously criticising the target company until they clearly capitulate on the issue, or maybe through working with the target company to get it improve its operations (Murphy and Bendell 1997, Kuhn dt et al. 2004). Often ENGOs work together on the same target (Princen 1994, Keck and Sikkink 1998), not only combining resources by networking or forming alliances, but also employing a kind of carrot-stick approach to get the target corporation to accede to their demands (papers I-III).

3. BACKGROUND FOR PAPERS

3.1 Impact of ENGO campaigns Paper I

ENGOS are not for profit advocacy organisations. Broadly speaking they operate to prevent the over exploitation and / or destruction of the environment, including natural resources as well as being advocates of social justice (Rucht 1999). They go about achieving this through attempting to influence the behaviour of governments, corporations and the general public (Keck and Sikkink 1998).

As previously mentioned, the ability of ENGOS to influence the operations and policies of corporations and governments has grown significantly. This increased influence by ENGOS has also coincided with an improvement in corporate responsibility (CR) (Cairncross 1995, Collier and Wanderley 2005, Vidal and Kozak 2008), also impacting on the operating practices of forestry corporations (Hellström 2001). However, in the Asia-Pacific region, for example, the influence of ENGOS is limited (Dauvergne 2005). It is often the case that they seek support of groups from developed countries to place more pressure on the target corporation. Though, it should be noted that there is increasing evidence that corporations in developing nations are increasingly adopting CR practices (OECD 2005, Baskin 2006, Frynas 2006), the reasons behind this include the wish to have access to markets in developed nations where CR is more valued.

Paper I focuses on campaigns by ENGOS against the operating practices of Asia Pacific Resources International Holdings Ltd (APRIL), an Asian pulp and paper company, regarding such issues as deforestation and ignoring the rights of indigenous peoples. Further information regarding the APRIL and the campaigns is given in the section 'background of the two example conflicts'.

There have been numerous campaigns throughout the world by ENGOS regarding forestry practices. Examples of previous research in this area include the examination of campaigns to halt deforestation in Sarawak, Malaysia (Keck and Sikkink 1998), the impact of ENGOS and consumer boycott on operations in Clayoquot Sound, Canada (Stanbury and Vertinsky 1997) and the impact of ENGOS on the practices of the pulp and paper industry in Australia, Indonesia and Malaysia (Sonnenfeld 2002).

3.2 Legitimacy in environmental conflict Paper II

The campaigns by ENGOS against corporations often revolve around legitimacy. The ENGOS frequently characterise the company's practices as lacking legal and moral legitimacy, while concurrently, the company claim that their operations are legitimate; acting within national laws and in agreement with contractual obligations.

Legitimacy can be defined as "a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions" (Suchman 1995: 574). This definition is often cited in literature focussing on legitimacy in the area of business, politics and pressure groups, hence its value for this work.

Legitimacy is significant for companies as it is likely to affect their profitability (e.g. Logsdon and Yuthas 1997) as well as deflecting potential ENGO campaigns (Hunter and Bansal 2006). Legitimacy theory puts forward the notion that a company's survival is based

on its ability to operate “within the bounds and norms of society”, as well as convincing society of this (Deegan and Rankin 1996, Deegan 2000). Matthews (1993) and Johnson and Scholes (2002) believe that this goes beyond merely meeting legal obligations and making a profit. While for ENGOs it determines the support they will get for their campaigns (from their peers, scientific community, media and ultimately the public), as well as their funding through membership and donations. These factors highlight the importance, to both sides, of being perceived as legitimate.

Previous research into the roles of legitimacy includes examining the construction of legitimacy by water companies in the UK through corporate reporting (Ogden and Clarke 2005), finding that corporate reporting plays an important role for a company seeking legitimacy. While Elsbach (1994) examined organisational legitimacy of the Californian cattle industry through examining the activities of the industry’s spokespersons following controversial events, finding that effectiveness depended on the audience’s perception of the issue.

3.3 Successful ENGO campaigns Paper III

Though the environmental movement (including ENGOs) is diverse (e.g. Keck and Sikkink 1998, Rootes 2004, Sutton 2004) the movement shares broad aims of bringing about a more just and equal society as well as re-prioritising its aims and functions, moving it more towards caring for the environment (Vogel 2006). To achieve this, ENGOs conduct campaigns, which are defined as having a concrete aim which mobilises a group of actors for achieving the target (della Porta and Rucht 2002).

Campaigns by ENGOs, like other social movements, target the holders of power (Tilly 1999). Therefore a corporate accountability movement has grown as a reaction to the fact that corporations have become increasingly powerful (John and Thomson 2003, Sutton 2004, Humphreys 2006), for example, as they have come to dominate the policy agendas of both national governments and international organisations (e.g. Murphy and Bendell 1997, John and Thomson 2003). In the past the focus was more on bringing about change through targeting the governments, however, increasingly ENGOs have focussed on corporations (Murphy and Bendell 1997, Mol 2000, Sonnenfeld 2002, Smith and Qaranda 2007).

There are diverse strategies employed by ENGOs in their campaigns which may result in confusion regarding what the groups are trying to achieve. This is the case not only for corporate campaigns, but also for ones against the state. However, corporate campaigns have the added dimension of whether they are really targeting the corporation or if these types of campaigns are another tool in campaigns against the state. For example, Gamson (1990) and Tarrow (1993) in their research into the impact and effectiveness of social movements (including ENGOs) focussed on policy repercussions. Is this the case also in ENGO corporate campaigns?

3.4 Ethical analysis (EA) Paper IV

The foundations of environmental conflict are often conflicting values (Nie 2003) and / or interests (Krott 2005) regarding the use of natural resources (also see Table 1). These conflicts are often marked by their complexity (e.g. Opatow and Weiss 2000, Putnam and Wondollock 2003). This intricacy has invariably developed as a result of the original issue

becoming hidden amongst the differing perceptions and interpretations of the situation (Lange 1993, Lewicki et al. 2003, Nie 2003, Wittmer et al. 2006). As Gray (2003: 13) put it “when people frame conflicts, they create interpretations of what a dispute is about, why it occurred, the other disputants, and whether and how they envision its potential resolution.” There are numerous examples of differences in how a situation is framed differently by the conflicting parties. It is often the case that the issue at the centre of the conflict becomes obscured by both sides providing contradictory versions of reality, accounts that were manipulated to fit their outlooks and values, for example in the spotted owl conflict (Moore 1993). These perceptions are based on the interests, values and principles of those concerned, making communication (Bolman and Deal 1997), and therefore resolution, very difficult. This situation can be applied to many environmental conflicts throughout the world. Therefore a tool is needed to simplify this complexity and return the conflict to its origins.

The tool selected is entitled ethical analysis (EA). The concept of EA is used in the field of business and medical ethics for dealing with ethical dilemmas, for example, in business ethics for corporate decision making (e.g. Hartman 2005) and in public health such as rationing of scarce resources (e.g. Roberts and Reich 2002). In both cases the analysis is conducted to facilitate the resolution of an ethical quandary. Here the ethical dimension of the EA is based on the view that one of the common features of intractable conflict is the fundamental or deep rooted moral conflict at its heart (Caton-Campbell 2003), hence the need to determine the bases for moral positions of the conflict actors (or moral agents).

In business an EA is conducted to solve an ethical dilemma. Often in business literature the method of the analysis is not presented as it is implied that the person or group facing the ethical dilemma will approach the issue from the perspective of what is good (morally right) and bad (morally wrong). Of those EA that are explicitly presented Hartman (2005) is the most relevant as its focus is on those that are central to natural resource management conflicts; stakeholders:

1. Identifying the ethical issue.
2. Gathering all relevant facts.
3. Identifying the alternatives at your disposal.
4. Identifying the stakeholders.
5. Identifying the impact of each alternative on each stakeholder.
6. Seeking guidance: considering alternative perspectives and theories.
7. Checking for legal constraints: is the decision in line with legal rules?
8. Checking for moral constraints: can you live with the decision?
9. Building mechanisms for assessment of your decision.

The validity of Hartman’s (2005) analysis is that is based on one of the key factors in ethical dilemmas in business, in other words the impact on stakeholders, and how their interests and values should be considered. Other EA (e.g. Nash 1981, Kidder 1995, Lewis and Gilman 2005) are similar in many respects to Hartman’s especially with regards to the impact of a decision on others.

3.5 Background of the two example conflicts

As previously mentioned environmental conflicts usually centre on clashing interests and / or values over the use of natural resources (Table 1); with values-based conflicts being more difficult to resolve (Burgess and Burgess 1997, Putnam and Wondolleck 2003). The research used two example conflicts that are based on conflicting interests and values, which as the research developed increasingly demonstrated, among other things, the complexity of conflicts related to natural resource management.

3.5.1 APRIL, Sumatra, Indonesia (*Papers I-IV*)

Indonesia's pulp and paper industry has grown significantly since the mid-1980s (Sonnenfeld 1998), with the 1990s seeing the industry grow from being a minor player, to being one of the world leaders (Sonnenfeld 1998, van Dijk 2005). Various reasons can be given as to why the Indonesian pulp and paper companies significantly invested in projects, in addition to how the industry has become the focus of campaigns by ENGOs:

- 1) The Indonesian government provided significant subsidies for the industry (Kartodihardjo and Supriono 2000, Barr 2001, Raitzer 2008). Additionally the government policies have supported the pulp and paper industry's conversion of natural forest into plantations (resulting in significant levels of deforestation) (Kartodihardjo and Supriono 2000, Raitzer 2008).
- 2) The weak regulation of the Indonesian financial system (which facilitated various illegal practices conducted by the industry) (Barr 2001).
- 3) The willingness of financial institutions to invest in the industry (Barr 2001, Spek 2006). Research by the Centre for International Forest Research (CIFOR) / WWF in 2000 found that the international finance community had invested over US\$15 billion in the Indonesian pulp and paper industry without ensuring that the industry had a secure, legal, and sustainable supply of wood fibre (Barr 2001).
- 4) Suitability regarding the country's significant forest resources.
- 5) Increased demand for pulp and paper in Asia, particularly in China (Sunderlin 1999).

APRIL, which is one of main pulp and paper companies in Indonesia, is a privately owned pulp and paper company with operations in Indonesia and China. APRIL has a pulp and paper mill (Riau Andalan Pulp and Paper (RAPP)) in Riau, Sumatra, this mill is the focus of the research. The company began establishing plantations in 1993 after securing a long term lease for 330 000 ha of concessions from the Indonesian Government. Over 50 ENGOs (for a more comprehensive list see appendix 1), including WWF Indonesia and Robin Wood, have accused the company of various legally and morally illegitimate acts including using illegally sourced timber and destroying pristine rainforest (e.g. DTE 2006, Eyes on the Forest 2006). Additionally, ENGOs accuse the company of establishing plantations on land claimed by indigenous peoples (e.g. Miettinen and Selin 1999, Matthew and van Gelder 2002). This conflict plays out against a backdrop of rampant deforestation in Indonesia with the pulp and paper industry seen as one of the main culprits (WRI 2000, Barr 2001, Pirard and Rokhim 2006, Pirard and Cossalter 2006). Spek (2006) estimates, as of 2006, that the industry, including APRIL, sourced over 70% of its fiber from natural forests in Sumatra. Sumatra is one of the hardest hit islands in the archipelago regarding

deforestation (Holmes 2002). The situation is exacerbated by the high levels of biodiversity in the island, including being home to endangered species such as the Sumatran rhinoceros (*Dicerorhinus sumatrensis*), elephants (*Elephas maximus*), orangutans (*Pongo pygmaeus*), and Sumatran tiger (*Panthera tigris sumatrae*).

In response to the criticism by the ENGOS, APRIL claimed that it is acting in accordance with their legal obligations as well as following their contractual requirements with the legal owners of the land, the Indonesian Government (APRIL 2002). Additionally the company points out the role it plays in the local economy; estimating that it employs over 24 000 people (APRIL 2004), Jensen (2007) puts the figure at 70 000.

On the scale of tractability (Figure 3) it could be said that the APRIL conflict incorporates conflicting interests and values, in addition to high levels of intensity with on-site protests and blockades, violence (including casualties), in addition to high levels of media coverage home and abroad therefore making the conflict intractable. The conflicting interests are with some of the local and indigenous communities who do not directly benefit from APRIL's operations, specifically those whose land has been used by the company for the establishment of the mill site or for plantations. There are conflicting values between APRIL and some of the local communities, but also with the ENGOS. According to Floyd et al. (1996) classification (Table 1) the APRIL conflict can be classified as a BB (conflict regarding renewable resource) and BD (renewable resource and amenity preservation) conflict, again reinforcing its intractability.

3.5.2 *The Finnish Forest and Park Service, Upper Lapland, Finland (Papers III-IV)*

The example conflict in Upper Lapland, Finland is centred on conflicting land uses, with on one side a state forest enterprise, the Finnish Forest and Park Service, and on the other reindeer herders. This type of issue, according to Deutsch (1973: 10) makes conflict inevitable; "conflict exists whenever incompatible activities occur... an action that is incompatible with another action prevents, obstructs, interferes, injures, or in some way makes the latter less likely or less effective". In this case the incompatibility is based, though not wholly, on conflicting interests.

This long running and complex conflict is based on the perception of some of the herders' that the Finnish Forest and Park Service's operations in Upper Lapland are endangering their livelihoods as felling in reindeer pasture areas limits the availability of winter food (see for example: Helle et al. 1990, Jaakkola et al. 2006), thereby incurring extra expenses for the herders, whose livelihoods are already endangered by higher costs of herding such as for slaughtering as well as falling meat prices (Raitio 2008). The Finnish Forest and Park Service, in response, has significantly reduced their felling in the areas to around half that of the 1980s (Sandström, 2000, Sihvo, 2006). As a result, recently, the total annual cut in private and state forests in Upper Lapland has only been 35–50% of the highest allowable cut (Nuutinen et al. 2005, Sihvo 2006). Additionally, the reindeer herders feel that other business and state activities such as tourism also inhibit reindeer herding (Hallikainen et al. 2006).

The Finnish Forest and Park Service is a state owned forest enterprise, responsible for reconciling the diverse interests regarding state forests in Finland (Raitio 2008). Its duties are diverse including the fact that it must be run in a profitable manner (Act on Metsähallitus (1378/2004)), while at the same time being responsible for ecological sustainability, as well as various social responsibilities this includes ensuring the prerequisites for Sámi culture in the Sámi homelands (Act on Sámi Council (974/1995)).

A central issue in this conflict is that of land rights. Sámi organisations highlight the nineteenth and twentieth centuries as being turning point with the colonisation by the Finnish State of traditional Sámi areas (Lawrence 2007). This has, they believe, infringed on their ability to follow their traditional way of life, including reindeer herding (Sámi Council 2005).

Greenpeace Finland is campaigning against the practices of the Finnish Forest and Park Service and the policies of the national government. It is their largest and most high profile campaign and has two key aims: protecting the natural old forests as well as safeguarding the rights and livelihoods of the reindeer herders. Other ENGOs, including Finnish Association for Nature Conservation (FANC), are also campaigning on this issue. The conflict became truly international through the campaigns of Greenpeace in blockading ships transporting timber products originating from the area and also through the issue being brought in front of the United Nations Human Rights Committee (UNHRC). On each occasion (1990, 1992, 1995 and 2001) the Committee has found for the State stating that logging has not been on a scale that it denies the right of the Sámi reindeer herders to enjoy their cultural rights (as set out in Article 27 of the International Covenant on Civil and Political Rights) or threatens the future of reindeer herding, but each time it has noted that the State is not doing as much as it can do on the Sámi issue (UNHRC 1994a, 1994b, 1996 and 2005).

Like most other environmental conflicts there are considerable differences between the parties on the problem that is at the heart of the conflict. According to Lawrence (2007) Stora Enso, who is a customer of the Finnish Forest and Park Service, sees the conflict as originating in the 1970s over the ecological concerns of ENGOs on the issue of logging in old growth forests, subsequently in the 1990s the issue became one of the reindeer herders campaigning to secure their livelihoods. This according to Lawrence (2007) ignores the feelings of various Sámi organisations regarding their land rights. This difference in framing in the Upper Lapland conflict is also illustrated by Heikkilä (2006) and Raitio (2008).

The Upper Lapland conflict is primarily based on conflicting interests, while the conflicting values are present they are not the dominant feature of the conflict. The conflict can be classified, according to Floyd and colleagues' (1996) scale (Table 1) primarily as BB conflict, also with aspects of a BC and BD conflict. Despite the conflict being primarily based on conflicting interests it has proven to be quite intractable, with high levels of conflicting coverage in the media, with on-site protests and blockades, as well as the highly visible campaign by ENGOs, primarily by Greenpeace, with various attempts at resolution thus far failing. Therefore the conflict can be defined as being intractable (Figure 3).

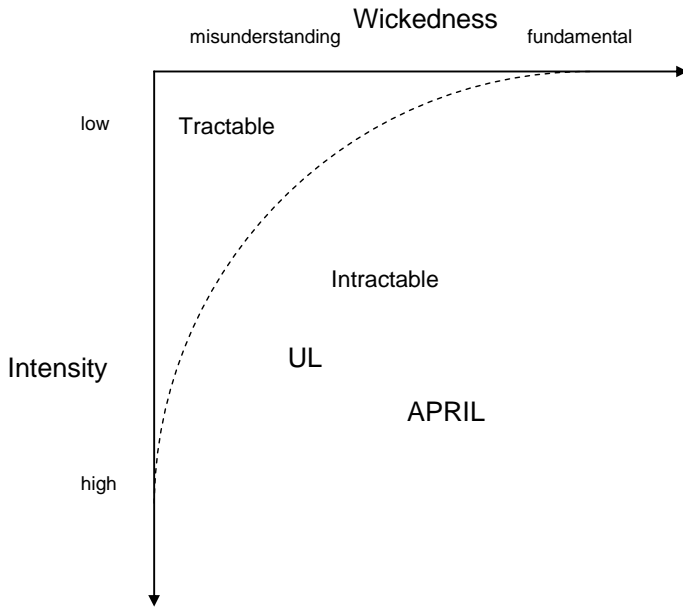


Figure 3. Tractability of the APRIL and Upper Lapland (UL) conflicts showing the levels of intractability of both the example conflicts based on intensity and wickedness.

4. MATERIAL AND METHODS

4.1 Thesis framework

There is a clear strand running through the research from paper I to IV; with papers I-III setting the scene for paper IV (Figure 4) pulling together the theoretical threads of the research.

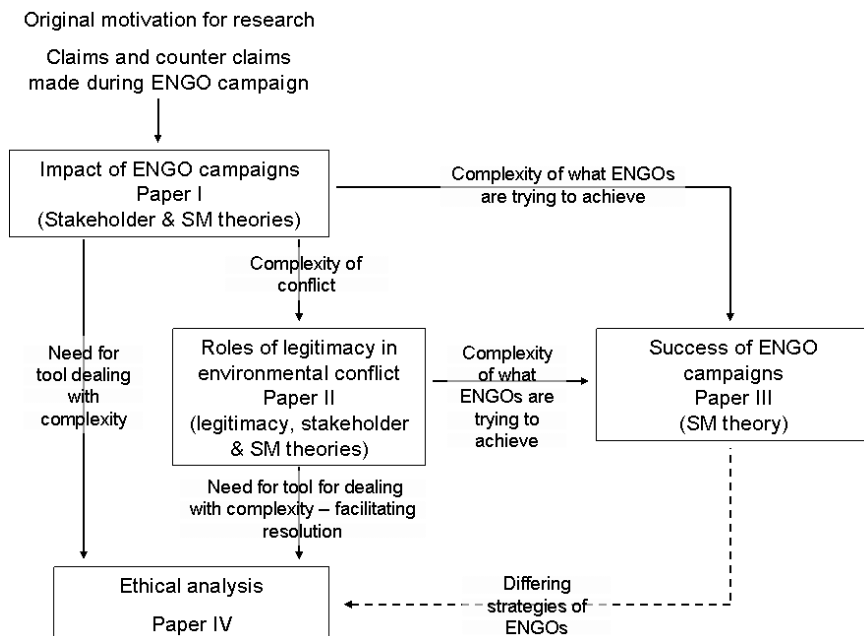


Figure 4. Development of the study from original motivation to research to interconnectedness of the results of papers I-III concluding with the need for the EA tool. Text in brackets are the theories underpinning the each stage of the research. SM theory = Social Movement theory.

Different methods were employed for ascertaining relevant information to achieve the aims of the research; with qualitative methods (interviews and questionnaires) being utilised for papers I-III and quantitative methods (questionnaires) being employed for paper III. In addition published and unpublished documents of the parties involved were also analysed (papers I-III).

4.2 Papers I and II

Papers I and II utilised similar material and methods with regards to the collection of information. The aims of the two papers necessitated gathering data and information from various sources. These sources included those targeted in the campaigns against APRIL, as well as third parties, such as CIFOR. CIFOR is an international forestry research centre working to improve livelihoods of people in the tropics and conserve forests, it focuses a significant amount of research on Indonesia, including studying the activities of pulp and paper industry in the country (for more information see: <http://www.cifor.cgiar.org/>).

The methodology, for the interviews and questionnaires, was determined by the papers' aims. Therefore, qualitative research methodology was used for the interviews and questionnaires. Face-to-face and telephone interviews were conducted, during the period December 2003 to October 2006, with parties relevant to the campaigns (Table 2).

The interviews followed a semi-structured design, often using open-ended questions. This format of interviewing allowed the interviewees to speak their minds and elaborate on issues they felt were important regarding the research, thus enabling the collecting of detailed and specific information about the campaigns. Pre-interviews were also conducted, in order to obtain supplementary background information, with academics and researchers related to the topic as well as campaign leaders from other ENGOs campaigning for improved practices in the pulp and paper industry in Indonesia.

In order to attain specific data not collected in the interviews questionnaires were sent to various parties related to the issue. These were completed by APRIL's management, and the campaign leaders of WWF Indonesia, Friends of the Earth (FoE) Finland and FoE England, Wales and Northern Ireland (EWNI), as well as paper merchants targeted by the FoE EWNI campaign (Table 2). In addition, one Indonesian ENGO completed a questionnaire on condition of anonymity. The ENGOs used for this area of the research were selected based on the fact that their campaigns were the most visible regarding the issue as they were covered by international media (e.g. BBC and CNN), as well as national newspapers (e.g. The Guardian (UK) and Helsinki Sanomat (Finland)). Additionally the groups were selected as they were highly active in their campaigns against APRIL, for example publishing original reports (e.g. FoE Finland, FoE EWNI and Robin Wood), and conducting field visits (e.g. FoE Finland and WWF Indonesia) as opposed to many groups that played a more supporting role in the campaigns, for instance signing letters of support for campaigns on this issue (e.g. EnviroJustice, USA and Worldforests, UK).

Another vital source of information were published and unpublished documents of APRIL and the ENGOs, as well as from other stakeholders including the Indonesian Government and UPM-Kymmene (UPM), the international forestry company, who have a pulp supply agreement with APRIL. Furthermore, publications from CIFOR also proved to be highly relevant.

Table 2. Organisations questioned in research (Papers I and II). TNC = The Nature Conservancy, FWI = Forest Watch International

	Interviews	Questionnaires	Background interviews
Groups targeted in campaigns			
APRIL (Senior Management - including Vice President Operations, Vice President Forestry and Environment Affairs Manager).	8 (2 of whom also completed questionnaire)	4	1
Paper Merchants - Senior Management or owners.	4	4	0
UK Government Department for Environment, Food and Rural Affairs – Senior Civil Servants (Head of Timber Procurement and Eco-labelling).	2	0	0
Financial Institutions.	0	2	0
Jaakko Pöyry – Manager, Operations.	0	1	0
UPM-Kymmene Director Issues Management	0	1	0
Environmental Groups			
FoE Finland - APRIL Campaign Leader.	0	1	0
FoE EWNl - Head of Corporate Campaigns (Including APRIL campaign).	1 (also completed questionnaire)	1	0
WWF Indonesia – Campaigners.	1 (also completed questionnaire)	1	2
Other Environmental groups – Campaign leaders.	1 (Robin Wood)	1 (Anonymous Indonesian ENGO)	2 (TNC Indonesia and FWI)
Academics / researchers and others			
Bogor Agricultural University – Forestry Academics.	0	1	4
CIFOR – Researchers.	1	0	4
Indonesian Government (Ministry of Forestry, Section Head of Forest Planning).	1	0	0

4.2.1 Theoretical framework (Paper II)

Roles of legitimacy

Suchman (1995) puts forward the notion that legitimacy is an action meeting the norms, values and beliefs of society, this provides a base for the roles that legitimacy plays in environmental conflict centred around the actions of a company and resulting campaigns by ENGOs. The roles of legitimacy in the campaigns can be seen in table 3.

Table 3. Forms of legitimacy in conflict between ENGOs and companies

Form of legitimacy	
Interpretation of legitimacy	Based on differing interpretations of what is legitimate regarding the management of natural resources (Ramirez 1999), based on values and interests.
Portrayal of legitimacy of self	In order to influence the perceptions (of legitimacy) of groups within society (Dowling and Pfeffer 1975; Clarke and Gibson-Sweet 1999).
Development of legitimacy	Where the company, and possibly the ENGOs, adapt their operating practices to be more in line with societies norms, values and conventions (Deegan 2000, Deegan et al. 2002).
Acceptance of legitimacy	Primarily by the ENGOs, but also by the company, of the legitimacy of the opponent's position; which is a driver for resolution.

Development of legitimacy of the company and ENGOs

Although corporations and ENGOs differ significantly in numerous ways it is possible to construct a framework enabling their categorisation regarding the development of their legitimacy. Logsdon and Yuthas' (1997) theory on the moral development of organisations, which has foundations in Kohlberg's (1976, 1981) theory of individual moral development (which puts forward the notion that people progress through various stages of moral development) provide the foundations for the framework (Table 4) categorising the development of legitimacy of corporations. The development of a corporation's legitimacy, moving from selfish to compliant, is based on their relations with stakeholders. The issue of corporations moving beyond self-interest has been previously examined (e.g. Johnson and Scholes 2002) finding that they often move beyond minimal compliance to incorporate stakeholder interests in their strategies. Johnson and Scholes (2002) define this as corporate social responsibility (CSR).

The categorisation of the development of the legitimacy of ENGOs (Table 4) is based on Logsdon and Yuthas' (1997) moral development of organisations and Jepson's (2005) examination of the legitimacy of ENGOs. Jepson (2005) classifies their legitimacy on a regulatory (adherence to law), pragmatic (based on self-interest), and normative and cognitive (based on relationship with peers and society in general; which is underlined by selflessness) basis. For the work presented here the emphasis moves from extreme self-interest (stage 1) where the group could be said to be acting immorally, to stages two and three where the group increases its legitimacy through honesty and accepting the legitimacy of the opponent, thus enabling it to consider the position of all stakeholders during its campaigns.

The framework is not necessarily based on the fact that the groups will progress in a linear way; it may be that an organisation may forego stage 1 altogether.

Table 4. Categorising the legitimacy of corporations and ENGOs.

	Categorisation of corporate legitimacy	Categorisation of ENGOs' legitimacy
Stage 1 Selfish	Act solely to further one's interests even when its action is legally suspect.	Act solely to further one's interests. For example campaigns lacking scientific reasoning or based on falsehood, including failing to truly represent interests of stakeholder.
Stage 2 Compliance	Emphasis on minimum compliance with all current regulations and laws – includes recognising the legal rights of stakeholders	Achieve acceptance of scientific community for campaigns and / or base campaigns on independent research for example, conducted by scientific community. Achieve peer support for campaign(s).
Stage 3 Consensual	Emphasis on positive duties towards others, including taking measures to promote welfare of other stakeholders. Including taking measures, such as certification, that go above and beyond legal requirements, which can be interpreted as accepting legitimacy of claims of other stakeholders.	Act to achieve consensus on conflicting issues, including accepting legitimacy of opponents' position

4.3 Paper III

The methodology for paper III followed two routes. The first, the quantitative method, was based on a questionnaire being sent to representatives of ENGOs. The second, qualitative, method involved interviewing seven ENGO representatives (Table 5) regarding specific corporate campaigns.

4.3.1 Quantitative research method

In order to determine whether ENGOs have a common perception of what deems a campaign against a corporation to be successful a questionnaire was sent to 223 ENGOs conducting corporate campaigns.

The criteria used in this section of the study were selected largely based on questionnaires sent to campaign leaders of two ENGOs involved in international campaigns. The criteria selected by them were expanded upon by the author with the guidance of various academics:

- A. Changes in international and national laws, regulations and policies as result of campaign.
- B. Campaign leads to debate in national parliament / important public bodies (even if the debates are inconclusive).
- C. Company's customers respond positively to campaign.
- D. Company's shareholders and lenders respond positively to campaign.
- E. High level of positive coverage of campaign in the national media.
- F. High level of positive coverage of campaign in the international media.
- G. Target group implements recommendation(s) of campaign.
- H. High level of public awareness of campaign.
- I. Campaign leads to other ENGOs targeting company.
- J. Home government of ENGO responds directly to campaign.
- K. Company meets with associates and customers in direct response to campaign.

In order to finalise the criteria for the questionnaire, campaign leaders of five ENGOs were asked to comment on the 11 criteria. As a result the criteria were reduced to seven (A-G).

Analytical hierarchical process (AHP) (Saaty 1980) was selected as the methodology to establish the value that the ENGOs' representatives bestowed on the criteria for defining success. AHP has been broadly used in intricate multi-criteria decision making, such as the analysis of preferences in complex problems with various criteria (Varis 1989, Mendoza et al. 1999, Choo and Wedley 2003), as it provides dependable and comprehensive numerical information about the relative importance of each criterion, thereby creating a rational framework for structuring the problem. Moreover, AHP presents information concerning the consistency of the respondents' answers. Additionally, pairwise comparison methods, which are an integral part of AHP, as opposed to direct rating, have been found to be more appropriate for collecting quantitative data (Naudé et al. 1993), and are often used to estimate the preference values of alternatives regarding a specific issue, which illustrates its value for this area of the research.

The questionnaire enabled the representatives of the ENGOs to compare pairs of criteria and articulate their views about the relative importance of one criterion compared to another by using a set of verbal expressions (from extremely prefer to equally prefer). Consequently this verbal expression was converted into numerical values to enable the numerical process required by AHP. The pairs of criteria were compared in a way that the criteria were compared with each other (A-B, A-C... F-G) giving a total of 21 comparisons. Of the 223 questionnaires sent, representatives of 42 groups completed and returned the questionnaire.

The analysis of the results was broken down into three different groups of experts; one being the whole set of experts, with the other two groups being a result of splitting that group into those that only conduct national oriented campaigns and those that do both international and national campaigns.

4.3.2 Qualitative research method

Representatives of seven ENGOs (Table 5) were questioned to ascertain the aims and perceived success of the relevant focus campaign. The focus campaigns were selected, four against APRIL and three against the Finnish Forest and Park Service, as they enabled the comparison of the different views of the representatives on the same issue.

Table 5. Groups questioned for the qualitative area of research

Group questioned	Campaign target	Period questioned	Position of interviewee regarding campaign
Friends of the Earth EWNI	APRIL	Spring and Autumn 2005	Campaign leader
FoE Finland	APRIL	Spring and Autumn 2005	Campaign leader
Robin Wood	APRIL	Spring 2006	Campaign leader
WWF Indonesia	APRIL	Spring 2006	Campaign leader
Greenpeace Finland	The Finnish Forest and Park Service	Spring 2006	Campaign Press officer
WWF Finland	The Finnish Forest and Park Service	Spring 2006	Head of Forestry
Finnish Association for Nature Conservation (FANC)	The Finnish Forest and Park Service	Autumn 2007	Lead Campaigner (Forest specialist)

As with papers I and II the interviews for the research were conducted in a semi-structured format. One of the campaign leaders was unable to be interviewed and chose, instead, to complete a questionnaire (and a follow-up questionnaire). Moreover, representatives of an additional four ENGOs were interviewed as background for this area of the research: Forest Watch International (Indonesia), The Nature Conservancy Indonesia, an Indonesian ENGO that wished to remain anonymous and a former Brent Spar campaign leader of Greenpeace.

An additional qualitative method was the validation of the results of the questionnaire by asking those that had completed it to comment on the findings, this was done in autumn of 2006. This resulted in ten of the respondents, of the pairwise comparison, providing additional information on the reasoning behind their responses.

4.4 Paper IV

4.4.1 Theoretical framework

The primary task of the ethical analysis is to chart and understand the interests, principles and values of the conflicting parties. Ethical analysis does not necessarily aim at finding a compromise but at determining a set of basic values, principles and interests of the parties in the conflict. Based on these values and the observable conduct of the parties, it attempts to assist the parties to understand their own and other stakeholders' values and interests, as well moral strengths and weaknesses. The anticipated benefit of ethical analysis and self-reflection will be an enhanced awareness both of their own values and moral codes and of those of the other parties, and will facilitate the groups moving to a position of shared perceptions of reality which is vital for the resolution. The ethical analysis is not a tool for direct use in resolving forest conflicts, instead it is an instrument that would be used before other resolution procedures, such as transformative mediation (Bush and Folger 2005) and interest-based negotiation (Burgess and Burgess 1997), thereby increasing the chances of their success.

4.4.2 Structure of the Ethical Analysis

The ethical analysis presented here is intended to be applied in natural resource conflict management. It consists of six stages that are procedural in nature. That is they do not say what is right and what is wrong, instead they present a base for starting an ethical dialogue aiming to facilitate conflict resolution. Additionally as the EA is conducted each stage will likely be reviewed, for example defining the problem will likely result in strong disagreements between the parties, hence it is necessary to start in general terms and then refine it during the process.

1. Identify the moral problem(s).

In conflict situations there are usually a complex set of ethical problems and moral issues. Therefore we must recognise what the ethical questions to be answered really are. In other EA (e.g. employed in business), for example, Nash (1981), Kidder (1995) and Hartman (2005), defining the problem is the first step, vital for progress in the analysis. However, in ethical discussions one of the difficult problems is clarifying what question we are trying to answer (Moore 1903).

2. Identify the stakeholders (moral agents).

Principle 10 of the Rio Declaration highlights the need to identify the stakeholders involved when attempting to resolve an environmental conflict: “Environmental issues are best handled with the participation of all concerned citizens, at the relevant level” (UNCED 1992). The importance of identifying the stakeholders is also central to the EA of Nash (1981), Kidder (1995) and Hartman (2005).

Just as defining the moral problem may be quite challenging so could identifying the stakeholders (later in the process both will likely need revisiting). Resource dependence theory posits that individuals form groups to represent their common interests and values (King 2008). This facilitates the identification of their values, interests and principles. There are, however, disagreements regarding what constitutes a stakeholder (e.g. Friedman and Miles 2006). Friedman and Miles (2006) state that the most common classification is that of a group of people with an apparent relationship with the corporation in question. However, this requires further clarification in the form of Mitchell et al. (1997) theory of stakeholder salience. They categorise stakeholders according to their prominence based on their legitimacy, power and urgency.

3. Identify their interests, values and principles.

Lewis and Gilman (2005) in their EA, employed to assist managers in public service to resolve problems, suggest that developing an understanding of the stakeholders and their interests is of great importance when making decisions so as to ensure that a potential scenario can be viewed from the potential victim’s perspective. Additionally, Bryson (2004) believes that in all stages of management, including conflict resolution, that it is vital to identify the stakeholders’ interests. This is underlined in the literature regarding the causes of conflicts which places significant emphasis on interests and values (e.g. Wehr 1979, Nie 2003, Krott 2005), and therefore their identification. This would be achieved based on analysis of public (e.g. declarations, documents, websites) and private statements (e.g. interviews), in addition to analysing the concrete actions of stakeholder.

Interests, values and principles form the complex motivation of stakeholders. These closely interrelated concepts are, to varying degrees, visible or hidden, used in a broad

variety of meanings in different contexts and disciplines, and often also without specific definitions. It is therefore required, before proceeding, to define interests, values and principles for application in the analysis. As there is no common reference for all three, it is necessary, considering the subject area, to use sources from forest policy science and philosophy. The latter largely draws its definitions from political and social sciences.

Interests have been brought to the centre of forest policy most explicitly by, for example, Glück (1976) and Krott (1990). For Krott (2005) interests are the bases for action whether by individuals or groups, based on the benefits the individual or group can receive from a certain object, such as a forest. Outside of forest policy Blackburn (1996) provides a clear definition that “interests [are] those things that a person needs or that are conducive to his or her flourishing and success”. Blackburn goes on to say that people are not always aware of their real interests. And that therefore it is advisable to distinguish interests and values. Blackburn makes precisely this distinction when he says: “To acknowledge some feature of things as a value is to take it into account in decision making, or in other words to be inclined to advance it as a consideration in influencing choice and guiding oneself and others” (Blackburn 1996: 390).

Values. The major difference between values and interests is, for Blackburn (1996), is that values are typically “more general” in scope than narrowly self-regarding interests. They can be defined as enduring beliefs that guide actions in varying situations. If one values something, one is “inclined to advance it as a consideration in influencing choice and guiding oneself and others” (Blackburn 1996: 390). Values play an important role when stakeholders evaluate their potential benefits. The role of changing social values as influencing forest policy, as well as values of different stakeholders, have been widely discussed (e.g. Cubbage et al. 1993, Krott 2005).

Principles are included in the EA as different people having different values still want to have common rules to direct and harmonize their common activity. A person acts only on such values that they can wish everyone else to act on (McKeever and Ridge 2006, Kant 2004). Such values are principles.

From the EA point of view, there is an important difference between values and principles (i.e. those values that are also principles): it is often possible safely to infer a person's values from their behaviour, but it is extremely risky to do so in the case of their principles. The reason is that principles are (by definition) general, whereas values need not be quite so general. Therefore, the most reliable source of discovering people's principles is their justifications for their actions (or for their values).

The concept of principle is of highly relevant in forestry and forest policy. The principle of sustained yield in forestry in the past and the modern multidimensional version of sustainability expressed in the “Forest Principles” of UNCED (1992) lay the moral foundation for forestry (e.g. Saastamoinen 2005).

Interests, values and principles are not mutually exclusive. They could be seen as parts of a continuum or stages in a developmental process. Moving from interests to values, and then from values to principles increases both their awareness and generality.

4. Explore how the stakeholders perceive the difference between their interests, values and principles and those of their opponents.

Ethical decisions are made by people or institutions that are living in a complex network of responsibilities, obligations and rights. It is important that these cause the minimum hindrance to the ethical decision making process therefore self-reflection and self-awareness are vital. This is also important for the conflict resolution process (Hellström

2001, Shmueli and Gal 2005, Sidaway 2005). External ethical assessments produced in the EA can be of significant importance in opening the views and providing ways for comparative understanding, although one has to recognise the difficulties involved in regard to objectivity and neutrality.

5. Identify the interests, values and principles that are bridges or barriers to meaningful dialogue.

This stage of the process aims to highlight the shared values, principles and interests of the parties, demonstrating the common ground. Also identifying the barriers (in the form of values, principles and interests) will be of benefit for the next stage of the resolution process, but also in improving the mutual understanding of the parties involved.

Bryson et al. (2002) believe that progress in conflict resolution for conflicts involving conflicting interests requires identifying the common interests (supra interests) of those involved. While a key element of Bush and Folger's (2005) procedure (transformative mediation) is the recognition of the other parties' interests and problems, creating an environment of mutual understanding.

6. Make the stakeholders aware of the "ethical assessments" and give them possibilities to comment.

In order to encourage self reflection and to lay the groundwork for the next stage in the attempts to resolve the conflict, it is of value to engage the organisations in discussions (with the assessors) regarding the findings of the analysis. As Gray (2003) put it that for achieving resolution it is vital that the groups must overcome their blinkered view of the situation and accept that there are other legitimate positions. This often requires the assistance of a neutral third party (Gray 2003), the group conducting the EA.

Of fundamental importance to the process is the issue of who would conduct the analysis. The suggested template would be an impartial group, such as multidisciplinary group of academics / scientists. For example, in the Upper Lapland conflict the group could include experts with backgrounds in, for instance, anthropology, economics, forestry, reindeer management science and sociology. The group would be selected to reflect as true a spectrum of the conflicting parties as possible.

5. SYNTHESIS OF RESULTS

The results of the research can be divided into four sections (papers). As previously mentioned papers I-III provide the foundations for paper IV; in other words exploring different aspects of conflicts regarding the use of forests as well as developing the roles, aims and of environmental groups targeting corporations and the corporation's response. While paper IV provides a tool to facilitate resolution of environmental conflicts based on the findings of the first three papers.

5.1 Physical and perceived impacts of campaigns (Paper I)

The impacts of the campaigns can be divided into concrete and perceived results. A summary of the physical impacts of the campaigns demonstrate the changes made by the targets of the campaigns (APRIL, paper merchants, UK Government, UPM-Kymmene and financial institutions). On the other hand the perceived impacts illustrate the complexity that underlies campaigns by ENGOs.

The ENGO campaigns forced APRIL and its associates, including the paper merchants and UPM, to re-examine their policies and their association with the company. This is demonstrated through comparing the campaigns' recommendations to the responses of the targets (see Paper I, Tables 2-6). This shows that there have been mixed responses by the target groups. APRIL, for example, has implemented an independent, on-going monitoring system to demonstrate that it continues to operate and source its raw materials sustainably and not through illegally obtained timber. This monitoring system is one of recommendations of FoE EWNI (Matthew and van Gelder 2002). This has been achieved through getting its timber tracking system audited three times since 2002 (SGS 2002, 2003, 2004).

Areas of the Indonesian Government believe that APRIL is involved in illegal logging as illustrated by the police seizing, in early 2007, 1 million m³ of timber destined for the company's mill based on suspicion of it being illegally sourced. APRIL strongly deny this allegation, blaming the issue on government failings (Jakarta Post 2008a). APRIL, in November 2008, announced that they would reduce production at the mill and lay-off some workers, they said the police action was one of the reasons for this (Jakarta Post 2008a). Within a few days of the APRIL announcement the police stated that they had dropped the legal investigation (Jakarta Post 2008b). This move by the police has been strongly condemned by various ENGOs (Eyes on the Forest 2008). Another indication of the government stance is reflected in the announcement, on the Eyes of the Forest website, that the government plans to extend the period that pulp and paper companies could source their timber from natural forests (Eyes on the Forest 2009). Previously it was announced that they would be denied access by 2009. This announcement is despite opposition from various ENGOs to the move.

Illegal logging illustrates the differences between the ENGOs with WWF supporting the audits, while some ENGOs, including Eyes on the Forest, claim APRIL are still using illegally sourced timber (Eyes on the Forest 2006, Jikalauhari 2008). Areas where APRIL has clearly not implemented the recommendations of the campaigns include failing to reduce its pulp processing capacity to sustainable levels. FoE Finland demanded that capacity should be kept below 1.2 million tonnes per annum (Miettinen and Selin 1999). In

fact in 2001 APRIL increased capacity to 2 million tonnes per year. The company plans to increase capacity to 3 million after 2009 (Leahy 2006). However, as previously mentioned, the company announced in November 2008 that they planned to temporarily reduce production (Jakarta Post 2008a).

The UK Government, on the other hand, failed to implement any of the four recommendations of the campaigns. However, a WWF publication entitled 'Government Barometer on Illegal logging and Trade' which evaluates the commitment of EU Member State governments to implementing the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan concluded that the UK Government is the only national government to score full marks for the effectiveness of its work with Indonesia to reduce levels of illegal logging (WWF 2007).

The difference between perceptions and apparent physical impacts of the campaigns is most notable among the ENGOs. For example, FoE Finland believes the campaigns achieved little; consider that APRIL has made no progress and that the company is still involved in illegal logging, infringing human rights, corrupt practices and generally operating in an unsustainable manner. Additionally, the targeting of UPM was aimed at either getting UPM to withdraw its support (financial and strategic) of APRIL, or to work with APRIL improving their operations. The FoE Finland campaign leader feels that it failed on both levels. On the other hand the campaign leader for WWF Indonesia was encouraged by APRIL's responses, for example, regarding it achieving Indonesia Ecolabelling Institute (Lembaga Ekolabel Indonesia (LEI)) certification in 2006.

Since the publication of paper I other events linked to the campaigns illustrate the difficulty in determining the true impacts of the ENGOs actions. For example, a European paper company decided in 2008 to stop purchasing pulp from Indonesia, based on concerns regarding the environmental practices by APRIL and its competitor APP. This stance was also taken by International Paper (IP), the world's biggest paper manufacturer, as they publicly stated they do not purchase wood or pulp from Indonesia as the company is unable to determine whether it is sourced from legal and sustainable sources (IP 2006). However, in 2008 the company announced plans to invest US\$4 billion in constructing a pulp mill and establishing plantations in Indonesia. This announcement by IP was widely criticised by ENGOs such as the Rainforest Action Network (RAN 2008). This illustrates that the industry responds to various stimuli, not just ENGO campaigns.

5.2 Roles of legitimacy in environmental conflict (Paper II)

The origins of paper II came from the findings of paper I, in other words the basis for the complexity for the positions taken by APRIL and the ENGOs. The paper presents frameworks (Tables 3 and 4) for presenting the roles of legitimacy in environmental conflicts, with emphasis on the development of the legitimacy of ENGOs and corporations. The frameworks were considered necessary as a tool to clarify the differing positions taken in environmental conflicts with legitimacy being at the centre. When applied to the APRIL conflict the following results can be seen:

1) Interpretation of legitimacy; each of the stakeholders in an environmental conflict have differing interpretations of what is legitimate regarding the utilisation of the natural resource at the centre of the conflict, the foundations for these interpretations are interests and values. For example, the difference between APRIL and FoE Finland is demonstrated in the ENGO's belief that the current operations by pulp and paper companies in Indonesia

benefit only a few, they believe that the utilisation of the forest resources should be done with the sole benefit of the Indonesian people in mind.

2) Portrayal of self-legitimacy; it is vital for the ENGOs and companies that they persuade society that their actions are legitimate, this is important for the company's profits and for the ENGO's membership, funding and influence. For example, the ENGOs campaigning against APRIL took measures trying to convince society (including APRIL's associates) of the company's lack of legitimacy. This can be seen in FoE EWNI targeting the paper merchants selling APRIL products, FoE Finland targeting UPM, Robin Wood targeting Papier Union and so on. While APRIL achieving LEI certification, as well as increasing its transparency in its operations, are examples of its attempts to demonstrate its legitimacy to its stakeholders.

3) Development of legitimacy; an organisation, whether a company like APRIL or an ENGO such as FoE Finland, as part of the process of portraying its legitimacy, will develop their legitimacy. For APRIL this was from distancing itself from any claims associating it with illegal activities, whether through having its timber supply independently audited to ensure that no illegally sourced timber is used, as well as forming partnership with WWF on certain issues (Table 6). While for ENGOs this development is less obvious, but nevertheless important, for example in getting peer support as well as support from academic community for its campaign.

4) Acceptance of legitimacy; was initially considered as being important for achieving resolution of the conflict, and to a certain extent this is the case. For example, APRIL have to accept that many stakeholders will view the ENGOs opposition as being legitimate and therefore the company needs to respond, with its actions coming more into line with what the ENGOs wanted. However, APRIL will not change their core operations as this would likely threaten the company's future. Regarding the ENGOs, WWF to a certain extent accept APRIL's legitimacy, though at the same time also criticises aspects of its operations, on the other hand FoE Finland completely oppose APRIL's operations believing them to be immoral and often illegal.

Table 6. Examples of the development of APRIL’s moral legitimacy. (ProForest is an independent company working in natural resource management including auditing as well as standards and criteria development).

Stage 1. Selfish	Stage 2. Compliance	Stage 3. Consensual
<p>1. APRIL logging and establishing roads and plantations in Tesso Nilo (TN) one of the most biodiverse lowland forests in the world (Gillison 2001, Prawiradilaga et al. 2003).</p> <p>2. APRIL not conducting evaluations of forest to determine if of High Conservation Value (HCVF). APRIL state government is responsible.</p> <p>3. APRIL accused by various sources of using illegally sourced timber.</p> <p>4. Clearing land claimed by indigenous communities. APRIL claimed resolving fairly (APRIL n.d).</p>	<p>1. Summer 2002 APRIL end further road building, land clearing and plantation establishment in TN.</p> <p>2. Summer 2005 APRIL announces commitment to protect and exclude all HCVF from its wood supply (APRIL 2006).</p> <p>3. Autumn 2002, 2003 and summer 2004 auditing of timber tracking by SGS to ensure no illegal logs used (SGS 2002, 2003, 2004).</p> <p>4. ProForest review APRIL’s land dispute resolution procedures (ProForest 2004).</p>	<p>1. Autumn 2003 APRIL and WWF form partnership on establishment of National park in TN.</p> <p>2. Spring 2006 APRIL achieves LEI certification for its plantations. LEI certification requires evidence of benefits of the plantation for local communities, including availability of non-forest products, employment opportunities for local communities and compensation for utilisation or damage to forests owned by local communities (LEI ND).</p> <p>3. Spring 2004 APRIL and WWF form alliance to combat illegal logging.</p> <p>4. Ongoing – APRIL invest over \$4 million a year in social projects (APRIL 2006).</p>

5.3 What ENGO campaigns are trying to achieve (Paper III)

The quantitative results of paper III were, in certain respects, as anticipated with campaigns against corporations by ENGOs have broadly similar aims in the targeting of changes in governmental policy and the target company implementing campaign’s recommendation(s). However, the qualitative results illustrate the complexity of environmental campaigns against corporations with success, apparently, being dependent on various factors including where the campaign fits within the overall aim of the ENGO (including between offices), the ideology and values of the campaign leaders and tactics of the group.

The results of the pairwise comparison are presented in three formats, according to the scope of the environmental groups (Figure 5 A, B and C). The analyses of all 42 valid responses show that the ENGOs strongly favoured criteria A “Changes in international and national laws, regulations and policies as result of campaign” and G “Target group implements recommendation(s) of campaign”, whilst positive coverage in the media

(criteria E and F) and debate in national parliament (B) were seen to be the least important indicators of success (Figure 5 A).

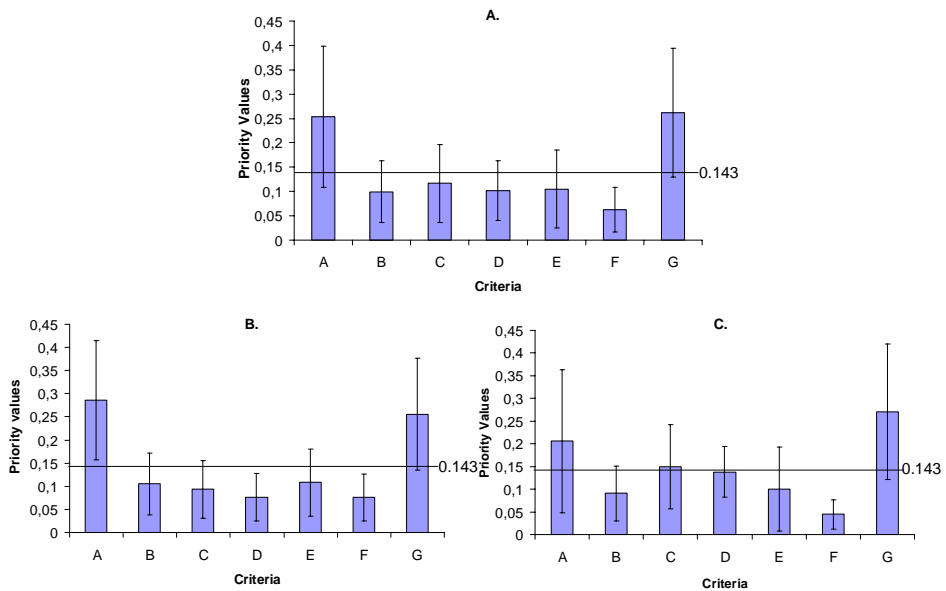


Figure 5. Obtained values for criteria and standard deviation according to groups: (A) All groups, (B) conducting both international and national campaigns and (C) conducting only national campaigns. 0.143 indicates the Laplace criterion (1/number of criteria).

An examination of which criterion was seen to be the most important in terms of the number of organisations that rated each of the criteria as the highest shows that, as expected, criteria A and G are valued highest by most of the groups (Table 7).

Table 7. Number of times each criterion was selected as most important

Criteria	NGOs conducting international and national campaigns	NGOs conducting only national campaigns	All campaigns
A. Changes in international and national laws, regulations and policies as result of campaign	13	4	17
B. Campaign leads to national debate in parliament / important public bodies (even if the debates are inconclusive).	0	0	0
C. Company's customers respond positively to campaign.	0	2	2
D. Company's shareholders and lenders respond positively to campaign.	0	0	0
E. High level of positive coverage of campaign in the national media.	0	2	2
F. High level of positive coverage of campaign in the international media	0	0	0
G. Target group implements recommendation(s) of campaign	12	9	21

The featured campaigns allow the comparison of their aims and perceived success (see paper III, Table 5), with particular value being in comparing the campaigns with shared corporate targets. An example of this is the campaigns against APRIL, where all the groups (Robin Wood, FoE EWNI, FoE Finland and WWF Indonesia) stated that the most important aim was getting APRIL to implement the recommendations, however the groups had quite differing perceptions whether this was achieved (e.g. FoE Finland believing that this had not been achieved, while WWF Indonesia felt that this had notable success). While the aims of the campaigns against the Finnish Forest and Park Service differed with WWF Finland targeting debate in parliament regarding the issue, with FANC and Greenpeace Finland prime aim was getting the Finnish Forest and Park Service to implement the recommendations of their respective campaigns.

5.4 Ethical analysis: a tool for facilitating conflict resolution (Paper IV)

The ethical analysis was created, for this work, as a tool to facilitate resolution of environmental conflict. Its fundamental task is to map and understand the interests and values of the conflicting parties. Based on these values and the observable conduct of the parties, it attempts to help the parties to understand their own and other parties' values and interests, as well moral strengths and weaknesses. The expected benefit of ethical analysis and self-reflection will be an improved awareness both of their own values and moral codes and of those of the other parties, and will facilitate the groups moving to a position of shared perceptions of reality which is vital for resolution. As the idea of the ethical analysis was generated in the process of cooperation with the research group of the Rovaniemi unit

of the Finnish Forest Research Institute (METLA) regarding the complex Upper Lapland forest use conflict the analysis of the Upper Lapland conflict will be used to illustrate the stages employed in the analysis. The validity of employing the ethical analysis to this conflict is demonstrated by an assessment of the conflict (Saarikoski et al. 2009) which highlighted the need for further detailed knowledge of the conflict, pointing out that it is not possible to find a solution as long as the parties feel that the key issues are not being considered from their perspective.. It is important to emphasise that what follows is a sample of a possible larger application of the ethical analysis together with the Finnish Forest Research Institute research group as well as the relevant stakeholders.

1. Identify the ethical problems.

In Upper Lapland the central problem is, on the surface, conflicting uses of the forest resource in the state forest area, where forestry operations negatively impact on the profitability of reindeer herding (e.g. Kyllönen et al. 2006). However, deeply entwined in this are moral issues, such as the responsibilities of state related actors (Raitio and Rytteri 2005, Raitio 2008) in regard to reindeer herding, and the rights of the indigenous people, Sámi, on one hand, and the local and regional employment in the forest and wood sector on the other (Vatanen et al. 2006, Hallikainen et al. 2008). The moral issue is the just treatment of local people independent of ethnicity (Hallikainen et al. 2006) but severe questions about morality and responsibilities extend to Stora Enso and Greenpeace involved directly or indirectly in the conflict. The situation in Upper Lapland fits with the notion described by Deutsch (1969: 14), where “each side... tends to perceive its own motives and behaviour as more benevolent and legitimate than those of the other side, it is evident that the conflict will spiral upward in intensity.”

2. Identify the stakeholders.

Applying the definitions of Mitchell et al. (1997) and Friedman and Miles (2006) to the Upper Lapland conflict, the list of stakeholders would include:

- Finnish Forest and Park Service (State forestry enterprise with public duties)
- Reindeer herders and their cooperatives
- the Finnish Forest and Park Service’ employees (and trade unions) and logging contractors
- the Finnish Forest and Park Service’ customers (small and large wood processing companies and their customers)
- Local municipal governments
- National government
- Sámi Parliament
- Local communities (both Sámi and non-Sámi)
- ENGOs (who have contrasting views and strategies)
- Local, national and international media.

It is often the case that people associate themselves with more than one stakeholder group. This complicates both the identification of the stakeholders but also determining their interests, values and principles (e.g. Kyllönen et al. 2006). For example, the Finnish Forest and Park Service employs Sámi people, additionally not all reindeer herders in the municipality are Sámi. Furthermore, the roles of the Finnish Forest and Park Service go

beyond wood production, including nature conservation, recreation, nature tourism and promoting employment (Act on Metsähallitus 1378/2004).

3. Identify their interests, values and principles.

A brief examination of two of the stakeholders in the Upper Lapland conflict, based on an analysis of organisations' documents, would indicate the following formulations of interests, values and principles:

Interests

The Finnish Forest and Park Service

The Finnish Forest and Park Service's interests are complex, and difficult to separate from their responsibilities. The Act on Metsähallitus (1378/2004) states that the enterprise must be run in a profitable manner, while at the same time the Act on Sámi Council (974/1995) requires that the Finnish Forest and Park Service adjust its use of natural resources to ensure the prerequisites for Sámi culture in their homelands. The Act on Reindeer Management (848/1990) necessitates that the Finnish Forest and Park Service ensures that in the northern reindeer management area (largely Upper Lapland) state land is used in a way which does not cause considerable disadvantage to reindeer husbandry and that the organisation negotiates with the herders when planning operations on herding pastures (Sandström et al. 2000, Piiparinen and Kotisaari 2006). The theory of public organisations says that personnel may have other interests to those of their employers (Krott 2005); the major interest of the staff is to maintain their employment, which largely depends on the volume of allowable cut.

Reindeer herders

The interests of the reindeer herders are easier to formulate compared to the Finnish Forest and Park Service's, however, the reverse is the case for values and principles. The reindeer herders' main interest is to be able to make a living from herding. The herders believe that herding in the area, to be economically viable, cannot be limited any further whether in terms of reindeer numbers or available pastures (Heikkilä 2006). Their situation is exacerbated by increased costs and a fall in the price of reindeer meat (Raitio 2008).

Values

The Finnish Forest and Park Service

The Finnish Forest and Park Service on their website, stress the importance of co-operation for achieving results, employees' well-being, customer focus and profitability, as well as the responsible management and use of natural resources.

Is there a ranking to their values? What happens when, as is the case in Upper Lapland, the values of cooperating with stakeholders, employee well-being and profitability conflict? Can all these three values be upheld?

Reindeer herders

The values of reindeer husbandry are not easily summarised. However, according to Heikkilä (2006) the understanding of the reindeer herders is founded on a conception of nature as a distinct place where continuous use of the same areas entails usage rights and a special bond attached to the place and personal history. However, in modern society this natural bond is often weakened or broken. Reindeer herders generally live in the modern

world and subscribe to many modern values and material goods, still it is obvious that a part of their cognition and most of their emotion relates to traditional society (Raitio 2008).

Principles

The Finnish Forest and Park Service

The Finnish Forest and Park Service places significant emphasis on the sustainability of its operations, whether related to nature tourism or timber production (Raitio 2008). This focus on sustainability is also reflected in its forestry operations in Upper Lapland, as further reductions in allowable cut will endanger its forestry operations in the area, but also those of local timber processing industry.

Reindeer herders

Safeguarding the requirements for reindeer herding is the fundamental principle (and claim) of the reindeer herding associations involved in the conflict (Raitio and Rytteri 2005). Another key principle is their fundamental belief in the right to follow their way of life (Heikkilä 2006, Valkonen 2007).

4. Explore how the stakeholders perceive the difference between their interests, values and principles and those of their opponents.

Generally speaking the herders and the workers of the Finnish Forest and Park Service see the issue as one of livelihoods, where each view the other's operations as a danger to their way of life as well as to their source of income. Their interests have been further brought into conflict by increased pressure facing both the forestry and reindeer sectors (e.g. Korhonen 2005, Raitio 2008). Each group stressed that they are attempting to adhere to the concept of sustainable development, however, they appear to be viewing this concept only from their own restricted perspective, reflecting their interests. Furthermore, both sides feel aggrieved and unfairly criticised (e.g. Heikkilä 2006).

5. Identify the interests, values and principles that are bridges or barriers to meaningful dialogue.

In the Upper Lapland conflict the principal issue is a clash of interests; there is a prevalent feeling, particularly amongst some of the reindeer herders, that the land uses often conflict with each other. For example, local the Finnish Forest and Park Service managers are concerned with their future prospects as well as those of their employees, and see (further) concessions to the relevant reindeer herder cooperatives (RHCs) as likely endangering these prospects (Raitio 2008). And some of the RHCs are just as fearful of their future prospects, believing that herding in the area, to be economically viable, cannot be limited any further by the impact of forestry on the grazing areas (Heikkilä 2006).

A clear stumbling block for achieving resolution to the conflict through the state channels is the importance placed on the constitutional principle of equality. Resolution favourable to the RHCs, with a further reduction in logging in the region, would be seen as disadvantageous to the foresters, and related industries in the region.

6. Make the stakeholders aware of the "ethical assessments" and give them possibilities to comment.

The desired result would see increased awareness on the part of the parties which would hopefully see them moving away from the strong emotions and language that currently permeate the conflict.

6. DISCUSSION AND CONCLUSIONS

The presentation of the discussion and conclusions is divided into three sections: the first section is a synthesis of the results of the thesis using examples to illustrate the main issues, as well as the implications of the work for the relevant theories. The second part examines limitations of the material and methods, and finally the third section presents ideas for future research as well as practical recommendations garnered from the work.

6.1 Summary of findings and the theoretical implications

In general terms the aim of the research was to examine the different dimensions to conflicts between ENGOs and forestry related industries, and to create a tool facilitating resolution. Broken down into sections the purpose of this study was to: 1) Analyse the perceived and actual impacts of ENGO campaigns against a pulp and paper company in Indonesia. 2) Investigate the roles of legitimacy in environmental conflict through examining the actions and perceptions of the different actors involved using a case study. 3) Determine whether ENGOs have a common perception of what deems a campaign, against a corporation, to be successful. And finally, 4) create a tool that facilitates the resolution of intractable environmental conflicts.

The results of papers I-III demonstrate the complexity of environmental conflict through examining various aspects of the relationship between environmental groups and corporations, this has been achieved through primarily focussing on the campaigns of ENGOs against the operating practices of APRIL. This complexity is broadly based on various factors including: different interests and values systems present in the conflicts (papers I & II), the different strategies of the ENGOs (papers I-III) as well as the motivations, for example, behind CR (papers I & II). Paper IV is a response to the findings of the previous papers by providing a tool to help overcome this complexity, thereby facilitating the resolution of environmental conflicts. In general terms the main findings of the study are presented according to their heading.

Before attempting to resolve a conflict it is vital that the problem is well understood (Wondolleck and Yaffee 2000), this research has attempted to do this not only in relation to the specific conflicts in Indonesia and Finland, but also forest conflicts (between ENGOs and forest industry companies) in general.

6.1.1 Complexity of environmental conflicts

In this research the complexity prevalent in environmental conflicts is demonstrated in various areas, including, the different perceptions of reality that exist regarding the conflict issues (papers I & II), as well as the different interests and values that underpin these perceptions (papers I-IV). More specific examples include: what ENGOs are trying to achieve (papers I-III), the differing roles that legitimacy plays in environmental conflicts (paper II), and determining the impact of ENGO campaigns (paper I). Previous work in the field of environmental conflict provides other examples of their complexity (e.g. Lewicki et al. 2003, Nie 2003, Wittmer et al. 2006), for example the conflict revolving around the northern spotted owl (Lange 1993, Moore 1993).

The complexity found in the example conflicts can be a result of the original issue becoming immersed under the weight of conflicting interests and values, which determine how the issue is perceived by the company, ENGOs and other stakeholders. This influences many areas of environmental conflict, including the relationship between ENGOs and forest industry. An example of a source of complexity is the interests and roles of the ENGOs; a good illustration of which is seen in the Upper Lapland conflict (paper III) where there were significant differences within the ENGO the Finnish Association for Nature Conservation (FANC) over the aims of the campaign against the Finnish Forest and Park Service. The FANC headquarters in Helsinki placed as much emphasis on the rights of Sámi reindeer herders as conserving old growth forests, while the group's regional office in Lapland played down the Sámi land rights issue for fear of alienating other local interests. This is also an example of the application of resource mobilisation theory, with the group trying to safeguard its resource access.

Determining the impact of campaigns by ENGOs (paper I) is complex as there are numerous variables (papers I-III) including the judges, the ideology of the campaign leader and the ENGO, as well as whether the company has responded to the campaigns or other internal or external factors, a finding supported by Tilly (1999). For example, the APRIL managers interviewed believe that the ENGO campaigns had little impact on their operations. However, Raitzer (2008: 44) presents a different view "APRIL officials credit NGO advocacy with virtually all improvement in sustainability made since 2001". A possible reason for this difference is the change in many management positions at the company, including many that were interviewed as part of this research (e.g. Vice President Operations Environment and the Environment Affairs Manager).

The actions taken by APRIL, nevertheless, signal a significant investment in ensuring the sustainability of its operations, though it still has some way to go. However, this is disputed not only by some of the ENGO campaign leaders, but also by a few academics and scientists working in the field of forestry in Indonesia. For instance, Pirard and Cossalter (2006) question APRIL's promise to source fiber solely from plantations by 2009. This complexity is mirrored in other work regarding the impact of ENGO campaigns (Keck and Sikkink 1998, Rucht 1999, Cartwright 2003, Della Porta and Diani 2006). The difficulty of determining the impact of ENGO campaigns is also illustrated by Raitio's (2008) work on conflict management in Upper Lapland. In this conflict the responses of the Finnish Government, the Finnish Forest and Park Service, as well as Stora Enso and other clients, is hard to determine under the differing claims by the groups as well as impact of other pressures on the forest industry in Finland, an example of which is the closure of Stora Enso's Kemijärvi pulp mill in 2008, which used timber from Upper Lapland.

The complexity is further deepened by the perceived differences between the legality and morality of operations, for example of APRIL and the Finnish Forest and Park Service. Both claim to be acting within the confines of the law, but are criticised by ENGOs for acting immorally. The situation in Indonesia becomes murkier with the role that the Indonesian State plays, though to a lesser extent now as in the past, as a driver of deforestation, including because of corruption (Tacconi et al. 2004, Henley 2008), and policies that actually deter sustainable forest management practices (Jurgens 2006, Raitzer 2008).

An additional complexity is whether the parties involved actually want the conflict resolved. This point was also raised by Raitio (2008), in her research into conflict management in Finland, with a special focus on the Upper Lapland conflict. She felt that it is often the case that it is not in the interest of the 'weaker parties' for the conflict to be

resolved (Raitio 2008). For instance, in the Upper Lapland conflict this may be applied to the Sámi reindeer herders as the conflict keeps their other grievances, such as their land rights, in the spotlight. While for Greenpeace the continuing conflict ensures they maintain a high profile in the media which is of benefit, for example, regarding membership (Gamson 2004, Vliegenthart et al. 2005) and for increasing their leverage in future campaigns (King 2008). For example, building their reputation which would give them a competitive advantage over their targets (Deephouse 2000), but also compared to other ENGOs in the race for funding and membership. Additionally, Raitio (2008) points out that there is a perceived direct link between the resolution of the conflict and future job security of the Finnish Forest and Park Service workers in the area. The interests of the Finnish Forest and Park Service workforce will be centred on ensuring that their jobs are secure, especially in the current climate of increased pressure on the Finnish forest industry. This raises the point that some of the conflicting parties may turn away from the findings of the ethical analysis based on the grounds that they do not wish the conflict to be resolved. This also highlights the value of the analysis as it would likely raise this issue.

As the research progressed it became increasingly apparent that cynicism as well as, to varying degrees, hyperbole often dominate environmental conflicts (papers I & II). Short (1991) describes this as agitative rhetoric saying that it often permeates conflicts, firstly as some of the parties attempt to raise the profile of the conflict issue and secondly to strengthen their bargaining position. It is apparent that often the conflicts do not move beyond this agitative rhetoric stage which is demonstrated in the APRIL and Upper Lapland conflicts, though in both cases the rhetoric is a tool used by many stakeholders to get message across in order to strengthen their position. Admittedly this rhetoric plays an important role in raising the profile of the issue, however, it is also coming at a cost of the continuation of the conflict.

During the example campaigns the companies often met with the ENGOs, whether formally or informally. However, this method of communication is more beneficial to the companies than to the ENGOs, as theoretically it would keep the conflict contained. In other words it is in the ENGOs interests to have the communication take place in the media, where companies would have less control of the message, as this would raise the profile of both the issue as well as the ENGO itself. Additionally it could shape how the conflict is perceived thereby influencing its outcome (Deegan et al. 2002). Using the media as a platform for communication intensifies not only the complexity of the conflict but also the intractability; as getting media coverage often entails maximising the imagery and strength of the language in order to gain coverage (della Porta and Diani 2006). This leads onto employing the ethical analysis as a tool to move away from the extremes portrayed in the media (paper IV). However, removing media from the ENGOs armoury would weaken their position which would likely make them reluctant to accept the results of analysis.

Science and research are often co-opted to represent interests (e.g. Tait 2001, Scott 2003, Sarewitz 2004), which is seen in discussions, for example, relating to the use of Genetically Modified (GM) crops (Tait 2001, Sarewitz 2004) as well as climate change (e.g. Sarewitz 2004, Washington Post 2005). One should consider that the truth that science puts forward will not always be acceptable to the conflicting parties, and therefore often differing fields of science are co-opted by the parties (Sarewitz 2004). In certain respects this is also the case in the example conflicts. The Upper Lapland conflict is a good illustration of this, with, for example, the conflicting parties believing that their claims are supported by science, for example, on the issue of the impact of forestry on reindeer herding (e.g. Inarin Paliskunnat 2002, Metsähallitus 2005). While in the APRIL conflict it was illustrated in the concerns of

the some of the interviewees questioning the motivation of the research, in other words believing that the research is motivated by interests and values. However, science and research have significant potential in facilitating resolution, or management of the conflicts, for example, in validating the claims made by the various groups, or in conducting the ethical analysis (paper IV), as well as in raising awareness and provide a better understanding of the issues at stake. Though it should be kept in mind that this is not without its dangers, for example, scientists need to ensure that they minimise the impact of their interests and values on results of their work. Additionally, science is often guided by money, in other words it is easier to do research when it is well funded, for instance, there are concerns regarding the intrusion of politics in the funding of research (Hammersley 1995). This should be considered against the backdrop of comparing the financial strength of multi-national corporations with, for example, Indonesian ENGOs, in addition to the credibility of the information. For instance, APRIL has employed various universities in Indonesia and Singapore to conduct research into the various impacts of its operations. Though the company claims the research is conducted free of interference its findings are still indirectly queried by some ENGOs. It also raises questions regarding the credibility of scientific information and how this information is used in often emotionally or politically charged environments (Mills and Clark 2001, Ozawa 2005).

Each conflict regarding natural resource management is unique in many ways, including its intensity and actors involved (Buckles and Rusnack 1999, Hellström 2001) nevertheless there has been significant amount of work done defining the types of conflicts (Table 1), as well as resolution methods, for example. There is, however, an inherent danger of over simplification, which can result in further complexity as the result of, for instance, misunderstandings. The ethical analysis, if mishandled, could also further entrench the conflict, making it even more complex. Therefore, significant emphasis should be placed on the methods for conducting the ethical analysis, whether in the composition of the team performing the ethical analysis to the thoroughness of the analysis.

The credibility of the team conducting the ethical analysis is vital. If the impartiality of the group is strongly questioned then the acceptance of the ethical analysis process, as well as its outcomes will be threatened. In order to safeguard against this it is proposed that a multidisciplinary group of academics perform the analysis (in conjunction with the various conflict stakeholders). The importance of the careful selection of the academics is underlined by the fact that in 2007 257 academics wrote an open letter to the Minister of Agriculture and Forestry calling for the ending of logging in old growth forests in Finland, also expressing their support for reindeer husbandry over commercial forestry (Tutkijakirje n.d.).

Though science may find itself adding to the complexity of environmental conflicts, nevertheless it is a vital tool for dealing with this intricacy. Where science is devoted to discovering the truth, rhetoric, that is often prevalent in conflicts, is a kind of anti-truth (Bruner and Oelschlaeger 1994). In other words for a shared reality to exist science must come to the fore for ENGOs and companies to legitimise their operations (paper II) as well as in undertaking the ethical analysis (paper IV).

6.1.2 Diverse strategies employed by ENGOs

The research illustrated that ENGOs employ different strategies to achieve their aims (papers I-III). Work by Gamson (1990) and Tarrow (1993) found that the effectiveness and impact of social movements was determined by their policy repercussions, the findings of

the research (paper III, in addition to paper I) agreed with this to a certain degree. Even though the campaigns being researched in this work were against corporate targets they clearly had a strong policy focus. However, it should be noted that other factors featured strongly, including the ENGOs' strategies. This exacerbates the complexity of the conflicts: As both the strategies and ultimate aims of the ENGOs heighten the intricacy of the situation.

In the campaigns against APRIL and the Finnish Forest and Park Service the ENGOs adopted different strategies which are reflected in the tactics employed in the campaigns, the perceptions of the target companies (including the concessions made by the companies) and ultimately whether there is an acceptance of the opponent's legitimacy. The strategies not only maximise the effectiveness of the campaigns, but also ensure that the ENGOs carve out a niche for themselves. This second reason is linked to resource mobilisation theory, for example, set out by Cress and Snow (1990) whereby the groups are acting to ensure they secure their future ability to campaign. McAdam et al.'s (1996) understanding that groups must overcome five hurdles to achieve change also illustrates this, where groups are striving to safeguard their future and therefore aim to appear distinct compared to the others. Therefore they are striving to:

1. Attract new recruits
2. Keep the current recruits
3. Generate media coverage
4. Mobilise support of the general public
5. Limit the social control options of the group's opponents.

ENGOs will approach this in different ways, based not only on their values but also on their interests. There is a relatively large pool of potential donors, recruits and supporters (or as Cress and Snow (1990) put it: people, expertise and resources) with each ENGO appealing to different groups within this. Aldo Leopold (1949: 259) illustrates this well; he believed there were two types of foresters: Group A who views the land solely on its ability to facilitate growth (production), whilst Group B views the land on a broader ecologically sensitive perspective. This can also be applied, in this simplistic form, to the ENGOs; group A views the land (forest) from an ecological (biodiversity) and social (protecting indigenous rights) perspective while group B acknowledges the other values in the forest. Each group appeals to a different constituency as reflected in the differences between, for example, WWF Finland and FoE Finland (paper II).

The differing strategies, however, create a potential problem for the ENGOs, as they attempt to protect their future this could weaken the message as their focus and effectiveness is often severely diluted, for instance, the sometimes contradictory tactics and statements by WWF Indonesia and FoE Finland (papers I & II). Haley and Clayton (2003) give examples where the ENGOs are more concerned for their profile with potential donors than with those that are supposed to be protecting. Though the examples given by Haley and Clayton (2003) are linked more to mismanagement, the mixed messages given by the different ENGOs in the APRIL campaign maybe counter-productive.

A way to conceptualise the strategies employed by the ENGOs is presented in figure 6, which partially adapted from Keck and Sikkink (1998). Initially, the transnational company (TNC) resists the pressure from domestic ENGOs. The domestic ENGOs contact and involve international ENGOs, increasing the intensity of the pressure on the TNC, especially through targeting the TNC's customers, shareholders and partners in other

nations. This is illustrated in both the Upper Lapland and APRIL conflicts. For example, for the campaigns against APRIL FoE EWNI targeted various associates (paper merchants and financial institutions) based in the UK, being German based Robin Wood targeted Papier Union which is a German company and FoE Finland targeted UPM. For the Upper Lapland conflict ENGOs in the UK and Germany (see appendix 2) were targeting clients of Stora Enso who is a customer of the Finnish Forest and Park Service. This coverage, in the campaigns, of as many areas of the operations of the target company, a so called blanket strategy or campaign, ensures that the target company has to react to the pressure, in the case of APRIL it is a view supported by Raitzer (2008), while for the Finnish Forest and Park Service Raitio (2008) present examples of the success of the blanket strategy.

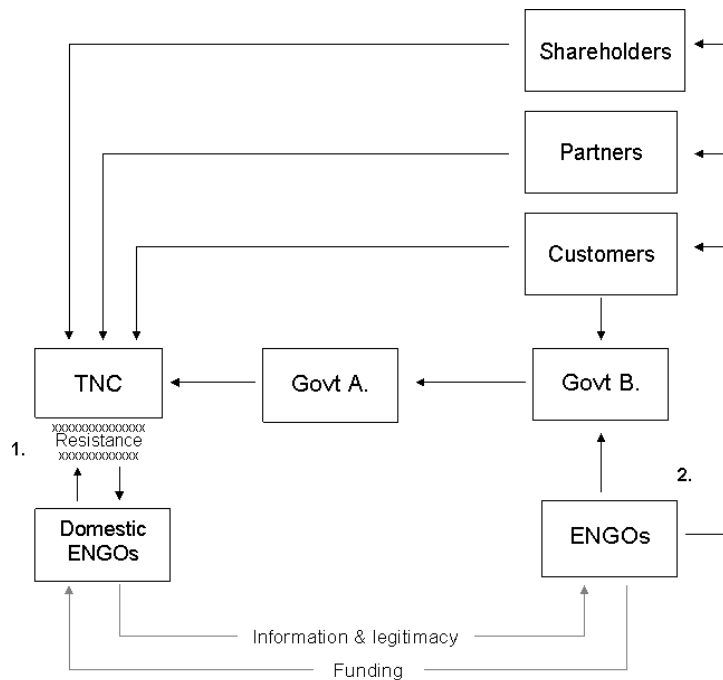


Figure 6. Blanket campaign by ENGOs targeting a transnational corporation (TNCs). Adapted from Keck and Sikkink (1998). (1) Initially the TNC (in developing country) resists pressure from domestic ENGOs, who then contact peers in developed countries for assistance (2) thereby increasing the intensity of the pressure on the TNC through targeting the TNC's customers, shareholders and partners in developed nations. Lines / Arrows indicate pressure, except dashed lines for illustrating the relationship between ENGOs. Govt A = Government of host country of TNC operations, Govt B = Government of country that hosts partners of TNC.

Although the ENGOs studied in this research (papers I-III) can not be considered the mildest or most fundamental there are significant differences between them (illustrated in Figure 7). These differences have been found in other work on ENGOs (e.g. Murphy and Bendell 1997, de-Shalit 2001, Rootes 2004, den Hond and de Bakker 2007). In the APRIL

case one can view the blanket type of campaign (Figure 6) as being applicable not only on a geographical level, but also in the strategies employed (from confrontational to collaborative). Where, it could be said, the result forced APRIL to work with WWF, thereby requiring APRIL to improve its operations. However, this comes at a price; for example, on one hand APRIL and WWF are working together on an issue such as illegal logging, while at the same time other ENGOs, including Eyes on the Forest (2006) and Down to Earth (DTE) (2006) are criticising APRIL for being involved in illegal logging. The confusion is further exacerbated by the fact that WWF Indonesia is a member of Eyes on the Forest. This makes the situation harder for APRIL's customers and associates to determine the reality of the situation regarding APRIL's operations.

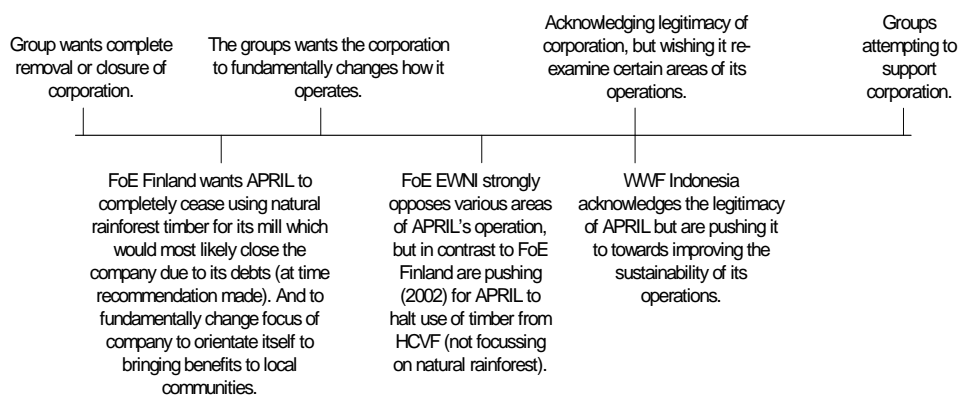


Figure 7. Scale of ENGOs' orientation towards target corporation, based on Broad and Cavanagh (1997) (examples used are three of the ENGOs campaigning against APRIL).

A similar level of complexity regarding the strategies of the ENGOs can be seen in the campaigns against APRIL's competitor Asia Pulp and Paper (APP). Starting with WWF campaigning against the company, then 2003 saw an agreement between WWF and APP on the issue of sustainability of the company's operations (WWF 2003), an agreement that achieved considerable media coverage. The agreement was criticised in various quarters, including by other ENGOs, as a form of greenwashing (Rose 2004). Soon after WWF walked away from the agreement, stating that APP was failing to live up to its promises. Since then APP has lost its contracts with Ricoh (which is an international company that produces electronic products, primarily cameras and office equipment such as printers, photocopiers and fax machines) and Office Depot (which is an international company that supplies office products and services). However, in October 2008 APP achieved Programme for the Endorsement of Forest Certification (PEFC) chain of custody for four of its mills in Indonesia (ProPrint 2008). This further deepens the complexity of the situation in Indonesia with, on one hand, organisations, such as CIFOR (e.g. Pirard and Cossalter 2006, Pirard and Rokhim 2006) and ENGOs being openly critical of APP's operations, but on the other hand they achieve certification which allows them to claim that products from these mills are sourced from sustainably managed forests, as well as getting the apparent, though temporary, support of WWF.

For the Upper Lapland conflict the strategies of the ENGOs also varied. Greenpeace Finland took a very confrontational stance in many aspects of their campaigns, including the blockading of ships carrying paper originating from forests in the region (e.g. Greenpeace 2005) and establishing the Forest Rescue Station in Inari, the purpose of which included increasing the media attention on the activities of the Finnish Forest and Park Service in the region (Raitio 2008). WWF Finland approached the issue in a different manner working with the Finnish Forest and Park Service, for example, taking part in the so called Dialogue Process with FANC and the Finnish Forest and Park Service regarding the operating practices of the State enterprise in the region (Raitio 2008).

Drawing together the issue of ENGO strategies and certification again illustrates the complexity of understanding the rights and wrongs underlying numerous environmental conflicts. In both cases stakeholders can be confused by the sometimes contradictory actions of ENGOs, just as they are by the differences between a Forest Stewardship Council (FSC) certified forest product compared to one which comes with a stamp on its packaging highlighting that the tree that makes up the components of the product came from renewable sources. In other words, the strategies employed by ENGOs, which is a reflection of both their values and interests may come at a cost of weakening the impact of the campaign.

Companies with sullied reputations, such as APP and APRIL, often attempt to associate themselves with organisations such as WWF. An example of this was WWF accepting funding (US\$ 18.4 million) from HSBC, the banking corporation, in 2002. The donation caused, according to a British newspaper, significant division within the ENGO (Independent 2002). Additionally HSBC has been criticised by FoE EWNI for funding projects involved in deforestation in Indonesia (FoE 2003). This again raises the question of how do the stakeholders, such as the customers and partners, determine the reality of the situation, for example regarding the motivation behind WWF's strategies and choice of campaigns. A similar complexity is also found in the Upper Lapland conflict regarding the funding of two of the ENGOs campaigning on the issue, where they receive funding from the Finnish State while at the same time criticising the State owned enterprise, this has been often highlighted by their opponents (METO 2005).

Just as corporations have become increasingly powerful (John and Thomson 2003, Sutton 2004) so have ENGOs (e.g. Betsill & Corell 2001, Castells 2004), this includes in financial terms (Jepson 2005). Jepson (2005) lists 20 ENGOs with a turnover in excess of 15 million Euros, including 5 with a turnover of over 100 million Euros. Funding is a big influence on the strategies employed by groups (Bartley 2007), as well as their professionalism (Brulle 2000, Brulle and Jenkins 2005). For example, Bartley (2007) feels that some funding sources, including foundations, encourage short-termism in the aims of the groups, and the moderating of goals and strategies.

6.1.3 Impact of ENGO campaigns on stakeholder salience

A key feature of stakeholder salience theory (Mitchell et al. 1997) is that a stakeholder's attributes of power, urgency and legitimacy are transitory. It is apparent that when ENGOs start campaigning against a company this increases the salience of many of the stakeholders (papers I & II). This is because the company associates do not wish to be linked with a company involved in questionable practices, therefore they may choose to end their association or press the target company to change its operations. Additionally, the salience of the southern ENGOs would have increased as a result of support provided by northern

ENGOS, for instance FoE Finland's support of Jikalahari, the Indonesian ENGO, would have increased its prominence through, for example, its raised profile. At the same time this would have increased the legitimacy of FoE Finland's position. Therefore, FoE Finland's campaign would see them moving from being a non-stakeholder (8) to being a definitive stakeholder (7) in their ability to pressure APRIL (Figure 8).

The increased salience of each of the example stakeholders comes about through different impacts as a result of the campaigns by the ENGOS. For example, Mitchell et al. (1997) divide the power attribute into three classifications: coercive power (based on physical resources including force, restraint and violence), utilitarian power (based on material and financial resources) and normative power (based on symbolic resources including ability to command media attention). Therefore, as a result of the campaigns it could be said that the local communities' coercive and utilitarian power have increased, for example, APRIL in order to increase its area of plantations has increased its number of joint ventures with local communities in establishing plantations (APRIL 2006). While FoE Finland and FoE EWNI's normative power have increased significantly as a result of the campaigns through their ability to get the media to cover the campaigns' developments.

Soon after FoE Finland started its campaign against APRIL, Indonesia was heading into a significant financial crisis. It could be said that the crisis brought about changes to the salience of such stakeholders as the financial institutions, especially as APRIL was seriously affected by the crisis (IHT 2005, Asia Sentinel 2006) this increased the companies reliance on the banks to continue its operations. The timing of the financial crisis would have also intensified the pressure by the ENGOS as APRIL would not want to lose support of its customers, financiers and partners in such financially unstable times. This is also a current pertinent issue with the company announcing, in November 2008, a temporary reduction in output as a result of lack of fiber for its mills (following the police seizures of 1 million m³ of timber) as well as the current downturn in demand for pulp and paper (Jakarta Post 2008a). This current climate will increase the salience of various stakeholders.

Additionally the links between salience and, for example, external pressure on a company such as a financial crises encourages the development of the political process model into a kind of corporate version, a corporate performance model. One could say that ENGOS have a greater likelihood in succeeding in their aims if they are campaigning at a time when the target company is already under pressure from other sources. Just as McAdam et al. (1996) put it that changes in the social situation that weaken the political order invite challenges by social movements, threats to the performance of a corporation may also encourage the challenges.

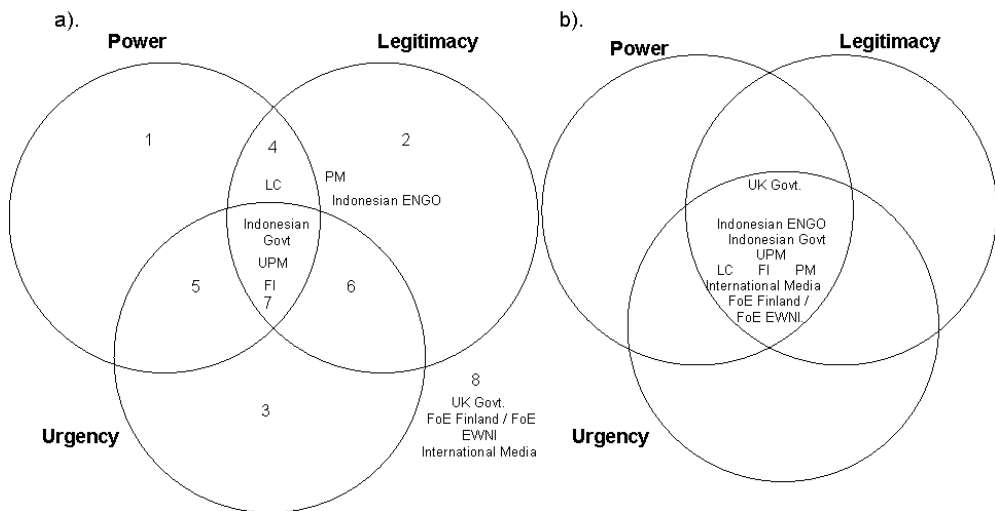


Figure 8. An illustration of the impact of the ENGO campaigns on stakeholder salience (Mitchell et al. 1997: 874) based on the presence of three attributes (power, legitimacy and urgency). a). is before the ENGO campaigns, b). is during the campaigns. LC = local communities, FI = financial institutions, PM = paper merchants, UPM = UPM Kymmene. Low salience (1-3), moderately salient classes (4-6) and highly salient stakeholder (7), 8 is non-stakeholder.

6.1.4 The web of legitimacy, stakeholders and corporate responsibility in environmental conflict

The research illustrates the overlap between stakeholder and legitimacy theories under the umbrella of corporate responsibility (paper I & II). Companies naturally want to distance themselves from possible sources of criticism and potential disruptions to their operations by stakeholders. As a result they take both reactive and proactive measures to strengthen their legitimacy, this sees the companies investing in, for example, local communities in order to minimise both potential disruption at a local level by disgruntled locals, as experienced by APRIL and the Finnish Forest and Park Service. They also do this to deflect criticism from ENGOs, again as experienced by both enterprises, which could significantly impact on sales (Cashore 2002, Bartley 2003, Kotler and Lee 2005). Recently there have been increasing questions regarding the primacy of shareholders in the decision making process of corporations (e.g. Freeman 2005). Though both companies used as examples in this research are not standard public companies; the Finnish Forest and Park Service is a state owned enterprise and APRIL is almost wholly owned by the Indonesian businessman Sukanto Tanoto, they are nevertheless prime examples illustrating the importance of the awareness of the needs the stakeholders thereby helping to ensure their continued profitability.

Corporate responsibility has developed significantly in the forest industry (Mikkilä 2006), just as the concept (corporate social responsibility (CSR) and CR) has evolved over time since Friedman's (1970) belief that the social responsibility of business was to make a

profit, to, for example, one of corporate responsibility through moral decision making (Goodpaster 1983) and economic, social and environmental responsibility and its linkage to sustainable development (Welford 2002). There is a great deal of difference between the different definitions of the concept (Garriga and Melé 2004):

“Corporate social responsibility means something, but not always the same thing to everybody. To some it conveys the idea of legal responsibility or liability; to others, it means socially responsible behaviour in the ethical sense; to still others, the meaning transmitted is that of ‘responsible for’ in a causal mode; many simply equate it with a charitable contribution; some take it to mean socially conscious; many of those who embrace it most fervently see it as a mere synonym for legitimacy in the context of belonging or being proper or valid; a few see a sort of fiduciary duty imposing higher standards of behaviour on businessmen than on citizens at large” (Votaw, 1972: 25 in Garriga and Melé 2004).

Though written over thirty years ago the statement is still valid today. It raises an important issue regarding this research of APRIL’s duties concerning responsibility and how this is reflected in their legitimacy, in other words are APRIL’s community development projects actually measures for ensuring profit maximisation, or as Jensen (2001: 9) puts it of ‘enlightened value maximisation’ where the company makes concessions to its stakeholders to facilitate its operations (the company is attempting to minimise the salience of the stakeholders (Figure 8))? Or are APRIL’s CR projects attempts by the company to achieve a good society, a kind of philanthropy, which are the basis for the company’s position regarding its stakeholders (Garriga and Melé 2004)? What is clear is that APRIL is continuously trying to deflect criticism from ENGOs and legitimise its operations, but also in many respects has to play the role of government with regard to building infrastructure in the area, for example building schools and mosques, as well as tarmacking roads and so on, something that forestry companies in Scandinavia and North America no longer have to do. These ultimate motivations can not be clarified using the ethical analysis, though it will go some way to raise the awareness of the motivation behind CR projects, and how they are perceived by the stakeholders.

Returning to what a corporation does when its legitimacy is questioned; they adapt with regard to their relationship with society (Dowling and Pfeffer 1975, Linblom 1994). However, instead of the corporation targeting society it is, in actual fact, focusing on the stakeholders (which is a truer reflection of the priorities of both the ENGOs and corporations):

1. Change its operating practices to meet the expectations of the stakeholders, and inform the stakeholders of these changes.
2. Not change its operations, but, through education and information, demonstrate the appropriateness of its operations to the stakeholders.
3. Attempt to change the perceptions of the stakeholders through association with highly legitimate symbols and try to change the stakeholder’s expectations of its performance.

Broadly speaking, despite their differences and institutional positions, APRIL and the Finnish Forest and Park Service have both employed all these strategies, with a great deal of emphasis being on portrayal. Additionally ENGOs utilise variations of the three strategies as well, reflecting resource mobilisation theory:

1. Adapt its strategies and aims to meet the expectations of the stakeholders, in other words responding to the values and interests of the stakeholders in an attempt to gain their support. Additionally making sure the stakeholders are aware of how the ENGO's campaign is in their interests, and is a reflection of their values.
2. Not change its strategy, but, through education and information, demonstrate the appropriateness of its strategy and aims to the stakeholders.
3. Attempt to change the perceptions of the stakeholders through association with highly legitimate symbols as well as trying to change the stakeholders' pre-conceptions of the environment movement.

Firms are investing in their reputation capital (Gunningham et al. 2003, Jordan and Stevenson 2003), this could be expanded to include ENGOs. In other words, just as corporations invest in CR so ENGOs invest in their campaigns, whether for the short or the long term; effectively just as corporations have to protect their brands so must ENGOs.

The issue of legitimacy is further clouded by the differences between reputation and legitimate behaviour (Alsop 2004), and the difficulties in differentiating between them. For example, APRIL would see their reputation as failing to match their corporate responsibility activities, while FoE Finland would likely take the opposite view, that while APRIL continue to be able to market their products they would see it that their reputation continues to soar above their actual activities. The same could be applied to the ENGOs, with some of the stakeholders. For example a majority of the UK paper merchants selling PaperOne products, questioning the legitimacy of the ENGOs as well as believing they distort the truth. If the ENGOs wish to gain the support of the merchants, for instance, they would have to respond in line with the strategies presented by Dowling and Pfeffer (1975) and Linblom (1994).

The legitimacy of the ENGOs is also based on the repeated failure of states and international organisations to confront the environmental and social impact of TNCs which has created an opportunity for the growth of ENGOs (Newell 2001) as they attempt to encourage the regulation of the companies. One could view this as an extension of the political process model, where the political environment encourages action by ENGOs, though this time targeting both the political and corporate regimes. For example, the Indonesian State has been deeply implicated in deforestation in the country (Tacconi et al. 2004, Jurgens 2006, Henley 2008), along with the pulp and paper and oil palm industries, hence the numerous campaigns by various national and international ENGOs targeting those industries, as well as the government.

6.2 Review of material and methods

6.2.1 Limitations of data and methods

The research in Indonesia (papers I-III) was curtailed by issues of security and doubts regarding the ability to conduct impartial research in the area around APRIL's mill in Riau. The issue of conducting independent research was regarding the desire to interview local communities around the mill. On the first trip to the mill, in December 2003, to assess the feasibility of the research, it was realised that it was impractical to cover this aspect of the research. This undoubtedly caused some limitations in the findings of the research, not just regarding ascertaining information from local communities but also for casting a wider net

in interviewing other stakeholders. The inability to interview members of the local communities was slightly compensated for by independent research conducted by the Universities of Indonesia, Singapore and Riau, as well as independent auditing by SGS and ProForest, though as mentioned before some ENGOs indirectly question the validity of the audits and the research by the universities.

The concern of independent research can also be applied to the material collected from the interviews and questionnaires. In other words, each of the organisations is attempting to present their version of reality, seeking to ensure that the findings of the research are favourable. It is beneficial to an organisation to have their work independently vindicated by independent research. This issue had to be considered when conducting the interviews and subsequent stages, for example, trying to ensure statements by representatives of one of the organisations was supported by documentary evidence. This, however, likely increased the complexity of the situation.

The research focussing on Indonesia (papers I-III) would have been greatly enriched by including APP, APRIL's competitor, in the studies. For example, the ENGOs campaigning against APRIL were invariably campaigning against APP as well, with the notable exception of FoE Finland. Studying the responses of APP to the campaigns, as well as a comparison of APRIL and APP, would have been of great benefit to various aspects of the study, including regarding methods taken by the companies to attain legitimacy.

The quantitative and qualitative methods employed to determine how ENGOs define a successful campaign (paper III) were selected to allow a comparison of the results that they created. It would have been beneficial to have a higher number of focus campaigns included in the qualitative method. Appendices 1 and 2 illustrate the large number of ENGOs involved in the campaigns against APRIL and the Finnish Forest and Park Service, however, it was decided to limit the groups included to those that were involved in the issue in a high profile way. Additionally as a comparison, Jepson's (2005) work on ENGO's success, accountability and governance was partially based on thoughts of chief executives from six ENGOs, validating the qualitative aspects of the work. The quantitative area of the work (for paper III) had a satisfactory number of responses, but the low response rate should be acknowledged.

6.2.2 Limitations of study framework

In general terms, the subject of the research; conflict over the utilisation of forests, with a special focus on the relationship between ENGOs and forest industry, can be viewed as being highly charged. This was an issue during the various stages of the study. An example of this occurred early in the research, when conducting the background interviews for papers I and II, where a representative of one ENGO declined to be interviewed on the basis that he felt that the motivation of the research was to undermine the ENGO's work, while advancing the interests of the Finnish forest industry. This kind of concern arose numerous times in the research, as well as in the writing of the papers. Qualitative research is invariably subjective and linked to the values of the researcher, especially in such emotive areas, and should be acknowledged (Kimmel 1988), as credibility as a researcher is vital throughout the whole research process. Additionally, it was important to ensure that the research methods did not result in an escalation of the conflicts. Part of confronting these issues was to discuss these matters with representatives from one of the focus companies in the research as well as a representative of one of the ENGOs, though she was not involved in the campaign. During the discussions, which were primarily held during the

data collections process, issues such as the research plan, ensuring independence in the research process and people to be questioned were covered. However, my values, as well as the pre-conceptions of those interviewed regarding my motives for the research would most likely have been an issue for some questioned.

Research into the real time activities of various corporations and stakeholders is constrained by its inability to remain up to date. For example, within a month of the publication of the paper 'Assessing the impact of environmental campaigns against the activities of a pulp and paper company in Indonesia' (paper I) there were further developments, for instance, publication of reports by various parties to the conflict including Eyes on the Forest claiming APRIL is still involved in illegal logging as well as academic publications, including Brockerhoff et al. (2008) and Nasi et al.'s (2008) research into the impact of plantations on biodiversity, with a particular focus on Indonesia. These developments have continued and will continue for the foreseeable future, as each of the parties defends its position.

Theoretically the ethical analysis could be an important tool in facilitating the resolution of environmental conflicts. However, its viability will not be determined until it has been applied. This will test whether certain concerns regarding the ethical analysis are warranted; these include the ability to conduct the analysis in an interest and value free manner, as well as whether a universal character exists for each group.

6.3 Recommendations

6.3.1 Future Research

The present research has created as many questions as answers, in areas such as the true implications and motivations of Corporate Responsibility, the strategies of ENGOs, as well as the role of science in resolving environmental conflicts. The research issues created by this work are presented below.

A comparison of green credentials of pulp and paper companies in Asia, South America with Europe and North America and their growth would be of great interest. This goes against a backdrop of the growing feeling that forestry companies in North America and Europe are only going to thrive if they prove themselves to be the ecologically superior choice in comparison to their rivals in the Asia and South America whose products tend to be cheaper. Additionally, as companies such as Stora Enso and UPM reduce their operations in their home countries, for example 2008 saw both companies closing or announcing the closure of numerous mills in Scandinavia and Germany (Print Week 2008), while at the same time increasing their level of investment in developing nations, it would be interesting to compare various aspects of their operations in different continents, from reporting, to workers and indigenous peoples' rights. This goes on against a backdrop of increased pressure on these companies regarding their future financial strength.

Hopefully, the work in presenting the roles of legitimacy and introducing the ethical analysis to facilitate resolution of forest conflicts stimulates more research to be directed at the important issues they address. For instance, future research should include implementing the ethical analysis in an environmental conflict such as the APRIL or Upper Lapland conflicts. This trial of the analysis should focus not only on facilitating resolving the example conflict but also examine the validity of the analysis, including the tools employed conducting it and whether it is suitable for all types of conflict regarding the use

of forest resources. For example, the issue of who would conduct the analysis is potentially very problematic. Additionally, research should also determine whether the analysis can be employed in other types of conflict regarding natural resources.

On a few occasions during the interviews for the research (papers I-II) the issue of asymmetrical globalisation arose. For example, one of the APRIL managers felt that the ENGOs and western governments were inhibiting Indonesia's development through placing barriers in the way of its developing pulp and paper industry. The feeling was that governments, like the Finnish government, were being caught up in the hyperbole created by the ENGOs. The APRIL manager felt that the governments were so willing to listen to the ENGOs because of their desire to protect their own nation's forest industry. This view is somewhat supported by the former Chairman of General Agreement on Tariffs and Trade (GATT, the predecessor to the World Trade Organisation) who believes that Governments in some developed countries are using the excuse of combating illegal logging to keep timber products from tropical countries out of their markets, thereby protecting their domestic timber industry (Oxley 2009). This subject, asymmetrical globalisation, has arisen before in work relating to the free market and globalisation (see for example Yotopoulos and Romano 2007) and the failed responsibility of developed nations, principally the USA, with regards to global governance (Griffin 2003). Research into this with a special focus on the forest products sector would be of great interest and value, especially considering the way the developed world, particularly the USA pursues a kind of neo-liberalism with strings, in other words free markets as long as they are in its interests (Humphreys 2006).

Additionally, research into the links between values, interests and strategies of the ENGOs would be of great interest. As previously mentioned there are apparent differences between the ENGOs regarding their strategies (papers I-IV). It would be worth investigating the reasons behind this, for example, the values of the individual ENGO campaign leaders, the sources of funding for the groups, as well as how they select their campaigns and the strategies involved. These are issues touched upon by in this research (papers I-III) and in other work (e.g. Murphy and Bendell 1997, de-Shalit 2001, Kuhndt et al. 2004, Rootes 2004, Brulle and Jenkins 2005, den Hond and de Bakker 2007), but not thoroughly explored. There is clearly an ongoing debate within the environment movement, and social movements in general, regarding tactics in campaigns against corporations, illustrated by the recent criticism of Amnesty International for relinquishing its right to boycott. In response Amnesty defended its position by stating that legitimacy for NGOs comes not only from their ability to talk but also they must listen (Jordan and Stevenson 2003) which underlies the need for further research in this area.

Of additional interest would be a more detailed examination of the application of the political process model (e.g. McAdam et al. 1996), but applied to the corporate world. In other words do changes in the market situation of the companies make them more conducive to challenges from ENGOs. For example, do the current challenges facing APRIL result in further campaigns by ENGOs as they take advantage of the company's weakened position. This would involve investigating the triggers for campaigns, as well as whether the targeted companies capitulate, resist or pre-empt the campaigns and linking this to other external pressures on the companies.

There is a need for further development of methods for the analysis of this complex topic which would provide a better understanding of the problems that are the foundations of environmental conflicts. In addition to the ethical analysis being empirically applied, a modified version of the Rokeach Value Survey (RVS) (Rokeach 1973) could also be used in an environmental conflict. An alternative to the RVS is the Schwartz Value Survey (SVS)

(Schwartz 1994). Both are quantitative methods allowing the determining of the respondents' values. Both have never been applied to environmental conflicts and could be a valuable tool in support of the ethical analysis. Xu and Bengtson (1997) have measured the values of forestry professionals, environmentalists and the general public using on a content analysis of expressions used by each of the groups in newspaper articles, however, direct surveys such as RVS could be more enlightening.

6.3.2 Recommendations for corporations and ENGOs

One can view environmental conflicts as being a necessary evil as a driver for change (Hellström 2001, Krott 2005). Nevertheless these conflicts are of significant concern to forestry companies whether directly through disruption of operations, impact on sales or indirectly through restriction on access to funding from financial institutions. This underlines the need to ensure that they are managed rather than being allowed to descend into hyperbole where one side labels the other as, for example, in the Upper Lapland conflict, as Nazis or al-Qaeda (Raitio 2008), a symptom of intractability. From a Finnish perspective these types of conflicts affect the nation's forest industry both home and abroad; from Upper Lapland to Uruguay and China to Brazil. The involved companies take measures to limit potential flashpoints, including conducting environmental and social impact assessments, as well as incorporating CSR practices in their operations. Nevertheless, they continue to be the target of ENGO campaigns.

If viewing the Finnish companies from the perspectives of ENGO campaigns, and their coverage in the media, then these companies are committing failures on the same level as their counterparts based in South America and Asia. If the Finnish companies are investing a significant amount of resources in CSR why do they fail to distance themselves from potentially damaging campaigns by ENGOs? The answer partly lies with the tactics and aims of the ENGOs, for example Greenpeace and FoE being as hard hitting with one target as another, to the belief that ensuring companies such as Stora Enso and UPM employ as high standards in their operations will encourage companies such as APRIL to follow suit in an attempt to safeguard their market as well as opening the door to other sales opportunities. As illustrated in Figure 6 it is a tool for applying pressure on governments and companies in developing countries to confront issues such as illegal logging. This seemingly makes it inevitable that Finnish companies will continue to be the target of ENGO campaigns. This is especially the case as they seek to secure their position in the global market, while facing increased pressure at home which has seen problems regarding low profitability (Mikkilä 2006). Nevertheless, companies need to continue to seek a successful model for reconciling local issues, for example cultural and social needs, as well as environmental and ecological matters thereby potentially nullifying potential ENGO campaigns. In addition they need to ensure that a universal standard is applied when conducting social and environmental impact assessment whether in Europe or in Asia, regardless of the political and social environment in the country. In other words campaigns by ENGOs are almost an inevitability though companies need to ensure that they take proactive measures to minimise the potential impact.

The work presented here also underlines the responsibility that ENGOs have regarding their constituency, including the activists, donors, and those they claim to protect. The groups are continuously evolving responding to the developments such as growth of corporations and the global nature of commerce and trade (Newell 2001). However, just as business is being forced to adopt more responsible practices (Newell 2001, Mikkilä 2006),

so ENGOs will gradually have to ensure that they do not alienate their power base as well as their tools for achieving change, including the media. As presented in this work (paper I-III) ENGOs adopt different strategies to achieve their targets, including being confrontational in their relationship with the target company and not acknowledging their legitimacy. Nevertheless, ENGOs will likely need to overcome certain issues if they are to continue to have support in their campaigns. Credibility is vital for ENGOs, without it support for boycotts, shareholder activism and so on would fail. In other words they need to protect their legitimacy through being rigorous in their transparency, consistency and accountability (Newell 2001). Just as they have pressed corporations on these issues so they must ensure they adhere to them as well. A global ethic regarding the practices of ENGOs would be difficult to formulate on various issues, such as funding. However, a code of practice ensuring high standards in transparency and accountability; including complete openness in sources of funding and decision making processes in campaigns, as well as following as high standards as possible regarding basing their campaigns on scientific publications would be challenging to formulate as well as implement.

Before starting a campaign ENGOs go through various stages including determining its viability, potential impact and requirements. The groups could also conduct an analysis before launching the campaign, similar to the ethical analysis presented by Nash (1981) for business leaders facing an ethical dilemma, which would be of benefit to the ENGO with regards to its decision making process, but also underlining its legitimacy. The analysis could be structured as follows:

1. Define the campaign issue in a thorough and transparent manner.
2. Consider the issue from the point of view of the campaign target (e.g. manager of target corporation).
3. Determine how the issue arose in the first place (e.g. as a result of government action).
4. Determine those affected by the issue (i.e. stakeholders).
5. What is your intention in launching the campaign (e.g. is it target company to change its operating practices)?
6. How does this intention compare with the likely outcomes?
7. Determine who, if anyone, could suffer as the result of the campaign.
8. Ascertain whether it is of benefit to engage in discussion with the possible campaign target regarding the issue.
9. Establish the validity of the campaign from a long term, as well as short term perspective.
10. Seek to verify the legitimacy of the campaign through determining whether the campaign would meet society's needs and expectations.

As previously mentioned the strategies of ENGOs can be confusing for the stakeholders they are trying to influence, especially consumers. Clearly there are benefits as well as drawbacks to these strategies. However, it is an issue that will have to be confronted as it could potentially diminish their potential impacts. This issue, of diminished potential impact, could also be applied to the various certification schemes, whether global (e.g. FSC and PEFC) or local (e.g. LEI). Customers throughout the world are likely to be confused as to the true value of these schemes if some ENGOs are openly supportive while others are strongly critical of the schemes for example FSC where WWF is clear in its support, while the World Rainforest Movement (WRM) is openly critical of many aspects of the scheme.

Certification will not be the saviour of tropical forests, but undoubtedly they have a potentially significant role to play, one where ENGOs need to continue to press for the highest standards possible, but taking into consideration that they must be realistic.

One APRIL manager raised the point during the research that the activities of the ENGOs could result in less sustainable practices with regards to Indonesia's forests, the belief being that the campaigns will ultimately scare off potential customers and investors. Since the ENGOs started to campaign to halt deforestation in Indonesia, primarily against the pulp and paper companies, deforestation has continued apace, and the prophecies of doom regarding the country's remaining natural forest continue. Each of the stakeholders needs to re-examine their role in protecting the forests. The vast majority of deforestation in natural forests is not caused by the pulp and paper industry but is caused by illegal loggers, whether on a small or large scale. For the ENGOs it is easier to target a company that is visible and with a reputation to protect, it is however a completely different ball game trying to halt the illegal loggers.

REFERENCES

- Alsop, R.J. 2004. Corporate reputation: Anything but superficial - the deep but fragile nature of corporate reputation. *Journal of Business Strategy*, 25(6): 21-29
- Amy, D. 1987. *The politics of environmental mediation*. New York: Columbia University Press. 250 p.
- APRIL 2002. APRIL management's comments in response to "Paper tiger, hidden dragons 2" APRIL (Unpublished Correspondence from APRIL to Friends of the Earth EWNI)
- . 2004. Survey cites positive community perception of APRIL. CSR Update 3rd Quarter 2004. APRIL. (Available from www.aprilasia.com)
- . 2006. Sustainability report: Driving a sustainable culture. APRIL. (Available from www.aprilasia.com)
- . No date. Land rights and collective labour agreement. APRIL (Unpublished document).
- Asia Sentinel. 2006. Resurrected: Awash in red ink, two Indonesian tycoons survive a financial typhoon and climb the Forbes list. 20th October 2006. http://www.asiasentinel.com/index.php?option=com_content&task=view&id=227&Itemid=32 [Cited: 17 Sept 2008].
- Barbosa, L.C. 2003. Save the rainforest! NGOs and grassroots organisations in the dialectics of Brazilian Amazonia. *International Social Science Journal*. 55(178): 583-591.
- Barr, C. 2001. Banking on sustainability: Structural adjustment and forestry reform in post-Suharto Indonesia. WWF Macroeconomics Program Office and CIFOR, Washington, D.C., USA. 140 p.
- Bartley, T. 2003. Certifying Forests and Factories. *Politics & Society* 31(3): 433-464.
- . 2007. How foundations shape social movements: The construction of an organisational field and the rise of forest certification. *Social Problems* 54(3): 229-255.
- Baskin, J. 2006 Corporate responsibility in emerging markets. *The Journal of Corporate Citizenship*. 24 (Winter 2006): 29-48.
- Bengston, D.N. 1994. Changing forest values and ecosystem management. *Society and Natural Resources*. 7: 515-533.
- Betsill, M.M. & Corell, E. 2001. NGO influence in international environmental negotiations: A framework for analysis. *Global Environmental Politics* 1(4): 65-84
- Blackburn, S., 1996. *The Oxford Dictionary of Philosophy*. Oxford University Press, Oxford. 432 p.
- Bolman, L.G. & Deal, T.E. 1997. *Reframing organizations: Artistry, choice and leadership*. Jossey-Bass Publishers. San Francisco, USA. 544 p.
- Broad, R. & Cavanagh, J. 1997. The Corporate accountability movement: Lessons and opportunities. Prepared for the International Flows and the Environment Project. World Resources Institute. <http://peri.enomaly.net/fileadmin/pdf/broad.pdf> [Cited: 12 Jan 2008].
- Brockerhoff, E.G., Jactel, H., Parrotta, J.A., Quine, C.P. & Sayer, J. 2008. Plantation forests and biodiversity: oxymoron or opportunity? *Biodiversity and Conservation*. 17: 925-951.
- Brulle, R.J. 2000. *Agency, democracy, and nature: the U.S. environmental movement from a critical theory perspective*. MIT Press, Cambridge, MA, USA. 347 p.
- & Jenkins, J.C. 2005. Foundations and the environmental movement; Priorities, Strategies, and Impact. In: Faber, D. and McCarthy, D. (eds.). *Foundations for Social Change: Critical perspectives on philanthropy and popular movements*. Rowman & Littlefield. p. 151-173

- Bruner, M. & Oelschlaeger, M. 1994. Rhetoric, environmentalism, and environmental ethics. 16: 377-96
- Bryson, J.M. 2004. What to do when stakeholders matter. Stakeholder identification and analysis techniques, *Public Management Review*, 6(1): 21-53.
- , Cunningham, G. & Lokkesmoe, K. 2002. What to Do When stakeholders Matter: The Case of Problem Formulation for the African American Men Project of Hennepin County Minnesota. *Public Administration Review* 62(5): 568-584.
- Buckles, D. & Rusnack, G. 1999. Conflict and collaboration in natural resource management. In: Buckles, D (ed.). *Cultivating peace: conflict and collaboration in natural resource management*. International Research Centre, Canada. p. 1-10
- Burgess, H., & Burgess, G.M. 1997. *Encyclopaedia of conflict resolution*. ABC-CLIO. California, USA. 356p.
- Bush, R.A.B. & Folger, J. 2005. *The promise of mediation: the transformative approach to conflict*. John Wiley and Sons. 287 p.
- Cairncross, F. 1995. *Green, Inc.: A guide to business and the environment*. Earthscan, London, UK. 277 p.
- Cartwright, J. 2003. Environmental Groups, Ontario's Lands for Life Process and the Forest Accord. *Environmental Politics*, 12(2). pp.115–132
- Cashore, B. 2002. Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule-Making Authority. *Governance* 15(4): 503-552
- Castells, M. 2004. *The power of identity*. 2nd ed. Blackwell, Oxford, UK. 537 p.
- Caton-Campbell, M. 2003. Intractability in environmental disputes: Exploring a complex construct. *Journal of Planning Literature* 17(3): 360-371
- Chandrasekharan, D. 1996. *Proceedings of electronic conference on Addressing Natural Resource Conflict through Community Forestry*. Rome: Food and Agricultural Organization of the United Nations.
- Choo, E.U. & Wedley, W.C. 2004. A common framework for deriving preference values from pairwise comparison matrices. *Computers & Operations Research* 31: 893-908.
- Clarke, J. & Gibson-Sweet, M. 1999. The use of corporate social disclosures in the management of reputation and legitimacy: A cross-sectoral analysis of UK top 100 companies. *Business Ethics: A European Review*. 8(1): 5-13
- Collier, J. & Wanderley, L. 2005. Thinking for the future: global corporate responsibility in the twenty-first century. *Futures*. 37: 169-182
- Collins. 2003. *Collins cobuild advanced learner's English dictionary*, 4th ed. Harper Collins.
- Cress, D.M. & Snow D.A.. 1996. Mobilization at the margins: Resources, benefactors, and the viability of homeless social movement organizations. *American Sociological Review*, 61: 1089-1109.
- Cubbage F.W., O'Laughlin J., & Bullock C.S. 1993. *Forest resource policy*. John Wiley & Sons. New York, 562 p.
- Daniels, S.E. & Walker, G.B. 1997. Collaborative learning and land management conflict. In: Solberg, B. & Miina, S. (eds.). *Conflict management and public participation in land management*. EFI Proceedings 14, European Forest Institute. Finland. p. 13-36.
- Dauvergne, P. 2005. The Environmental Challenge to Loggers in the Asia-Pacific: Corporate Practices in Informal Regimes of Governance. In D.L. Levy & P.J. Newell, (eds.). *The Business of Global Environmental Governance*. The MIT Press Cambridge, MA, USA: 169-196.
- Deegan, C. 2000. *Financial Accounting Theory*. McGraw-Hill: Roseville, NSW, Australia. 472 p.

- & Rankin, M. 1996. Do Australian companies report environmental news objectively? An analysis of environmental disclosures by firms prosecuted successfully by the Environmental Protection Authority. *Accounting, Auditing and Accountability*. 9(2): 52-69
- , Rankin, M. & Tobin, J. 2002. An examination of the corporate social and environmental disclosures of BHP from 1983-1997: A test of legitimacy theory. *Accounting, Auditing and Accountability Journal*. 15(3): 312-343.
- Deephouse, D.L. 2000. Media reputation as a strategic resource: An integration of mass communication and resource-based theories. *Journal of Management*, 26(6): 1091-1112
- della Porta, D. & Diani, M. 2006. *Social movements: An introduction*. 2nd ed. Blackwell, Malden, MA, USA. 336 p.
- & Rucht, D. 2002. The dynamics of environmental campaigns. *Mobilization: An International Quarterly*. 7(1): 1-14.
- den Hond, F. & de Bakker, F.G.A. 2007. Ideologically motivated activism: How activist groups influence the corporate social change activities. *Academy of Management Review* 32(3): 901-924.
- de-Shalit, A. 2001. Ten commandments of how to fail in an environmental campaign. *Environmental Politics* 10(1): 111-137
- Deutsch, M., 1969. Conflicts: Productive and destructive. *Journal of Social Issues*. 25: 7-41.
- . 1973. *The resolution of conflict*. Yale University Press. New Haven, CT. USA. 420 p.
- Dietz, T., Stern, P.C. & Rycroft, R.W. 1989. Definitions of conflict and the legitimation of resources: The case of environmental risk. *Sociological Forum* 4(1): 47-70
- Dowling, J. & Pfeffer, J. 1975. Organizational legitimacy: Social values and organizational behaviour. *The Pacific Sociological Review*. 18(1): 122-136.
- DTE. 2006. Certification controversy. *Down to Earth*. No.69, May 2006. <http://dte.gn.apc.org/69for2.htm> [Cited: 02 Oct 2008]
- Elsbach, K. 1994. Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts. *Administrative Science Quarterly*. 39: 57-88.
- Eyes on the Forest. 2006. Eyes on the Forest December 2005 investigative report. <http://www.eyesontheforest.or.id/investigation/Des%2005%20update%20report.pdf> [Cited: 25 Aug 2008].
- . 2008. Police terminate companies' illegal logging cases. *EoF News* Tuesday, 23 December 2008. http://eyesontheforest.or.id/index.php?option=com_content&task=view&id=212&Itemid=6&lang=english. [Cited: 08/01/2009].
- . 2009. Minister extends deadline to clear forest for pulp material. *Monday*, 12th January 2009. http://eyesontheforest.or.id/index.php?option=com_content&task=view&id=215&Itemid=6&lang=english. [Cited: 12 Jan 2009]
- FAO. 2006. Progress towards sustainable forest management, 2006. *FAO Forestry Paper* 147. <http://www.fao.org/documents/> [Cited: 25 Aug 2008].
- Finnish Constitution, 1999. *The Constitution of Finland*. <http://www.finlex.fi/fi/laki/kaannokset/1999/en19990731.pdf> [Cited: 27th Oct 2008]
- Floyd, D.W., Germain R.H., & der Horst, K. 1996. A model for assessing negotiations and mediation in forest resource conflicts. *Journal of Forestry*. May 1996: 29-33
- FoE. 2003. Media briefing: HSBC Holdings plc. Friends of the Earth England, Wales and Northern Ireland. May 2003. Friends of the Earth, UK.
- Freeman, R.E. 1984. *Strategic management: A stakeholder approach*. Pitman, Boston. USA. 276 p.

- . 2005. A stakeholder theory of the modern corporation. In: Hartman, L. (ed.). *Perspectives in business ethics*. Third Edition. McGraw-Hill International Edition. p. 171-181
- Friedman, A.L. & Miles, S. 2006. *Stakeholders; Theory and practice*. Oxford University Press. 330 p.
- Friedman, M. 1970. The responsibility of business is to increase its profits. *New York Times Magazine*, 13th September 1970.
- Frynas, J.G. 2006. Corporate social responsibility in emerging economies. *The Journal of Corporate Citizenship*. 24 (Winter 2006): 16-19
- Gamson, W.A. 1990. *The strategy of social protest*. Wadsworth, Belmont. USA. 357 p.
- . 2004. Bystanders, public opinion and the media. In: Snow, D.A., Soule, S.A., Kriesi, H. (eds.). 2006. *The Blackwell companion to social movements*. Blackwell. USA. p. 242-261
- Garriga, E. & Melé, D. 2004. Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics* 53: 51-71.
- Gillison, A.N. 2001. Vegetation survey and habitat assessment of the Tesso Nilo forest complex. Prepared for WWF-USA by the Centre for Biodiversity Management, Australia. WWF - USA.
<http://www.wwf.de/fileadmin/fm-wwf/pdf-alt/presse/tessonilo.pdf> [Cited: 17 Oct 2008]
- Glück, P. 1976. *Die rolle der verbände in der theoretischen Forst- und holzwirtschaftspolitik*. Habilitationsschrift an der Universität für Bodenkultur, Wien. (In German).
- Goodpaster, G. 1983. The concept of corporate responsibility. *Journal of Business Ethics* 2: 1-22.
- Gray, B. 2003. Framing of environmental disputes. In: Lewicki, R, Gray, B. & Elliot, M (eds.). *Making sense of intractable environmental conflicts: Concepts and cases*. Island Press. Washington DC. USA. p. 11-34
- Greenpeace. 2005. Paper ship stopped in Lübeck.
http://weblog.greenpeace.org/forestrescue/archives/2005/11/paper_ship_stop.html#more [Cited: 9 Apr 2009]
- Griffin, K. 2003. Economic globalization and institutions of global governance. *Development and Change* 34(5): 789–807
- Grolin, J. 1998. Corporate legitimacy in risk society: The case of Brent Spar. *Business Strategy and the Environment* 7: 213-222
- Gunningham, N, Kagan, R.H. & Thornton, D. 2003. *Shades of green*. Business, regulation and the environment. Stanford University Press, USA. 210 p.
- Haley, M., & Clayton, A. 2003. The role of environmental NGOs in environmental policy failures in a developing country: The mismanagement of Jamaica's coral reefs. *Environmental Values*. 12 (1): 29-54
- Hallikainen, V., Jokinen, M., Parviainen, M., Pernu, L., Puoskari, J., Rovannerä, S. & Seppä, J. 2006. Inarilaisten käsityksiä metsätaloudesta ja muusta luonnonkäytöstä. *Metsätieteen aikakauskirja* 4/2006: 453—474. (In Finnish).
- Hallikainen, V., Helle, T., Hyppönen, M., Ikonen, A., Jokinen, M., Naskali, A., Tuulentie, S., & Varmola, M. 2008. Luonnon käyttöön perustuvat elinkeinot ja niiden väliset suhteet Ylä-Lapissa. *Metsätieteen aikakauskirja* 3/2008: 191–219. (In Finnish).
- Hammersley, M. 1995. *The politics of social research*. Sage Publications, UK. 200 p.
- Handy, F. 2001. Advocacy by environmental nonprofit organisations: An optimal strategy for addressing environmental problems? *International Journal of Social Economics*. 28(8): 648-666.
- Hartman, L.P. 2005. *Perspectives in business ethics*. McGraw Hill. 816 p.

- Heikkilä, L. 2006. Reindeer talk: Sámi reindeer herding and nature management. Acta Universitatis Lapponiensis. University of Lapland, Finland. 386 p.
- Heinonen, R.E., Pelkonen, P. & Saastamoinen, O. 2002. Need for a global forest ethics network. Paper presented at the Panel for Global Forest Ethics, World Summit on Sustainable Development (WSSD), Johannesburg, 29th August 2002. <http://www.joensuu.fi/unep/pages/network.htm> [Cited: 01 Oct 2008]
- Helle, T., Aspi, J. & Kilpelä, S-S. 1990. The effects of stand characteristics on reindeer lichens and range used by semi-domesticated reindeer. *Rangifer*, Special Issue 3: 107-114.
- Hellström, E. 2001. Conflicting cultures – Qualitative comparative analysis of environmental conflicts in Forestry. *Silva Fennica Monographs* 2 2001. 109 p.
- Henley, D. 2008. Natural resource management: historical lessons from Indonesia. *Human Ecology*, 36: 273-290.
- Hildyard, N., Hedge, P., Wolverkamp, P. & Reddy, S. 1997. Same platform: different train. Pluralism, participation and power. Paper presented at the FAO Workshop on Pluralism and Sustainable Forestry and Rural Development, 9–12 Dec 1997, Rome, Italy.
- Hoffman, A. 1996. Trends in corporate environmentalism: the chemical and petroleum industries, 1960-1993. *Society & Natural Resources*, 9: 47-64.
- Holmes, D.A. 2002. The predicted extinction of lowland forests in Indonesia. In: E. Wickramanayake, E. Dinerstein, C. J. Loucks, D. M. Olson, J. Morrison, J. Lamoreux, M. McKnight, & P. Hedao. (eds.). *Terrestrial eco-regions of the Indo-Pacific: a conservation assessment*. Island Press, Washington, D.C. USA. p. 7-13.
- Humphreys, D. 2006. *Logjam: Deforestation and the crisis of global governance*. The Earthscan Forest Library. Earthscan, London. UK. 302 p.
- Hunter, T. & Bansal, P. 2007. How standard is standardized MNC global environmental communication? *Journal of Business Ethics*. 71(2): 135-147
- Huxham, M. & Sumner, D. 1999. Emotion, science and rationality: The case of the Brent Spar. *Environmental Values* 8: 349-368.
- IHT. 2005. Outcry as Jakarta tries to revive paper industry. *International Herald Tribune*. 2nd November 2005. <http://www.ihf.com/articles/2005/11/02/business/pulp.t.php> [Cited: 17 Sept 2008].
- Inarin Paliskunnat. 2002. About the impacts of state forestry towards our reindeer herding and proposals for correcting the situation. Open Letter to the Ministry of Forestry and Agriculture, Ministry of Justice and Ministry of Environment from Reindeer herding co-operative of Hammastunturi, Nellim sub-unit of the reindeer herding co-operative of Ivalo, Reindeer herding co-operative of Muddusjärvi, Reindeer herding co-operative of Muotkatunturi and Reindeer herding co-operative of Paatsjoki. March 20-21, 2002. <http://www.inarinpaliskunnat.org/letter.html> [Cited: 06 Oct 2008].
- Independent. 2002. Environment: Bank's £35m gift for WWF angers greens. *Independent*, The (London), 7th April, 2002. http://findarticles.com/p/articles/mi_qn4158/is_/ai_n12607251 [Cited: 02 Oct 2008].
- IP. 2006. An International Paper Journal: 2004-2006 Sustainability Update. *International Paper*. (Available from: <http://www.internationalpaper.com/>)
- Jaakkola, L., Helle, T., Soppela, J., Kuitunen, M. & Yrjönen, M. 2006. Effects of forest characters on the abundance of alectoroid lichens in northern Finland. *Canadian Journal of Forest Research* 36: 2955-2965
- Jackson, L.S. 2001. Contemporary public involvement: toward a strategic approach. *Local Environment* 6(2): 35–147.
- & Pradubraj, P. 2004. Introduction: Environmental conflict in the Asia-Pacific. *Asia Pacific Viewpoint*, 45(1): 1-11.

- Jakarta Post. 2008a. Riaupulp lays off 2,000 workers. Jakarta Post 21st November 2008. <http://old.thejakartapost.com/detailbusiness.asp?fileid=20081121.L03&irec=2>. [Cited: 21 Nov 2008].
- Jakarta Post 2008b. Kaban backs decision to close illegal logging case. Jakarta Post 24th December 2008. <http://www.thejakartapost.com/news/2008/12/24/kaban-backs-decision-close-illegal-logging-case.html>. [Cited: 12 Jan 2008].
- Jensen, M.C. 2001. Value Maximization, Stakeholder Theory, and the Corporate Objective Function. *Journal of Applied Corporate Finance*. 14(3): 8-21
- Jensen, O.B. 2007. Consolidating Sustainable Forest Management Certification in Indonesia – Ex-post evaluation report (ITTO Project PD 80/01 Rev. 6(M). www.itto.or.jp/live/Live_Server/3328/Ex-post-PD-80-01-R6.doc [Cited: 18 Sept 2008]
- Jepson, P. 2005. Governance and accountability of environmental NGOs. *Environmental Science and Policy*. 8: 515-524
- Jikalahari. 2008. Request to stop supplying pulp from APRIL. Open letter from 27 ENGOs to Jussi Pesonen, President & CEO of UPM-Kymmene. 7th March 2008. http://yle.fi/tvuutiset/utiset/upics/Request_to_stop_supplying_pulp_from_UPM.pdf. [Cited: 02 Oct 2008]
- John, S. & Thomson, S. 2003. *New activism and the corporate response*. Palgrave Macmillan. Basingstoke, UK. 308 p.
- Johnson, G. & Scholes, K. 2002. *Exploring corporate strategy: Text and cases*. Prentice Hall. 878 p.
- Jordan, G. & Stevenson, L. 2003. Beyond win-lose process? The potential of group co-operation strategies. In: John, S. & Thomson, S. (eds.). *New activism and the corporate response*. Palgrave Macmillan. Basingstoke, UK. p. 31-48.
- Jurgens, E. 2006. Learning lessons to promote certification and combat illegal logging in Indonesia: September 2003 to June 2006. Center for International Forestry Research. Bogor, Indonesia. 50 p.
- Kant, I. 2004. *Fundamental principles of the metaphysic of morals*. Kessinger Publishing, Whitefish, USA. 68 p.
- Kartodihardjo, H. & Supriono, A. 2000. The impact of sectoral development on natural forest conversion and degradation: The case of timber and tree crop plantations in Indonesia. Occasional Paper No. 26(E). Center for International Forestry Research. Bogor, Indonesia. 14 p.
- Kearney, A.R., Bradley, G., Kaplan, R. & Kaplan, S. 1999. Stakeholder perspectives on appropriate forest management in the Pacific Northwest. *Forest Science* 45(1): 62-73.
- Keck, M.E. & Sikkink, K. 1998. *Activists beyond borders: Advocacy networks in international politics*. Ithaca and London: Cornell University Press. 227 p.
- Kidder, R.M. 1995. *How good people make tough choices*. New York: William Morrow and Company. 240 p.
- Kimmel, A.J. 1988. *Ethics and values in applied social research*. Applied social research methods series. Volume 12. Sage Publications. 160 p.
- King, B. 2008. A social movement perspective of stakeholder collective action and influence. *Business and Society* 47(1): 21-49
- Kohlberg, L. 1976. Moral stages and moralization. In: T. Likona (ed.). *Moral development and behaviour*. Holt, Rinehart, & Winston, New York, USA. p. 31-53.
- . 1981. *Essays on moral development*. Vol. 1: *The Philosophy of Moral Development*, Harper and Row: San Francisco, USA. 441 p.
- Korhonen, K.M., 2005. Balancing the interests of forestry and reindeer husbandry in Northern Lapland. <http://www.metsahallitus.fi/print.asp?Section=2675&Item=4016> [Cited: 27 Oct 2008]

- Kotler, P. & Lee, N. 2005. Corporate social responsibility. Doing the most good for your company and your cause. John Wiley & Sons. 307 p.
- Krott, M. 2005. Forest policy analysis. Springer: Dordrecht, The Netherlands. 323 p.
- Kuhndt, M., Tunçer R., B., Snorre, Anderson K., & Liedtke C. 2004. Responsible corporate governance: An overview of trends, initiatives and state-of-the-art elements. What sort of globalisation is sustainable? Wuppertal Papers 139.
- Kumpula, J., 2001. Productivity of the semi-domesticated reindeer (*Rangifer t. tarandus* L.) stock and carrying capacity of pastures in Finland during 1960–90's. Acta Universitatis Ouluensis, A Scientiae Rerum Naturalium 375. 44 p.
- Kyllönen, S., Colpaert, A., Heikkinen, H., Jokinen, M., Kumpula, J., Marttunen, M., Muje, K. & Raitio, K. 2006. Conflict management as a means to the sustainable use of natural resources. *Silva Fennica* 40(4): 687–728.
- Lange, J. 1993. The logic of competing information campaigns: conflict over old growth and the spotted owl. *Communication monographs*. 60(3): 239-257
- Lawrence, R. 2007. Corporate social responsibility, Supply-chains and Saami claims: Tracing the political in the Finnish forestry industry. *Geographical Research* 45(2): 167–176.
- Leahy, J. 2006. APRIL set to become paper tiger. FT Business – The Australian. 22nd February 2006. www.theaustralian.news.com.au/story/0,20867,18227543-36375,00.html [Cited: 26 May 2008].
- LEI. No date. Lembaga Ekolabel Indonesia – Certification system for plantation forest management. <http://www.lei.or.id/english/download.php> [Cited: 18 Oct 2008]
- Leopold, A. 1949. A Sand County almanac with essays on conservation from Round River. Ballantine Books, New York, USA.
- Lertzman, D.A. and Vredenburg, H. 2005. Indigenous peoples, resource extraction and sustainable development: An ethical approach. *Journal of Business Ethics* 56: 239-254.
- Lewicki, R, Gray, B. & Elliot, M (eds.). 2003. Making sense of intractable environmental conflicts: Concepts and cases. Island Press. Washington DC. USA. 469 p.
- Lewis, C.W. & Gilman, S. 2005. The ethics challenge in public service: a problem-solving guide. John Wiley and Sons. 363 p.
- Lindblom, C.K. 1994. The implications of organisational legitimacy for corporate social performance and disclosure. Paper presented at the critical perspectives on accounting conference, New York, USA.
- Logsdon, J.M. & Yuthas, K. 1997. Corporate social performance, stakeholder orientation, and organizational moral development. *Journal of Business Ethics*. 16: 1212-1226
- Matthew, E. & van Gelder, J.W. 2002. Paper tiger, hidden dragons 2: APRIL fools: The forest destruction, social conflict and financial crisis of Asia Pacific Resources International Holdings Ltd APRIL, and the role of financial institutions and paper merchants. Friends of the Earth, London.
www.foe.co.uk/resource/reports/april_fools.pdf [Cited: 28 May 2008]
- Matthews, M.R. 1993. Socially responsible accounting. Chapman and Hall. London, UK. 240 p.
- McAdam, D. 1982. Political process and the development of black insurgency 1930-1970. Chicago: University of Chicago Press. 25 p.
- , McCarthy, J.D. & Zald, M.N. 1996. Introduction: Opportunities, mobilizing structures, and framing processes — toward a synthetic, comparative perspective on social movements. In: McAdam, D., McCarthy, J.D., & Zald, M.N. (eds.) *Comparative perspectives on social movements: Political opportunities, mobilizing structures and cultural framings*. Cambridge University Press, Cambridge, UK. 1-21 p.

- McKeever, S. & Ridge, M. 2006. *Principled ethics: Generalism as a regulative ideal*. Oxford University Press. 242 p.
- Mendoza, G.A., Macoun, P., Prabhu, R., Sukadri, D., Purnomo, H. & Hartando, H. 1999. *Guidelines for applying multi-criteria analysis to the assessment of criteria and indicators*. Center for International Forestry Research. Bogor, Indonesia. 85 p.
- METO. 2005. International environmentalist movement continues its ruthless campaign against forestry in northern Finland. News Release Forestry Experts Association (METO), Lapland and the Wood and Allied Workers Union, Lapland. 7th November 2005.
<http://www.metsa.fi/sivustot/metsa/SiteAttachments/METO+PUERTOnewsrelease.pdf>
 [Cited: 7 Apr 2009]
- Metsähallitus. 2005. Balancing the interests of forestry and reindeer herding in Northern Lapland. <http://www.metsa.fi/binary.aspx?Section=2675&Item=4010> [Cited: 06 Oct 2008].
- Miettinen, O. & Selin, T. 1999. The calculated risk - UPM-Kymmene in Indonesian rainforests. (Translated excerpts from the book "Harkittu riski - UPM-Kymmene")
- Mikkilä, M. 2006. The many faces of responsibility: Acceptability of the global pulp and paper industry in various societies. *Dissertationes Forestales* 25. The Finnish Society of Forest Sciences. Helsinki, Finland. 91 p.
- Mills, T.J. & Clark, R.N. 2001. Roles of research scientists in natural resource decision-making. *Forest Ecology and Management* 153: 189-198.
- Mitchell, R., Agle, B & Wood, O. 1997. Toward a theory of stakeholder identification and salience: defining the principle of how and what really counts. *Academy of Management Review*. 22(4): 853-886.
- Mol, A.P.J. 2000. The environmental movement in an era of ecological modernisation. *Geoforum*. 31: 45-56
- Moore, M.P. 1993. Constructing irreconcilable conflict: The function of synecdoche in the spotted owl controversy. *Communication monographs* 60: 258-274.
- Morris, A. 2000. Reflections on social movement theory: Criticisms and proposals. *Contemporary Sociology*. 29(3): 445-454
- Murphy, D.F. & Bendell, J. 1997. *In the company of partners: business, environmental groups and sustainable development post-Rio*. The Policy Press: UK. 408 p.
- Nash L.L. 1981. Ethics without the sermon. *Harvard Business Review* 59, November-December: 79-90
- Nasi, R., Koponen, P., Poulsen, J.G., Buitenzorgy, M. & Rusmantoro, W. 2008. Impact of landscape and corridor design on primates in a large-scale industrial tropical plantation. *Biodiversity and Conservation* 17: 1105-1126
- Naudé, P., Lockett, G. & Gisbourne, S. 1993. Market analysis via judgmental modelling. *European Journal of Marketing* 27(3): 5-22
- Newell, P. 2001. Environmental NGOs, TNCs and the question of governance. In: Stevis, D. & Assetto, V.J. (eds.). *The international political economy of the environment: critical perspectives*. Lynne Rienner Publishers, Boulder, Co., USA. p. 85-107
- Nie, M. 2003. Drivers in natural resource-based political conflict. *Policy Sciences* 36: 307-341.
- Nuutinen, T., Hirvelä, H. & Salminen, O. 2005. Valtakunnan metsien 9. inventointiin perustuvat hakkuumahdollisuusarviot vuosille 2003–2032 Lapin metsäkeskuksen alueella. *Metsätieteen aikauskirja* 2B/2005: 289–305. (In Finnish).
- OECD 2005. *Corporate responsibility practices of emerging market companies – A fact finding study*. Organisation for Economic Co-operation and Development, Paris.

- Ogden, S. & Clarke, J. 2005. Customer disclosures, impression management and the construction of legitimacy: Corporate reports in the UK privatized water industry. *Accounting, Auditing & Accountability Journal*. 18(3): 313-345.
- Opotow, S. & Weiss, L. 2000. Denial and the process of moral exclusion in environmental conflict. *Journal of Social Issues*. 563(3): 475-490.
- Oxley, A. 2009. Protectionism and our forests. *Forbes.com*. 22nd April 2009. http://www.forbes.com/2009/04/22/protectionism-trade-conservation-opinions-contributors-forest_print.html [Cited: 23/04/2009]
- Ozawa, C.P. 2005. Science in environmental conflicts. In: King, L. & McCarthy, D. (eds.). *Environmental Sociology: From Analysis to Action*. Rowman & Littlefield. p. 326-338.
- Panwar, R., Rinne, T., Hansen, E. & Juslin, H. 2006. Corporate responsibility. *Forest Products Journal*, 56(2): 4-12.
- Parsons, T. 1960. *Structure and process in modern societies*. Free Press: Glencoe, IL, USA. 344 p.
- Phillips, R. 2003. Stakeholder legitimacy. *Business Ethics Quarterly*. 13(1): 25-41.
- Piiparinen, H. & Kotisaari, A. 2006. *Participatory Processes in Finnish Forest Conservation. Participation by stakeholders*. Helsinki: Ministry of Agriculture and Forestry. 37 p.
- Pirard, R. & Cossalter, C. 2006. The Revival of Industrial Forest Plantations in Indonesia's Kalimantan Provinces: Will they help eliminate fiber shortfalls at Sumatran pulp mills or feed the China market? CIFOR Working Paper No. 37. Center for International Forestry Research. Bogor, Indonesia. 64 p.
- & Rokhim, R. 2006. Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse. CIFOR Working Paper No. 33. Center for International Forestry Research. Bogor, Indonesia. 23 p.
- Prawiradilaga, D.M., Suyanto, A., Noertjito, W.A., Saim A., Purwaningsih, Rachmatika, I., Susiarti, S., Sidik, S., Marakarmah, A., Mun'im, A., Sinaga, M.H., Cholik, E., Ismail, Maharani, M., Purwanto, Y. & Waluyo, E.B. 2003. The summary of biodiversity assessment in Tesso Nilo. Research Centre for Biology LIPI and WWF Indonesia. http://eyesontheforest.or.id/doc/summary_bio_assesment.pdf [Cited: 12/09/2008]
- Princen, T. 1994. NGOs: Creating a niche in environmental diplomacy. In: Princen, T. & Finger, M. (eds.). *Environmental NGOs in World Politics*. Routledge, New York. USA. p. 29-47
- Print Week. 2008. 3,300 jobs to be affected as UPM and Stora Enso announce capacity reductions. *PrintWeek.com*. 11th September 2008. <http://www.printweek.com/News/MostEmailed/845631/3300-jobs-affected-UPM-Stora-Enso-announce-capacity-reductions/> [Cited: 23 Sept 2008]
- ProForest 2004. A review of RAPP's Land Dispute Resolution Procedures. ProForest 06 February 2004. Unpublished document. p.10.
- ProPrint. 2008. APP mills gain PEFC certification. *Printweek.com*. 15th October 2008. <http://www.proprint.com.au/News/125542,app-mills-gain-pefc-certification.aspx> [Cited: 16 Oct 2008].
- Putnam, L.L. & Wondolleck, J.M. 2003. Intractability: Definitions, dimensions, and distinctions. In: Lewicki, R.J., Gray, B. & Elliot, M. (eds.). *Making sense of intractable environmental conflicts: concepts and cases*. Island Press, Washington, USA. 35-59 p.
- Raitzer, D.A. 2008. Assessing the impact of CIFOR's influence on policy and practice in the Indonesian pulp and paper sector. Impact Assessment Paper. Center for International Forestry Research. Bogor, Indonesia. 85 p.
- Raitio, K. 2008. "You can't please everyone" conflict management practices, frames and institutions in Finnish state forests. *Joensuun yliopiston yhteiskuntatieteellisiä julkaisuja nro 86*. 271 p.

- Raitio, K., & Rytteri, T. 2005. Metsähallituksen ja valtio-omistajan vastuu Ylä-Lapin porotalouden ja metsätalouden välisessä kiistassa. *Metsätieteen aikakauskirja* 2/2005: 117–137.
- Ramirez, R. 1999. Stakeholder analysis and conflict management. In: D. Buckles (ed.). *Conflict and collaboration in natural resource management*. IDRC and the World Bank. Ottawa, Canada. p. 101-126
- RAN. 2008. International Paper threatens to violate own policy by expanding into Indonesian rainforest. Rainforest Action Network. Press Release. May 12, 2008 http://ran.org/media_center/news_article/?uid=4757 [Cited: 20 Sept 2008]
- Roberts, M.J. & Reich, M.R. 2002. Ethical analysis in public health. *Lancet*. 359: 1055-1059.
- Rokeach, M. 1973. *The Nature of Human Values*. Free Press, New York, USA. 438 p.
- Rootes, C. 2004. Environmental movements. In: Snow, D.A., Soule, S.A., & Kriesi, H. (eds.). *The Blackwell companion to social movements*. Blackwell Publishing, Oxford, UK. 608-640 p.
- Rose, C. 1998. The turning of the ‘Spar. Greenpeace UK. 221p.
- Rose, J. 2004. WWF and the APP partnership – a lesson learnt. *Ethical Corporation* 24th June 2004.
- Rowley, T.J. & Moldoveanu, M. 2003. When will stakeholder groups act? An interest- and identity – based model of stakeholder group mobilization. *Academy of Management Review*. 28: 204-209.
- Rucht, D. 1999. The impact of environmental movements in western societies. In: Giugni, M., McAdam, D., & Tilly, C. (eds.). *How social movements matter*. Minnesota. USA. p. 204-224.
- Saarikoski, H., Mustajoki, M., Marttunen, M. 2009. Monitavoitearviointi Ylä-Lapin metsien kestävästä käytöstä. Ylä-Lapin metsien kestävä käyttö –hankeen loppuseminaari Saariselkä 26.3.2009. <http://www.metla.fi/tapahtumat/2009/yla-lappi/heli-saarikoski.pdf> [Cited: 30 Apr 2009]
- Saastamoinen, O. 2005. Multiple ethics for multidimensional sustainability in forestry? In: Erkkilä, A., Heinonen, R.E., Oesten, G., Pelkonen, P., & Saastamoinen, O. (eds.) *European forests and beyond: An ethical discourse*. *Silva Carelica* 49. University of Joensuu, Finland.
- Saaty T.L. 1980. *The analytical hierarchy process*. New York: McGraw-Hill.
- Sandström, O., Vaara, I., Heikkuri, P., Jokinen, M., Kokkonen, T., Liimatainen, J., Loikkanen, T., Mela, M., Osmonen, O., Salmi, J., Seppänen, M., Siekkinen, A., Sihvo, J., Tolonen, J., Tuohisaari, O., Tynys, T., Vaara, M. & Veijola, P. 2000. Ylä-Lapin luonnonvarasuunnitelma. *Metsähallituksen metsätalouden julkaisuja* 38. 246 p. (In Finnish)
- Sarewitz, D. 2004. How science makes environmental controversies worse. *Environmental Science and Policy*. 7(5): 385-403.
- Schmidtz, D. 2002. Natural enemies: An anatomy of environmental conflict. In: Schmidtz, D. & Willott, E. (eds.). *Environmental ethics: What really matters, what really works*, Oxford University Press, New York, USA. p. 417–424.
- Schwartz, S. 1994. Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4): 19–46.
- Scott, D. 2003. Science and the consequences of mistrust: lessons from recent GM controversies. *Journal of Agricultural and Environmental Ethics* 16: 569–582.
- Sethi, S.P. 2003. *Setting global standards: Guidelines for creating codes of conduct in multinational corporations*. John Wiley and Sons. 306 p.

- SGS Malaysia 2002. Timber tracking – Legal forest management concessions assessment report. SGS (Malaysia) Sdn. Bhd. Forestry Division. Unpublished company document
- . 2003. Timber tracking – Legal forest management concessions assessment report. SGS (Malaysia) Sdn. Bhd. Forestry Division. Unpublished company document
- . 2004. Timber tracking – Legal forest management concessions surveillance 02 Report. SGS (Malaysia) Sdn. Bhd. Forestry Division. Unpublished company document
- Sharma, S. & Henriques, I. 2005. Stakeholder influences on sustainability practices in the Canadian forest products industry. *Strategic Management Journal* 26: 159-180.
- Short, B. 1991. *Earth First! and the rhetoric of moral confrontation*. In: Waddell, C. (ed.). 1998. *Landmark essays on rhetoric and the environment*. Vol. XII. Lawrence Erlbaum Associates. New Jersey, USA. p. 107-124
- Sidaway, R. 2005. *Resolving environmental disputes: From conflict to consensus*. Earthscan, London, UK. 297 p.
- Sihvo, J. 2006. Ylä-Lapin luonnonvarasuunnitelma 2006-2010. Tarkistukset luonnonvarasuunnitelmaan 2001-2010. *Metsähallituksen metsätalouden julkaisu* 38, 2000. Julkaisematon. 174 p. (In Finnish).
- Smith, D. & Quaranda, S. 2007. Environmental Non-government Organization (ENGO) market-based forest protection campaigns. <http://forestryencyclopedia.jot.com/WikiHome/Environmental%20Forest%20Protection%20Campaigns>. [Cited: 09 Jan 2009]
- Sonnenfeld, D. 1998. Social movements, environment, and technology in Indonesia's pulp and paper industry. *Asia Pacific Viewpoint*. 39(1): 95-110
- . 2002. Social movements and ecological modernization: The transformation of pulp and paper manufacturing. *Development and Change*. 33(1): 1-28
- Spar, D.L. & Mure, L.T. 2003. The power of activism: Assessing the impact of NGOs on global business. *California Management Review*. 43(3): 78-101
- Spek, M. 2006. *Financing pulp mills: An appraisal of risk assessment and safeguard procedures*. Centre for International Forestry Research (CIFOR), Bogor, Indonesia. 86 p.
- Stanbury, W.T. & Vertinsky, I.B. 1997. Boycotts in conflicts over forestry issues: The case of Clayoquot Sound. *Commonwealth Forestry Review*. 76(1): 18-24.
- Suchman, M. 1995. Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*. 20(3): 571-610.
- Sunderlin, W. 1999. *The effects of economic crisis and political change on Indonesia's forest sector, 1997-99*. Centre for International Forestry Research, Bogor, Indonesia. 26 p.
- Sutton, P.W. 2004. *Nature, environment and Society (Sociology for a changing world)*. Palgrave Macmillan, Basingstoke, UK. 232 p.
- Swaminathan, A., & Wade, J.B. 2001. Social movement theory and the evolution of new organizational forms. In: Schoonhoven, C.B., & Romanelli, E. (eds.). *The entrepreneurship dynamic: Origins of entrepreneurship and the evolution of industries*. Stanford University Press. p. 286-313.
- Tacconi, L., Obidzinski, K. & Agung, F. 2004. *Learning lessons to promote forest certification and control illegal logging in Indonesia*. Center for International Forestry Research. Bogor, Indonesia. 81 p.
- Tait, J. 2001. More Faust than Frankenstein: the European debate about risk regulation for genetically modified crops. *Journal of Risk Research*. 4(2): 175-189.
- Tarrow, S. 1993. Cycles of collective action: Between moments of madness and the repertoire of contention. *Social Science History* 17(2): 281-307.
- . 1994. *Power in movement: social movements. Collective action and politics*. Cambridge University Press, Cambridge, UK. p.251.

- Tilly, C. 1999. From interactions to outcomes in social movements. In: Giugni, M., McAdam, D., & Tilly, C. (eds.). *How social movements matter*. Minnesota, USA. p. 253-270
- Tutkijakirje. No Date. Open letter demanding end for logging in remaining natural forests in Finland: 257 researchers demand an end for logging in Finnish old-growth forests. <http://www.forestinfo.fi/forestlapland/researchersletter.htm> [Cited: 8 April 2008].
- UNCED. 1992. Rio Declaration on environment and development. United Nations Conference on Environment and Development. United Nations, New York, USA.
- UNHRC. 1994a. Sara et al. v. Finland, Communication No. 431/1990 <http://www1.umn.edu/humanrts/undocs/html/dec431.htm> [Cited: 6 Jan 2009]
- . 1994b. Länsman et al. v. Finland, Communication No 511/1992. <http://www.unhchr.ch/tbs/doc.nsf/0/7e86ee6323192d2f802566e30034e775?Opendocument> [Cited: 6 Jan 2009]
- . 1996. Länsman et al. v. Finland, Communication No 671/1995. <http://www.unhchr.ch/tbs/doc.nsf/0/67b455218cbd622d80256714005cfdad?Opendocument>: [Cited: 6 Jan 2009]
- . 2005. Länsman et al. v. Finland, Communication No 1023/2001. [http://www.unhchr.ch/tbs/doc.nsf/\(Symbol\)/fa24fc7cd513751bc1256fe900525608?Opendocument](http://www.unhchr.ch/tbs/doc.nsf/(Symbol)/fa24fc7cd513751bc1256fe900525608?Opendocument) [Cited: 6 Jan 2009]
- Valkonen, J. 2007. Luontopolitiikan paikallisuus. *Alue ja Ympäristö* Vol. 36 (1): 27-37. (In Finnish).
- Van Dijk, M. 2005. Industry evolution and catch up: the case of the Indonesian pulp and paper industry. ECIS Dissertation Series, Eindhoven, The Netherlands.
- Varis, O. 1989. The analysis of preferences in complex environmental judgements—a focus on the Analytic Hierarchy Process. *Journal of Environmental Management*. 28: 283-294.
- Vataniemi, E., Pirkonen, J., Ahonen, A., Hyppönen, M., & Mäenpää, I. 2006. Luonnon käyttöön perustuvien elinkeinojen paikallistaloudelliset vaikutukset Inarissa. *Metsätieteen aikakauskirja* 4/2006 :435–452. (In Finnish).
- Vidal, N.G. & Kozak R.A. 2008. Corporate responsibility practices in the forestry sector: Definitions and the role of context. *Journal of Corporate Citizenship* (In press).
- Vliegthart, R. Oegema, D. & Klandermans, B. 2005. Media coverage and organizational support in the Dutch environmental movement. *Mobilization* 10(3): 365-381.
- Vogel, D. 2005. *The market for virtue: The potential limits of corporate social responsibility*. Brookings Institution Press. 222 p.
- Votaw, D. 1972. Genius became rare: A comment on the doctrine of social responsibility part 1. In: Garriga, E., & Melé, D. 2004. Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics* 53: 51-71.
- Walker, G. & Daniels, S. 1997. Foundations of natural resource conflict: conflict theory and public policy. In: Solberg, B. & Miina, S. (eds.). *Conflict management and public participation in land management*. EFI Proceedings 14, European Forest Institute, Finland. p.13-36.
- Washington Post 2005. Hurricane scientist leaves U.N. team: U.S. expert cites politics in a letter. 23rd January 2005. <http://www.washingtonpost.com/wp-dyn/articles/A29397-2005Jan22.html> [Cited: 23 Sept 2008].
- Wehr, P. 1979. *Conflict regulation*. Westview, Boulder, CO, USA. 249 p.
- Welford, R. 2002. Globalisation, corporate social responsibility and human rights. *Corporate Social Responsibility and Environmental Management* 9(1): 1-7.
- Wittmer, H., Rauschmayer, F. & Klauer, B. 2006. How to select instruments for the resolution of environmental conflicts? *Land Use Policy* 23(1): 1-9

- Wondolleck, J.M. & Yaffee, S.L. 2000. Making collaboration work: Lessons from innovation in natural resource management. Island Press. 277 p.
- WRI. 2000. Trial by fire: Forest fires in Indonesia's era of crisis and reform. World Resources Institute, Washington DC. 76 p.
- WWF. 2003. Agreement signed for conservation and forest management. http://www.panda.org/about_wwf/where_we_work/asia_pacific/where/indonesia/news/index.cfm?uNewsID=8381. [Cited: 15 Sept 2008].
- . 2007. Government barometer 2007. <http://barometer.wwf.org.uk/intro.asp>. [Cited: 08 Oct 2008].
- Xu, Z. & Bengston, D.N. 1997. Trends in national forest values among forestry professionals, environmentalists and the news media, 1982-1993. *Society and Natural Resources*. 10(1): 43-60.
- Yotopoulos, P.O. & Romano, D. 2007. The asymmetries of globalization. Routledge, UK. 208 p.
- Zadek, S. 2001. The Civil Corporation: The New Economy of Corporate Citizenship. Earthscan, London, UK. 257 p.
- Zietsma, I.B. & Vertinsky, I.B. 2002. Shades of green: Cognitive framing and the dynamics of corporate environmental response. *Journal of Business Administration and Policy Analysis*. 27/29: 261-292

APPENDIX 1. ENGOS CAMPAIGNING AGAINST APRIL (PAPERS I-IV)

One should note that the ENGOS, listed below, were campaigning against APRIL to differing degrees of intensity.

Aliansi Masyarakat Adat Riau (Amar), Indonesia
 ARA - Working Group on Rainforests and Biodiversity, Germany
 BirdLife International Forest Task Force
 Borneo Orangutan Survival International
 Canadian EarthCare Society
 Community Alliance for Pulp Paper Advocacy (CAPP), Indonesia
 Dogwood Alliance, USA
 Down to Earth (DTE), Indonesia
 EnviroJustice, USA
 Eyes on the Forest, Indonesia
 Finnish Association for Nature Conservation (FANC)/ Suomen Luonnonsuojeluliitto
 Finnish Nature League / Luonto-Liitto
 Finnish Society for Nature and Environment / Natur och Miljö
 Forests and the European Union Resource Network / FERN
 Forest Watch International/ FWI, Indonesia
 Friends of the Earth Australia
 Friends of the Earth Austria / GLOBAL 2000
 Friends of the Earth Colombia / Censat Agua Viva
 Friends of the Earth Costa Rica / COECOCeiba
 Friends of the Earth England, Wales & Northern Ireland
 Friends of the Earth Finland
 Friends of the Earth Indonesia / WALHI
 Friends of the Earth International Forest Program
 Friends of the Earth Japan
 Friends of the Earth Netherlands / Milieudefensie
 Friends of the Earth Norway
 Friends of the Earth Paraguay / SOBREVIVENCIA
 Global Forest Coalition
 Green Press Initiative, USA
 Greenpeace International
 Hakiki, Indonesia
 ICTI - Tanimbar, Indonesia
 Institute for Environmental Advocacy (LALH), Indonesia
 Jikalahari, Indonesia
 Kaliptra Sumatra, Indonesia
 Kelompok Advokasi Riau (KAR), Indonesia
 Mitra Insani, Indonesia
 Pro REGENWALD, Germany
 Rainforest Action Network, USA
 Robin Wood, Germany
 SKEPHI, Indonesia

Urgewald, Germany
Virginia Forest Watch, USA
WALHI Kalimantan Selatan, Indonesia
WALHI Riau, Indonesia
Watch Indonesia!, Germany
Worldforests, Scotland
World Rainforest Movement (WRM)
World Watch Institute
WWF Indonesia
WWF Riau, Indonesia
WWF International

APPENDIX 2. ENGOS CAMPAIGNING AGAINST THE FINNISH FOREST AND PARK SERVICE (PAPERS I-IV)

One should note that the ENGOS listed below were campaigning against the Finnish Forest and Park Service to differing degrees of intensity.

Finnish Association for Nature Conservation (FANC)/ Suomen Luonnonsuojeluliitto
Finnish Nature League (FNL)/ Luoto-Liitto
Friends of the Earth England, Wales & Northern Ireland
Greenpeace International
Greenpeace, Finland
Greenpeace, Germany
Greenpeace, Netherlands
Greenpeace, UK
Taiga Rescue Network
Wilderness Movement
WWF Finland