# Governing Forests in a Changing Climate

## Exploring Patterns of Thought at the Climate Change – Forest Policy Intersection

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# Governing forests in a changing climate. Exploring patterns of thought at the climate change – forest policy intersection


## Abstract

This thesis explores how the climate change-forest policy intersection is constituted in different contexts. Bringing together discourse analysis, feminist political theory and Governmentality studies, the thesis employs a critical governance approach and thus sheds light on indirect and subtle forms of governing. Embedded in the intergovernmental context of United Nations Framework Convention on Climate Change (UNFCCC) and the Swedish national forest policy context, the analytical focus is on problematisations of climate change and forests, on (gendered) identity formations and how these overlap and differ in the two contexts.

The thesis confirms how climate change entails a narrow conception of forests as carbon sinks, and demonstrates an ongoing categorisation of forests and forestry based on spatial locations that imply conservation of tropical forests, and intensive management of forests in countries like Sweden. In both contexts there is a rural-urban dichotomy that entails an implied difference between distant and immediate forest dependence that approaches a civilised/uncivilised differentiation. The associated steering techniques entail a focus on activating individuals such as female forest owners, on enabling poor forest dependent communities, or establishing global forest carbon trading, which distorts the contestable role of forests in climate change strategies.

In the Swedish context, the analysis further demonstrates how climate change has become a forest production issue, how forests are abstracted from local contexts and an important part of the formation of a Swedish national identity. The image of consensus around Swedish forestry distorts domestic conflicts around forests. Finally, by drawing on feminist political theory this thesis bring attention to gendering practices in Swedish forest policy, and reveals deep rooted values in Swedish forest governance that continue to favour intensive forest production and economic revenues above publically defined goals connected to social and environmental concerns.



*Keywords:* forest, climate change, UNFCCC, global, policy, governance, discourse, gender.



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# Dedication

Till barna mina.

*All things are subject to interpretation; whichever interpretation prevails at a given time is function of power and not truth.*

Friedrich Nietzche

# Contents

# List of Publications

This thesis is based on the work contained in the following papers:

I Kleinschmit, D., Ingemarsson, F. and Holmgren, S. (2011). Swedish forest policy research – a review. *Scandinavian Journal of Forestry Research* (27:2), 120-129.

II Holmgren, S. (2013). REDD+ in the making: Orders of knowledge in the climate-deforestation nexus. *Environmental Science and Policy* (33), 369-377.

III Holmgren, S. and Arora-Jonsson, S. (2015). The forest kingdom – with what values for the world? Climate change and gender equality in a contested forest policy context. Scandinavian Journal of Forestry Research, (30:3), 235-245.

The contribution of Sara Holmgren to the papers included in this thesis was as follows:

I The research idea and framework for analysis was developed by Kleinschmit. Kleinschmit, Ingemarsson and Holmgren conducted the content analysis, discussed methods, and summarised the main results. Kleinschmit wrote the majority of text whereas Ingemarsson and Holmgren contributed with minor sections.

II Holmgren developed the analytical framework, analysed the empirical material and wrote the paper.

III Holmgren developed the analytical framework, analysed the empirical material and wrote most of the text. Arora-Jonsson was active as a discussion partner and wrote minor parts of the text.

# Abbreviations

| | |
|---|---|
| CDM | Clean development mechanism |
| COP | Conference of the Parties |
| ENGO | Environmental non-governmental organisation |
| EU | European Union |
| FSC | Forest stewardship council |
| HWP | Harvested wood products |
| JI | Joint implementation |
| KP | Kyoto Protocol |
| KSLA | Swedish Academy of Agriculture and Forestry |
| LULUCF | Land use, land use change and forestry |
| PES | Payment for environmental services |
| REDD+ | Reducing emissions from deforestation and forest degradation, and enhancing forest carbon stocks in developing countries |
| SBSTA | Subsidiary body on scientific and technological Advice |
| SEPA | Swedish environmental protection agency |
| SFA | Swedish forest agency |
| SKAD | Sociology of Knowledge Approach to Discourse |
| UNFCCC | United Nations Framework Convention on Climate Change |
| WPR | What's the Problem Represented to be? |

# 1 Introduction

This thesis is about forests in the era of climate change. Acknowledging the severity of climate change as a material phenomenon, I have chosen to devote this thesis to the *social construction* of climate change in a forest policy context. In addition to the material effects of climate change, social constructions have consequences for what issues are problematized in relation to forests, how forests are governed and managed, how people are governed, as well as how people perceive forests, themselves and others.

Situated in the field of critical policy research, and more specifically the subfield of forest policy, this thesis draws attention to what Governmentality scholars refer to as 'government at a distance' (Miller and Rose, 2008: 33). That is, the collective forms of thinking that are a precondition for any type of governing (Bacchi, 2009: 265), including forests in a changing climate. Accordingly, I explore how social meanings around forests emerge in the era of climate change, how problems are constituted in different contexts, how (gendered) identities are formed, and how they are (re)produced by state and non-state actors, resulting in particular relations of power. The empirical focus is on Sweden and the intergovernmental context of the United Nations Framework Convention on Climate Change (UNFCCC).

## 1.1 Setting the scene: Forests in a changing climate

In the Summary for Policymakers in the 5th Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPPC), the Working Group I concluded that:

> Warming of the climate system is unequivocal, and since 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level

> has risen, and the concentrations of greenhouse gases have increased. (IPCC, 2013, p. 4)

While the climate has become warmer during the last 50 years as shown by IPPC in AR5, scientific, political, rhetorical and economic struggles have proceeded and have implied small steps in addressing climate change over the last 20 years (Pettenger, 2007: 1-4). Throughout this period, the role of forests in climate change mitigation and adaptation has become increasingly emphasised. It is now widely recognized that forests and human interactions with forests can amplify or dampen anthropogenic climate change (Bonan, 2008). Consequently, scholars in different contexts argue that forest and climate policy need to be approached as intersecting policy areas in order to fully grasp related challenges, and to be able to develop instruments and governance systems that can resolve goal conflicts and take advantage of synergies (Beland Lindahl and Westholm, 2010; Buizer et al., 2014). Thematically, this thesis takes this policy 'intersection' as its point of departure for further analysis.

A basic point of departure in this thesis is that in forest policy contexts, climate change evokes fundamental questions of political character, such as the meaning of forests, including how they should be used, managed, with what goals, interests and by whom. So far, the majority of policy studies linking climate change with forests have however focused on developing countries (Storch and Winkel, 2013). Still, the meanings attached to climate change and forests are also central in developed countries, in particular in forest rich countries like Sweden, as it can affect national carbon accounting and reporting of carbon emissions and reductions to United Nation Framework Convention on Climate Change (UNFCCC); offer opportunities for commercialisation of forest products as 'low-carbon', 'bio' and 'green'; and alter forest management and policies. Above all, the meanings of climate change and forests can be considered central as they affect what actors, issues, interests, and values of forests are privileged and marginalised. By focusing empirically on meaning making in Swedish forest policy and the UNFCCC contexts, this thesis brings attention to contexts not often covered in studies focusing at the climate-forest policy intersection (Storch and Winkel, 2013); *and* to groups often overlooked in discourse oriented forest policy studies (Winkel, 2012; Leipold, 2014).

In the intergovernmental context of UNFCCC, forest issues are primarily negotiated under the headings of land use, land use change and forestry (LULUCF) (targeting industrialised countries); and reducing emissions from deforestation and forest degradation, and enhancing forest carbon stocks in developing countries (REDD+) (targeting developing countries). Here, I

picture UNFCCC as a 'global' and influential context where state and non-state actors struggle to demarcate policy problems and solutions concerning forests, while assigning responsibilities and formulating research agendas. However, the negotiations around climate change and forests are not limited to the intergovernmental setting of UNFCCC. Climate change is directly or indirectly underpinning forest related policies and governance processes on different scales (c.f. Doelle et al., 2012).

Bringing together discourse analysis, Governmentality studies, and feminist political theory, this thesis draw attention to more indirect forms of steering and thereby increases our understandings of how forest governing in the era of climate change takes place, of interdependencies, and of how this governing is both gendered and gender*ing* (c.f. Bacchi and Eveline, 2010). The discourse analytical focus is on ways of problematizing climate change and forests, ways of forming (gendered) subjects, and patterns of similarities and differences across national and global contexts. Contrary to most studies at the climate-forest policy intersection, this thesis incorporates a feminist perspective to the analysis. With feminist perspective I here aim at an interest in how policy produces gendered relationships (as socially constructed differences between men and women that have divisional and unequal effects (Acker, 2004), and how pre-existing conditions alter this process.

There are several reasons why the inclusion of gender in forest related policy studies is relevant and timely. First, references to gender are increasingly found in global climate policy a (UNFCCC, 2015a), in relation to REDD+ projects in tropical contexts (Westholm and Arora-Jonsson, Forthcoming), as well as in national forest sector strategies, i.e. Sweden (Ministry for Rural Affairs, 2011). References to gender are often a source of research funding, development project grants, and considered key for legitimate governance of environmental resources (Arora-Jonsson, 2014). Finally, as argued by Bryson (2003, p. 4), any political analysis ignoring the power relationships between men and women is inescapable incomplete. By adding a feminist perspective this thesis draws attention to an often overlooked power relation and topic in political analysis (c.f. Rönnblom and Eduards, 2010).

In the following sections I introduce some main features of the scholarly literature on climate change and forests. I further introduce the theoretical perspectives from which the aims and objectives are derived. Finally, I provide the reader with a guide to the further reading of this thesis.

## 1.2 Scholarly trends at the climate-forest policy intersection

The emergence and development of REDD+ and LULUCF illustrates the increased role of forests in climate change governance over the past two decades; varied and important research efforts have been made in relation to these topics. This research includes studies on the effects of rising temperatures on forest ecosystems, and ecological, social, political, and economic possibilities and effects of using forests as a climate change strategy. When it comes to policy related studies, a majority of the research has been oriented towards informing policy makers, facilitating and improving policy implementation of various climate mitigation and adaptation efforts (Agrawal et al., 2011; Ellison et al., 2011; Doelle et al., 2012; Ellison et al., 2013), or explaining policy development and change (den Besten et al., 2014; Reinecke et al., 2014). REDD+ has furthermore been the topic of a number of journal special issues (Corbera and Schroeder, 2011; Marino and Ribot, 2012; Buizer et al., 2014), adding important insights to the development, problems and implications of the mechanism.

Additionally, a number of studies draw attention to framings and discursive struggles at the forest-climate policy intersection, in Northern (developed) (Lindahl and Westholm, 2011; Winkel et al., 2011; Kleinschmit and Sjöstedt, 2014) as well as in Southern (developing) contexts (Somorin et al., 2012; Di Gregorio et al., 2013). Pistorius et al. (2012) further demonstrate interesting parallels between the historic German discourse on forest functions and REDD+, arguing that the historical one-sided focus on timber production has been replaced by a focus on the carbon sequestration capacity of forests. Baldwin (2003) refers to the strong focus on timber production as a new management paradigm, suggesting that 'normal growth', 'annual allowable cuts' and maximum sustained yields' have been replaced by a focus on storing and cycling 'energy and material flows', requiring advanced remote sensing and satellite imaging technologies.

Despite the bias towards developing country contexts noted by Storch and Winkel (2013), there is a growing number of Swedish studies focusing on the climate change-forest policy intersection. Keskitalo (2008; 2011) provides insights to vulnerabilities, adaptive capacities and policies in forestry, from a local as well as from a European comparative perspective. Due to climate change and related issues connected to resource use, Beland Lindahl and Westholm (2010) argue for a broader understanding of the forest sector and related policies as forests are increasingly linked to other issues. The authors further note how traditional actors in the Swedish forest sector conceive climate change and the related energy transition as central to the future of the forest sector, and largely portray climate change in accordance with their pre-

existing preferences and interests (Lindahl and Westholm, 2011). Additionally, Kleinschmit and Sjöstedt (2014) illustrate how the climate-forest debate in Swedish media largely have followed international discussions, and that politicians and scientists are highly influential on how problems are defined and solutions discussed. In an analysis of the adaptation policy debate, Ulmanen et al. (2015) further reveal how climate adaptation concerns have been limited in Sweden, primarily due to the strong influence of large-scale rational forestry interests that have presented adaptation and related biodiversity preservation as a threat to increased forest production and climate change mitigation. The authors note how, in a similar manner, conservation advocates have prioritised mitigation, since adaptation has been seen as a denial of necessary emission reductions (Ulmanen et al., 2015).

However, as in the broader policy literature on climate change and forests (c.f. Cabello and Gilbertsen, 2012), there is a tendency in the Swedish context to overlook questions of power and *how* the problems examined come to exist – an endeavour that is central to critical scholarship (c.f. Death, 2014).

## 1.3 A critical approach

From being relatively rare in research on climate change and forests, primarily due the dominance of natural science, there is a growing body of 'critical' studies on the climate-forest policy intersection (Cabello and Gilbertsen, 2012; c.f. Gupta et al., 2012). These studies are 'critical' in the sense that they demonstrate links between knowledge and power, and/or call for alternative epistemological understandings of forests and climate change (c.f. Lövbrand, 2009; Cabello and Gilbertsen, 2012; Gupta et al., 2012). In this vein, Baldwin (2003) and Boyd (2010) illustrate how carbon cycle research with claims on objectivity increasingly have turned forests into a sphere of climate regulation rather than e.g. sustainable forest management. Gupta et al. (2012) further note how technical issues connected to carbon accounting not only simplify complex relationships and local pre-conditions, but also produce resistance and counter expertise. Yet, as noted by Death (2014: 1-6), the critical scholarship is not only characterised by a theory driven interest in power relationships, the close connection between knowledge and power, conflicts, resistances, common sense, and *how* actors and problems are constituted, but also through dealing with overlooked topics. When it comes to climate change and forest policy, gender relations is one such largely overlooked topic.

However, there is now a growing scholarship that pays attention to gendered power relations and gendering practices in the context of climate change or forests. In Northern contexts, this includes discussions on how

critical feminist theory can contribute with alternative approaches to studies of human-social relationships (Kaijser and Kronsell, 2013) and climate governance research (Kronsell, 2013). Magnusdottir and Kronsell (2014) further note how climate policy making in Scandinavia is gender balanced in terms of representation, but insensitive to how masculine institutions continue to shape the policy area thus favouring technical fixes instead of e.g. behavioural change (Magnusdottir and Kronsell, 2014). Additionally, Arora-Jonsson (2011) demonstrates stereotyped representations of women in relation to climate change in policy and scholarly literature, where women in the North are represented as virtuous and women in the South as vulnerable.

When it comes to forests, important research efforts have been made particularly in relation to forest management. In a special issue on gender and forestry Lidestav and Reed (2010) state that forest management is not primarily a technical or scientific issue, but fundamentally political in character. Therefore, they call for new research problems and approaches that can grasp gendered relations of power (Lidestav and Reed, 2010). Similarly, Colfer and Minarchek (2013) draw attention to the need for a gender perspective in tropical forest management to benefit both women and men. In Swedish forest related research gendered relations have primarily been analysed in relation to small scale forest owners (Lidestav, 1998), differences in management practices and attitudes (Lidestav and Ekström, 2000; Lidestav and Berg Lejon, 2012), and the representation of female and male forest owners in forest sector media (Lidestav and Sjölander, 2007). Moving beyond forest management, Reed (2010) further explores participation and influence in forestry decision making in Canadian rural communities based on assumptions connected to class, race and gender. With a similar focus on rural locations, Arora-Jonsson (2009) traces contradictions and connections of gender constructions across two rural communities in India and Sweden. Acknowledging the need to approach forest management as a political issue (Lidestav and Reed, 2010) and how gender relations are manifested in local contexts, this thesis focuses on gendering practices on central level forest policy making in the context of climate change. It thereby adds a macro level perspective to gender studies of Swedish forest governance.

Overall, when it comes to questions of gender, the climate-forest policy intersection is still rather unexplored. By incorporating a feminist perspective and exploring *how* the climate change – forest policy intersection is constituted in a country like Sweden and among international organisations, this thesis complements previous scholarly literature on climate change and forest policy. It adds to an evolving field of critical policy research on the environment (c.f. Death, 2014; Stripple and Bulkeley, 2014).

### 1.3.1 Theoretical points of departure

The critical approach advocated in this thesis brings together three types of theoretical literature that, to various degrees, draw on Foucault's theorising of knowledge, power, subjects and problematisations: Discourse analysis, Governmentality studies, and post-structural feminist theory. First, by drawing on scholars like Bacchi (2009) and Keller (2005, 2011) this thesis is located within a discourse analytical perspective that conceives discourse as context dependent, contingent, productive and structuring of social relationships, and that is interested in methodological questions when doing discourse analysis. By drawing on Governmentality scholars like Miller and Rose (2008), Dean (2010), and their followers in climate and forest research (Lövbrand, 2009; Boyd, 2010; Gupta et al., 2012; Stripple and Bulkeley, 2014; Lövbrand and Stripple, 2014) and feminist policy studies (Bacchi, 2009), I approach discourse production and related 'ways of thinking' as a distant form of steering of populations. Through discourse norms of desirable behaviour are established and people become involved in self-regulation to fulfil given norms. As is the case in this thesis, this perspective acknowledge the state as an important player amongst other, and explore the role of agencies, institutions and knowledge's in governing processes (Bacchi, 2009: 266).

By drawing on post-structural feminist scholars like Bacchi (2009), Rönnblom and Eduards (2010) I finally add a feminist perspective to this thesis. With a feminist perspective, I mean an understanding of gender as something that is continuously *done* and that requires empirical enquiry; and an interest in the conditions under which particular gender relations come to exist. By adding a feminist perspective, this thesis exemplifies how forest policy studies can take gendered relationships into consideration as an integrated dimension of political analysis and thus draw attention to power relationships often overlooked in political science (Rönnblom and Eduards, 2010). In this thesis, gender is thus *not* about women or women's subordination, but about highlighting power *relationships* and how they are continuously done.

## 1.4 Aims and objectives

Based on the related theoretical literature introduced above (Section 1.3.1), this thesis aims to demonstrate how social meanings around forests emerge in the era of climate change, how climate change and forest are problematized in different contexts, how (gendered) identities are formed, and how they are (re)produced by state and non-state actors, resulting in particular relations of power. More specific objectives are:

1) To demonstrate how the climate-forest policy intersection is constituted in different contexts, using Sweden and UNFCCC as examples; and draw attention to similarities and differences in these contexts.
2) To demonstrate how climate change as an issue intervenes in Swedish forest policy, taking the institutional context into account.
3) To demonstrate how gendered relations are produced at the climate change-forest policy intersection, using Sweden as a case.

To achieve these objectives I use the discourse analytical approaches developed by Bacchi (2009) and Keller (2005, 2011) to explore *how* climate change and forests are problematized, and *how* (gendered) subject positions are formed, taking the institutional context into account. Subsequently, I trace the development of climate-forest policy in Sweden and UNFCCC over the two past decades, and draw on the Governmentality literature to contextualise the analysis.

The overall aims and objectives are explored through three different Papers (I-III), each with its own objectives. The objectives of the Papers were:

I) To provide an overview of Swedish forest policy related research during the past two decades, and identify trends, gaps and blind spots.
II) To explore the intersection between climate change and tropical deforestation; *and* draw attention to the role of non-state actors in global governance by focusing on REDD+ programme hosts as *producers* of discourse.
III) First, to demonstrate how the Swedish State has made meaning of climate change and gender equality in a governmental action plan launched in 2011. Second, to make visible the deep-rooted values underpinning these representations.

The thesis takes its point of departure in Paper I, where our findings show how Swedish forest policy studies are very limited in linking forest policy to processes beyond the national level; that climate change has been a rather overlooked theme, and that critical theoretical approaches are rare. Consequently, in Papers II and III, and in the Synthesis, I draw on critical scholars; focus on climate change as an issue; and on Swedish-global interdependencies. In the Synthesis, Papers II and III are brought together and complemented by further descriptions and analysis of LULUCF, REDD+, and

Swedish forest governance. In the Synthesis similarities and differences across the global and national contexts are also described.

## 1.5 A guide for the reader

This thesis is structured as follows: In Chapter 2 the empirical contexts are introduced. On the global level LULUCF and REDD+ are described in terms of their evolution, intended functions and contested issues. Following on, I introduce key features of Swedish forest governance. I particularly direct attention to the social, cultural and political context. Last, I present how global climate governance has interacted with Swedish forest and climate governance over the past two decades, with particular focus on forest policy and the meaning making of climate change. In chapter 3 I introduce the theoretical points of departure of this thesis. This includes elaboration of the theoretical perspectives drawn upon, definition of central concepts, and a positioning of the approach in relation to the main theoretical approaches used in governance research. Chapter 3 ends with a discussion of the limitations of the chosen approach.

In chapter 4 I discuss my research strategy, which is intimately related to the theoretical approach outlined in Chapter 3. Here I elaborate on how the interpretative epistemological position has shaped my research questions, interpretation and formulation of findings. Furthermore I reflect on the methods used in the papers of this thesis. In Chapter 5 the three papers of the thesis are summarised. Finally, in Chapter 6 I revisit the three overall aims introduced in Chapter 1 and discuss them in relation to the findings of the three papers.

# 2 Background

As stated in the Introduction, the focus of this thesis is on exploring major patterns of thought at the intersection of climate change and forest policy. In the following, I elaborate on the development of the sink concept in UNFCCC and on Swedish forest governance, paying attention to political, economic and social aspects. Theoretically, I draw on Governmentality scholars to contextualise Swedish forest policy in wider societal trends, and thus refer to what Miller and Rose (2008: 18) refer to as 'advanced liberalism' – a development that has gained momentum over the past two decades. Advanced liberalism originated in the 1960s and emerged as a unison critique of an overblown state. Eventually, it led to a shift from central to more distanced and novel steering. This distanced steering has been manifested differently in different contexts but often involves, for example, standards, budgets, targets, experts, and/or market instruments primarily aimed at enhancing autonomy, and activating and 'responsibilising' free individuals. Often this has occurred through a language of professionalism, enterprise and efficiency which in turn also goes under the term 'new public management' (Miller & Rose, 2008). Hence, the title of the thesis "Governing forests in a changing climate" is two pronged; not only referring to a warmer climate but also to the wider political climate that has developed since the adoption of the UNFCCC in 1992.

## 2.1 Forests and global climate policy

In 1992 in Rio de Janeiro, UNFCCC was adopted as one of three "Rio Conventions". The UNFCCC entered into force in March 1994 with the ultimate objective of stabilizing greenhouse gas concentrations at a level where food production and economic development are not threatened. In the convention, industrialised countries (Annex I countries) are given a leadership role to reduce national emissions levels in comparison to developing countries

(non-Annex I parties) (UNFCCC, 2015b). In 1997 in Kyoto, the Kyoto Protocol (KP) was adopted, which sets legally binding emission reduction targets for industrialised countries in the first commitment period 2008-2012, where signatories commit themselves to reduce their overall emissions by at least 5 per cent below 1990 levels (UNFCCC, 2015b). The second commitment period runs from 2013-2020 and has a different composition of Parties who are committed to reduce emissions by 18 percent below 1990s levels. Structured like the convention, KP places greater responsibility on developed countries under the principle "common but differentiated responsibility" (UNFCCC, 2015c).

All Parties to the Convention are expected to count their GHG emissions and removals from land use change and forestry in national inventories. Annex I countries are furthermore obliged to submit an annual inventory of their greenhouse gas emissions. After submission to the UNFCCC secretariat, the country reports become publically available (UNFCCC, 2015d). A central component of the UNFCCC and KP is thus the question of carbon accounting, including monitoring, reporting and verification (MRV) of countries carbon stocks. Governments have, since 1994, invested significant resources in GHG data collection, preparation and validation as comparable data is considered essential for climate change mitigation (UNFCCC, 2015d). However, accounting for emissions from land use and forest related activities is complex and bound by uncertainty. The main problems are connected to the *setting of reference levels* i.e. the historical carbon content of lands to which current emission reductions will be compared. Another central question is the *non-permanent* character of carbon sequestration in trees and land use systems due to human induced or natural disturbances. Additionally, *leakage* is a major challenge implying that e.g. forest protection for carbon sequestration purposes in one location may cause deforestation elsewhere (Mattsson, 2012).

Apart from national level emission reductions, the KP allows Parties to meet their emission reduction targets through three market-based mechanisms: (1) international emission trading, which allows countries to sell excessive emission units to countries that do not meet their targets (UNFCCC, 2015e); (2) the Clean Development Mechanism (CDM); and (3) Joint implementation (JI). CDM and JI are two so-called flexible mechanisms which allow industrialised countries to count removals by sinks in project based activities. Whereas CDM covers Annex I country investments in projects in developing countries, aimed at reaching emission targets at a lower cost, JI refers to projects jointly undertaken by two Annex I countries (Mattsson, 2012: 5-8). The idea is that these market based mechanism will advance so called green investments and make emission reductions more cost-effective (UNFCCC,

2015b). Additionally, in 2005 a number of tropical nations initiated discussions around what is now labelled REDD+, which is a global system of payment aimed at increasing forest carbon stocks in tropical forested countries. Similar to CDM and JI, REDD+ is assumed to generate cheap and quick reductions in global GHG emissions by paying forest users and owners to better manage their forests and fell fewer trees (Angelsen et al., 2009: 1). In total, the working of the UNFCCC and Kyoto Protocol is based on national carbon accounting and carbon markets. In the following sections, the role of forests is global climate politics is described.

### 2.1.1 LULUCF struggles…

Article 3.4 in the Kyoto Protocol stipulates a voluntary removal of emissions by the use of sinks when accounting changes in the national greenhouse gas inventory (United Nations, 1998). The flows of carbon between land and atmosphere depend on the rate of $CO_2$ emitted from and removed by soils and vegetation. By altering land use and managing forest resources, countries can potentially affect the concentrations of $CO_2$ in the atmosphere. Since 1995 when the first Conference of the Parties (COPI) of the UNFCCC was held, state and non-state actors have struggled over the meaning of forests in climate change mitigation, and tried to make the use of forest sinks a morally acceptable climate strategy (Lövbrand, 2009). Lövbrand (2009) notes how the struggle around definitions and accounting culminated in 2000. As the US withdrew from the Kyoto Protocol, the European Union (EU) accepted additional LULUCF activities under Article 3.4 as a compromise, to save the KP. This acceptance of additional LULUCF activities entailed a drastic increase in eligible sinks. Lövbrand (2009: 409) refers to the acceptance of additional LULUCF activities as a compromise, and its formulation in legal text as an institutionalisation of the 'moral rightness of terrestrial carbon sequestration'. Critics argue that LULUCF has been the source of the KP's ineffectiveness as focus is put on sinks rather than cutting emissions at their source (Macintosh, 2011).

LULUCF includes five different strategies for GHG reductions: (1) provision of renewable energy; (2) substitution for more fossil carbon intensive products; (3) reduction of emissions other than carbon dioxide; (4) sequestration of carbon through enhancement of terrestrial carbon stocks; and (5) conservation of existing carbon stocks through reduced devegetation and reduced deforestation (Schlamadinger et al., 2007: 273). Ellison et al. (2011) note how these strategies for GHG reductions are intimately linked to particular forest interests, which influence the development of a carbon accounting framework. LULUCF is thus characterised by competition and

struggles linked to competing demands on forests and a promotion of (1) *standing forests* (carbon sequestration, biodiversity protection); (2) *Harvested Wood Products* (HWP); and (3) *bioenergy* (Ellison et al., 2011). Especially for forest rich countries, including Sweden, the question of how forest carbon stocks are treated is central as it largely affects the outcome of national GHG inventories, and incentivises different forest uses. Many of the controversial discussions in UNFCCC have therefore circled around forest carbon stocks and carbon stock changes.

However, at COP17 in Durban in 2011 new accounting rules for the second period of the Kyoto protocol were decided upon, which potentially alters the balance among the different LULUCF strategies. In the new rules, HWP are accounted for which implies that domestically harvested wood, whether converted to sawn wood or paper, is an eligible contribution to a country's carbon pool. In the new rules, use of domestically grown wood is thus incentivised. The inclusion of HWP implies a shift in LULUCF from privileging wood for energy production to a favouring of domestic wood for products (Frieden et al., 2012). As will be shown in Section 2.2, the importance of HWP as a climate mitigation strategy has long been apparent in the Swedish forest policy context, promoted by public, as well as, industrial actors.

### 2.1.2 … and REDD+ debates

Cabello and Gilbertson (2012) note how the legitimisation of sinks in LULUCF paved the way for what later came to be referred to as REDD+. While bioenergy and wood production dominates LULUCF, REDD+ is ultimately about standing forests and forest conservation. Tropical deforestation was incorporated to the UNFCCC agenda in 2005. At that time Costa Rica, Papua New Guinea along with several other nations known as the Coalition for Rainforest Nations proposed the so-called RED mechanism to give developing countries incentives to reduce emissions through reduced deforestation (Agrawal et al., 2011). In the 2009 Copenhagen Accord, REDD+ is formulated as a proposal to assist developing countries with voluntary reductions in national deforestation and GHG emissions below a baseline though economic incentives (UNFCCC, 2009). The main idea is to establish a multilevel system, from the global to the local level, of payments for environmental services (PES) that aim to reduce carbon emissions and increase forest carbon stocks (Angelsen et al., 2009: 1-3). Similar to LULUCF carbon accounting and systems for measuring, reporting and verifying carbon flows are at the heart of REDD+.

However, REDD+ has not been free from criticism. Böhm et al. (2012) note how indigenous peoples, non-governmental organisations, and other civil society actors in the global South have been resisting REDD+ and the associated expansion of carbon markets for years. Although REDD+ now includes a '+' that stands for safeguards in the implementation phase, including e.g. gender aspects, biodiversity and transparency that are to guarantee social and environmental considerations, REDD+ is still a contested policy process. Critics argue that REDD+ governance fails to consider previous research and experiences from development projects. Additional critique is that REDD+ homogenises environmental and development governance (Westholm and Arora-Jonsson, Forthcoming). Regarding safeguards, Westholm and Arora-Jonsson (Forthcoming) further note how gender has become a bureaucratic obligation that legitimises the REDD+ process and that stipulates a causal relationship between increased incomes and improvement of women's status.

Despite the prominent position of REDD+ on the UNFCCC agenda, many researchers question the link between tropical deforestation, rural populations and poverty. Geist and Lambin (2002) conclude in a large meta-analysis of tropical deforestation that too much focus has been put on local factors, such as population growth and shifting cultivation. They state that any universal policy or global attempt to control deforestation, e.g. by poverty alleviation is condemned to fail (Geist and Lambin, 2002). Other authors follow this line of argumentation. Butler and Laurance (2008) suggest that since the mid-1990s, the general character of tropical deforestation and forest degradation has changed. Instead of being caused by rural farmers, tropical deforestation is rather caused by economic globalisation, major industries, timber operations, exotic tree plantations, large-scale farming as well as oil and gas extraction (Butler and Laurance, 2008). DeFries et al. (2010) further shed light on the need of paying attention to both sides of binaries, such as the rural-urban, forested and non-forested lands, and exporting-importing countries in order to address the drivers of deforestation. Growth in urban populations and export of agricultural products are increasing the pressure on remaining forests in developing countries. Urbanised populations consumption furthermore induces intensive commercial food production in rural landscapes, which increases the pressure on tropical forests (DeFries et al., 2010).

### 2.1.3 A broadened global climate-forest policy intersection

Initially, the climate-forest policy intersection in the UNFCCC entailed a narrow focus on the carbon sequestration capacity of forests (c.f. Lövbrand, 2007; Boyd, 2010; Pistorius et al., 2012). It presumably reflects the influence

of forestry science and carbon cycle research. Over time the climate-forest intersection has been broadened and is now linked to wider social and political development issues (Gupta, 2010). This includes e.g. rural development, lively hoods, poverty reduction, employment, energy, and the transition to a 'low carbon economy', 'bio economy' or 'green economy'. In tropical forest contexts, climate change mitigation and adaptation are often discussed in relation to e.g. development (poverty reduction), conservation, rights of indigenous people, transformation of land use, ownership and tenure, PES, and the 'greening of economies' (Agrawal et al., 2008; UNECE, 2009; DeFries et al., 2010; Pistorius et al., 2012). In the EU, forest-climate interactions are e.g. manifested in renewable energy policies (European Parliament and Council, 2009), and the transition to a 'bioeconomy'. These build on ideas of smart and green growth based on efficient resource use and mitigation of climate change through reduction of fossil fuel dependence (European Commission, 2012; Kleinschmit et al., 2014; Pülzl et al., 2014). The general broadening of the climate-forest policy intersection reflects what (Bulkeley and Moser, 2007: 4) refer to as 'issue linkage', implying that climate governance has become a vehicle in the realisation of other policy goals, such as energy transition or regeneration of communities.

The emergence of REDD+ and LULUCF can largely be seen as what Adger et al. (2001) refer to as expressions of a 'global environmental managerial discourse'. This discourse draws on development optimism and a belief that interaction between developing and developed countries, involving public and private actors, will generate local advantages in poor countries (Adger et al., 2001). Amongst others, this discourse is characterised by external policy interventions distanced from the local resource users, largely contrasting the findings of location specific research (Adger et al, 2001). Likewise, Westholm and Arora-Jonsson (Forthcoming) note how REDD+ exemplifies how global environmental decision making has tended to move up-ward, while responsibility for managing the problems have moved downwards, in particular to rural geographies. This kind of distanced steering characteristic of 'advanced liberalism', and one-sided focus on the rural side of the rural-urban binary - is also evident in Swedish forest governance, which constitutes the 'national' context of this thesis.

## 2.2 Swedish forest governance

Sweden is a sparsely populated and forest rich country in the northern hemisphere. The role of forests is in many ways fundamental not only as a habitat, or a place of living, being, and working. Forests are also important for

rural subsistence, the national economy, and for building Swedish national identity. Together with mines and hydropower, the forest industry is often represented as a prerequisite for the rapid industrialisation and modernisation of Sweden that took place in the decades around the 1900s (Beland Lindahl, 2008). In the following, I provide an overview of Swedish forest governance over time, including the social and political context; and of how climate change has been represented in Swedish forest policy over the two past decades, while making connections to UNFCCC developments.

### 2.2.1 Historical trajectories

Over the two preceding centuries, the economic, social and cultural constructions of forests and subsequent struggles for control have been dominated by the production of timber (Arora-Jonsson, 2013). However, until the mid-19th century, Swedish forests were primarily valued for their contribution to agriculture in terms of pastures, fodder, and reclaimed land for farming. Competition over forest land was minor and local, and forests were considered as common resources. Throughout the 19th century, wider liberalisation processes started to alter this representation of forests as common resources as the State began to distribute public forest land to individual farmers and sell forest land to enterprises (Törnqvist, 1995: 54-55). As industrialisation boosted the demand for timber, charcoal, and construction material many men began to work in the forest and sell their timber to the State and later to sawmill companies in order to supplement their incomes from farming (Enander, 2007). The meaning of forests thereby shifts and become a production object underpinning the expansion of the sawmilling industry (Törnqvist, 1995), and intimately related to masculine representations of forestry workers. Previous uses of forests, as common pastures and firewood supply, had implied more diverse representations of forests, also including women (Arora-Jonsson, 2013). Hence, as the meaning of forests became equal to its timber, forests largely became associated with men.

Moreover, rapid modernisation and economic development throughout the 19th century was largely enabled by a representation of the Swedish North as uninhabited and remote. The image of the northern areas as empty legitimised the colonisation, which began in the 16th century and accelerated due to industrialisation. The colonisation and distribution of land largely displaced and challenged the subsistence of the indigenous people – the Sámi - that had been living in the area for about 8000 years. Still today, forestry and the Sámi reindeer herders, to a large degree, use and depend on overlapping lands. Reflecting the colonisation, the northern areas are still marked by conflicts between forestry, landowners and reindeer herders (Enander, 2007; Beland

Lindahl, 2008). Overall, the introduction of forestry implied specialisation in resource use where large areas became reserved for intensive wood production. A specialisation that coincided with a number of other processes, connected to markets, liberalisation trends, and colonisation (Eliasson, 2002: 45). The connections between the industrial forest production paradigm and masculine representations have continued to define forest activities and their status on local and national levels into present times (Lidestav and Sjölander, 2007; Sundström, 2010; Arora-Jonsson, 2013).

Another characteristic for Swedish forest governance is its corporatist structures, which have become distinctive over the past century. These structures have implied a mutual dependence between the State (through the Swedish Forest Agency, responsible for implementation and supervision), forest owners and industries. Accordingly, as long as forest owners delivered raw material to the industries in a sustainable manner, and forestry industry generated export revenues, tax incomes and employment, the State stayed at arm's length. This relationship was largely facilitated by a common perception of knowledge, scientific methods, expertise and a homogenous assembly of actors – white, middle aged or older men who in general have studied forestry. However, as Sweden adopted a new forest policy in 1993, putting environmental concern on equal footing with production, new actors entered and private initiatives such as FSC came to complement the public processes (Sundström, 2010). Sundström (2010) argues that the new forest policy in 1993 combined with FSC led to new actor constellations, where conservation and productionist advocates worked together, which weakened corporatist structures as a result (Sundström, 2010). Despite the weakening of corporatist structures, the gendered relationships characteristic of the policy area has persisted (Näringsdepartementet, 2004a).

### 2.2.2 A distanced steering

Swedish forest governance has, since the 1800s, been continuously shifting between central and decentralised steering. Appelstrand (2007) notes how this balancing between individual freedom and local communities on one hand, and central state power and steering on the other, has been a recurring theme in different epochs of Swedish forestry. The epochs are associated with distinct representations of small-scale forest owners, long since considered a key actor category in Swedish forest governance (c.f. Skosstyrelsen, 2002).

In 2011, individual forest owners owned 50 % of the productive forestland (Skogsstyrelsen, 2013), that is forestland that is suitable for forestry in the sense that production is at least 1 $m^{3\ per}$ hectare and year (Swedish National Forest Inventory, 2015). Around 60 % of the nearly 328 000 forest owners

were men. Meanwhile, 25 % of the productive forest land is owned by private companies and 14% by state owned companies (Skogsstyrelsen., 2013). In comparison to the great interest paid to small-scale forest owners in research concerning their role as wood producers (Törnqvist, 1995: 1), we show in Paper I of this thesis that companies only rarely appear in Swedish forest governance research.

In a Swedish policy context, the focus on governing forest owners has a long tradition and has had different expressions over time, largely reflecting the prevailing forest policy problem representations of the time. For example, by the mid-1800s there was a fear that forest owners would overexploit their forests and thereby harm not only their forestland and property, but also the interest of the nation. There was thus a *public* interest connected to the sustainable use of forests, and forest owners were represented as *self-interested* not understanding their own good (Appelstrand, 2007, p. 75). As a response, forests not needed by farmers were set aside as crown forests in the later 1800s. The state authorities motivated this intervention as the need to secure future timber supply. The idea was that the crown forests and their protection would be based on scientific methods and serve as benchmarks to other forest owners (Arora-Jonsson, 2013: 49-53 ).

By the latter half of the 1800s, peasants were portrayed as *victims* of industrial forest exploitation and in need of protection. In early 1900s, they were seen as *threats* to sustainable forestry and in need of education and supervision; and in mid 1900s as *timber producers* that needed incentives to produce as much as possible to guarantee timber supply to the forest industry (Appelstrand, 2007). Through the adoption of the equal forest policy goals of production and environmental protection in early 1990s, emphasis shifted to producing enlightened self-interest among forest owners and common understandings among previously opposing actors, i.e. between production and conservation advocates (Appelstrand, 2007: 203-304).

However, while the political (Appelstrand, 2007) and academic focus (Paper I) primarily has been on Swedish small-scale forest owners, recent research draws attention to the need of looking beyond this traditional actor category. Previously overlooked actor categories, including forestry advisors, contractors and timber buyers, are highly influential on how Swedish forest owners manage their forests. Consequently, factors used for explaining or predicting forest owners' behaviour, such as; gender; place of residence; or attitudes towards the forest ownership are insufficient (Hysing and Olsson, 2005; Häggström et al., 2012; Eggers et al., 2014). In line with what e.g. Miller and Rose (2008: 18) refer to as advanced liberalism, forest owners have 'outsourced' their responsibility to professionals, i.e. to entrepreneurs such as

forest service providers of various kinds. In order to understand the mechanisms influencing the achievements of policy goals, including climate adaptation and mitigation, we need to know more about previously overlooked actors and institutions such as forest service providers and the knowledge that shapes their advices and practices.

### 2.2.3 An altered forest policy and new challenges

Apart from equal goals of production and environmental protection, the 1993 forest policy change enhanced private and corporate authority over environmental, social and economic action. The 1993 policy change largely corresponds to what Shore and Wright (1997: 28-29) refer to as:

> a struggle between an old social democratic model - based on a paternalistic, bureaucratic, welfarist approach to government – and a neo-liberal model in which the power of government is mediated and disguised by *laissez-faire* economics and flanked by an ethos of individualism.

In 1991, Swedish voters elected a new conservative government. In the forest policy domain, the social democrats had steered centrally and top-down with detailed regulation since the 1920s. During this time, the right-wing position had coalesced with the organisation of forest owners, and its plea for strengthened ownership rights and deregulation. The assumption was that the diversity of forest owners would entail just as diverse preferences and management types, which naturally would result in more diverse management practices after decades of clear felling. Consequently, the conservative government pushed through ideas of deregulation which the federation of Swedish forest owners had promoted since the 1960s (Enander, 2003: 159-170).

In practice, the policy shift implied a downsized forest agency responsible for implementation and supervision and the catchphrase “freedom with responsibility”. Hence, forest owners were given the freedom to manage their forest as they liked, as long as they took the responsibility in terms of law and order (Regeringen, 1992). The assumption was, as Rose (1999: 139) puts it, that:

> “once responsibilized and entrepreneurialized, they would govern themselves within a state-secured framework of law and order”.

Since the 1993 policy change, the environmental dimensions of Swedish forest policy have been complemented through public and private initiatives. In 1999

the Swedish government launched a visionary environmental objective called 'Sustainable Forests' reading :

> The value of forests and forest land for biological production must be protected, at the same time as biological diversity and cultural heritage and recreational assets are safeguarded (SEPA, 2012: 20).

'Sustainable forests' was thereby quantified and subject to interim time set targets in 2001, and SFA became the agency responsible for implementation (Skogsstyrelsen., 2001). Additionally, public forest policy is today largely implemented with support from the certification schemes initiated in the mid 1990s. As noted by Boström (2002) and (Johansson, 2013), the dominant certification scheme, forest stewardship council (FSC), often exceeds legal requirements concerning e.g. logging of old growth forests and consultations between reindeer husbandry and forest industry, and thereby have a strong impact on forest management practices (Boström, 2002; Johansson, 2013).

Despite equal forest policy goals considering both production and the environment, Swedish forest governance is currently contested. While its proponents describe the 'Swedish forestry model' as world leading, including the Ministry of Rural Affairs and the Swedish University of Agricultural Sciences (Swedish University of Agricultural Sciences, 2012; Affairs, 2011), it has increasingly been exposed to criticism. Despite international evaluations that have criticised Sweden for not realising international obligations in terms of transparency and protection of old growth forests (Skogsstyrelsen, 1998), the State has continued to favour the Swedish model and avoid public debate around the contested issues (Skogsstyrelsen, 2004; Hysing, 2009). In Sweden, researchers (Forsberg, 2012), journalists (Zaremba, 2012), and environmental non-governmental organisations (ENGOs) (SSNC, 2011) have argued that the freedom of the Swedish forestry model has come to override responsibility, and that it contradicts established international and national objectives of safeguarding biological diversity and achieving sustainable development. The criticism not only involves environmental aspects, it also involves social dimensions related to the restricted possibilities for non-conventional forestry actors to participate in decision making, including local and environmental groups (Forsberg, 2012). The criticism indicates that while the state has become less visible, forest owners are not as 'responsibilised' as expected, forest management is not as diverse and governance not as heterogeneous or transparent as anticipated.

As climate change has become more prominent in Swedish forest policy, previous conflicts and polarisations have gained momentum as production

advocates use climate change as an argument to intensify forest production and conservation advocates see climate change as an argument for conserving forests (Lindahl and Westholm, 2011). However, as illustrated in the following section, the way in which climate change has been represented by the State has changed over the two past decades, clearly influencing the meaning of forests and ultimately the prerequisites for Swedish forest governance.

### 2.2.4 The role of climate change in Swedish forest governance

Returning to the Swedish forest policy from 1993, climate change is not treated in any specific sections but is referred to in disparate passages. 'Air pollution', i.e. climate change, is primarily represented as a threat to forest ecosystems and wood production. A diverse forest ecosystem with strong adaptive capacity is promoted for preventive reasons (Regeringen, 1992: 32). Nearly parallel to the Forest policy, the newly elected conservative Swedish government presented a Climate Bill (Regeringen, 1993) that directly targeted forestry and the forest sector. The Climate Bill included a strategy to stabilise national GHG emissions by the year 2000 at a level equal to the 1990 emissions levels. Like the UNFCCC negotiations, the 1992 Climate Bill focused on renewable fuel and energy production, with support for research on biofuels and biofuel technology, and reduced energy consumption on a household level (Regeringen, 1993).

The will to substitute fossil fuels with renewables, articulated in the Climate Bill in 1992, was eventually reflected in forest policy. In the 2007 forest policy revision, more intensive forest production methods were encouraged, which contrasts the discussions prevailing around the 1993 forest policy. At that time 'ecological' forestry was promoted and new species and fertilisation was abandoned (Regeringen, 1992). In the 2007 Governmental Bill on forest policy, it is stated:

> The government finds a high and stable growth a prerequisite for taking charge of the role forest has in climate change mitigation and adaptation. A high growth mitigate climate change through increased carbon sequestration in growing forests, forest soils, various forest products and by increased production of biofuels (Regeringen, 2008: 24).
>
> The government finds a long term sustainable increase of forest harvest as necessary for meeting the increased demand of forest raw materials, and for avoiding negative consequences on the international competitiveness of the forestry industry (Regeringen, 2008: 25).

Although it took nearly two decades for climate change to intervene in Swedish forest policy, the dominant representations of forests in UNFCCC negotiations has continuously been reflected in governmental programmes and strategies targeting the forest sector. One example is the question of HWP, whose inclusion in national greenhouse gas (GHG) accounting has been a long contested issue beginning with international discussions in 2001. At COP 17 in Durban in 2011, it was agreed to include HWP in national accounting (Ellison et al., 2011). HWP had appeared in Swedish forest policy programmes already in 2004, reflecting significant similarities with ongoing LULUCF debates. In 2003, the Subsidiary Body on Scientific and Technological Advice (SBSTA) - a permanent body established to support members of the UNFCCC and its Kyoto Protocol with advice and information on technological and scientific matters – presented a technical paper on HWP. The technical paper provides concepts and definitions of wood products and sketches the cycle of carbon in wood products. In the paper, it stated:

> […] wood products can affect the carbon cycle because they store carbon, they are substitutes of materials whose production results in larger fossil fuel emissions, and they are a renewable source of energy. In addition, existing wood products are a source of carbon dioxide and methane emissions as they decay. On the other hand, by using wood products as a substitute energy source, emissions from other sources, such as fossil fuels, could be reduced (UNFCCC, 2003: 6-7).

The articulation is similar to what is stated in a governmental investigation from 2004, which serves as a basis for a national strategy for promoting the use of wood in construction. Accordingly:

> If wood is used to a greater extent in long lived products, such as buildings, there will be a certain reduction of emissions of greenhouse gases. Partly it happens as wood is used in construction rather than burned or mouldered, and partly as wood substitutes other materials used in construction (Näringsdepartementet, 2004b: 180-181).

Interestingly, in the 2004 governmental strategy, it stated that climate change serves to complement previously *emotional* arguments for using wood in construction with *rational* arguments (ibid). The promotion of wood use for climate reasons on *EU level* is additionally described as affecting the status of Swedish forests, from being a national resource to being important for the 'global environment' (Näringsdepartementet, 2004b: 180-181).

In general, Sweden has played a very active role in EU climate policy, particularly in the LULUCF negotiations involving forests (Kjellén, 2007: 3). In a report published by the Ministry of Finance, a former Swedish chief negotiator provide insights into the Kyoto negotiations at the time when US left the Protocol, and when the 'moral rightness of terrestrial carbon sequestration' became institutionalised (Lövbrand, 2009: 409). According to the negotiator, as Sweden took over the EU presidency in 2001 it prioritised a unified EU position to ensure an immediate uptake of the KP negotiations. Additional focus was on pushing the internal climate work in EU (Kjellén, 2007: 75). The Swedish negotiator argues that the EU presidency allowed Sweden to have a continued active role in the climate negotiations, in particular when it comes to the Articles including forests. Accordingly:

> Sweden's long experience of national forest inventory and effective national coordination gave the Swedish climate negotiators trust and authority in the EU circle already from the start of our EU membership (Kjellén, 2007: 94).
>
> During Sweden's EU presidency in 2001 the Kyoto negotiations were at critical stage and Swedish forestry experts had the opportunity to exercise great influence on the agreement on sinks at the important resume of COP7 in Bonn, July 2001 […] (Kjellén, 2007:94).

The important role of scientific knowledge in the climate-forest nexus has been highlighted by several scholars, in Sweden (Lövbrand, 2007) and beyond (Lövbrand, 2009; Boyd, 2010). Accordingly, particular kinds of scientific knowledge serve to make carbon sequestration activities not only imaginable, but also measureable, controllable and equivalent to emissions from fossil fuels (Fry, 2002; Lövbrand, 2009; Boyd, 2010). In the LULUCF context, Fry (2002) further describes forestry science as a prerequisite for the shift in rhetoric associated with sinks. While previously being controversial, forest sinks are now articulated in a language of 'possibilities and 'opportunities', primarily reflecting forestry industrial interests (Fry, 2002). To understand how climate change came to be an opportunity, consideration must be taken to the role of carbon cycle research, forestry science and forest industrial interests.

There are however other events that are also important. Anshelm (2012) notes that as Swedish voters elected a new government in 2006, based on a coalition of liberal and conservative parties, there was a shift in Swedish climate policy. From previously being organised around ambitious emissions reductions in Sweden, emphasis was now on strictly economic arguments, cost-efficiency, and the need of having a global perspective on emission reductions. Combined with a construction of Sweden as a role model and EU

as leader in climate change policy and emission reductions, an increased use of so called 'flexible mechanisms' were made eligible. Flexible mechanisms entail that countries can reduce their emissions in other countries in order to lower the costs of achieving their emission targets (Anshelm, 2012). As illustrated previously in this section, the newly elected government simultaneously opened up intensified forestry, rationalised by the needs of climate mitigation (Regeringen, 2008: 24) and over the following years the struggles around the meaning of climate change and its implications for the future of society were highly political and ideological in Sweden (Anshelm, 2012). In this period, Kleinschmit and Sjöstedt (2014: 121) note how Swedish enterprises became frequently cited in national media through questions related to climate change and forests. According to the 'media logic', the enterprises thereby increased their 'standing' which implied a substantial opportunity to shape the public debate in the direction they preferred. Kleinschmit and Sjöstedt (2014) further note that the increased standing implied that enterprises increasingly became represented as solvers of the climate change-forest problematique. This role has been attributed them by themselves as well as others, including scientists, NGOs and politicians. Being presented as a solver is highly beneficial for actors, suggesting they are actively working to address the given problem (Kleinschmit and Sjöstedt, 2014).

The election of a centre-conservative government and the increased role of enterprises in climate change mitigation coalesced with the concept of a 'low carbon economy'. The concept received its breakthrough in 2006 through the Stern review, a report by economist Nicholas Stern released for the British government. The report explored the economics of climate change, including adaptation and mitigation. The focus of the report was on managing a transition to a 'low carbon economy'. In the summary, it is stated that:

> "The transition to a low-carbon economy will bring challenges for competitiveness but also opportunities for growth" (Stern, 2006: xvi).

This rhetoric of the 'low carbon economy' received much attention in the following years. It was boosted by the economic crisis in 2008 and not the least by the Swedish national media. As Sweden again took over the EU presidency in 2009, Swedish and EU climate policy was articulated in the language of the 'low carbon economy' (Anshelm, 2012). After the failure to reach a new climate agreement in Copenhagen in 2009, the public debate on climate change has changed dramatically, and Anshelm (2012) notes how climate change is now one environmental issue amongst others in the media debate.

However, although climate change has lost its prominence on the media and policy agenda, its representation has substantial influence on other 'environmental issues', such as forests. In a working report on LULUCF serving as a ground work for the Swedish long term climate change strategy, the Swedish Environmental protection Agency (SEPA) raises attention to nature conservation and carbon sequestration (Naturvårdsverket, 2012). The report states that setting aside productive forestlands entails negative consequences for the forestry industry along with reduced potential for bio energy. This requires compensation through intensified production on forestland with low natural values in order to avoid carbon 'leakage' to other countries. It can be concluded that forest conservation on climate grounds offers no means for substitution of e.g. fossil fuels or fossil intense products, and in the longer run the carbon uptake decreases. On the other hand, the setting aside of productive forestlands imply the environmental objective 'Sustainable forests' becomes achievable as more land is kept from intensive forest management, enabling increased biodiversity (Naturvårdsverket, 2012:7-8). The report largely reflects how climate change necessitates trade-offs between climate and other environmental objectives, which deserve to be politicised. In the following Section, the theoretical question of how problems are articulated and politicised are brought up and discussed.

# 3 Theoretical perspectives

In a recent review article on discourse oriented forest policy studies Leipold (2014) argues that there is a need for testing and adjusting different theoretical and methodological approaches. The value of bringing in 'new' theoretical approaches to forest related policy research is that they shed light on questions, approaches, conceptions, explanations and understandings of empirical findings not previously highlighted. As mentioned in the Introduction, our findings in Paper I show that this is particularly relevant in a Swedish context, where institutional approaches have dominated. So what theories are there that can offer alternative questions and understandings? What theories facilitate the move beyond fixed institutions, territorial organisation, pre-assumed actor constellations and problem representations?

## 3.1 Bringing together three types of theorising

As stipulated in the Introduction, this thesis bring together three types of related theoretical perspectives: discourse analysis (Keller, 2005; 2011; Bacchi, 2009), Governmentality studies (Miller and Rose, 2008; Dean, 2010; Lövbrand and Stripple, 2014; Stripple and Bulkeley, 2014); and post-structural feminist theory (Bacchi, 2009; Rönnblom and Eduards, 2010). With similar references to Foucault, these approaches have a common understanding of discourse as constitutive and of central concepts such as power, knowledge, problematisations, and subjectivities. This related literature is used among various research disciplines within the social sciences such as sociology, anthropology, political science and international relations, and have been part of shaping my overarching research questions as well as the interpretations of my material. They are rooted in different intellectual traditions involving e.g. social constructionism, post structuralism, feminism, and symbolic

interactionism. Common to the three theoretical perspectives is that they 'destabilise' and put relations of power centre stage. Primarily by drawing attention to the *processes* where problems are constructed, identities formed, power relations (re)produced, and responsibilities distributed. Additionally, the feminist perspective entails: (1) a focus on how gendered categories are done; *and* (2) how this categorisation reflects broader social and political processes of forest governance. Taken together, these theoretical approaches help shed new light on how human-forest relations are governed in a changing climate, and emphasise interdependencies and relationships rather than orders and disjunction.

In the following sections I briefly describe them and define concepts that have been central in the work on this thesis. Following from that I position these literatures in relation to the main schools of thought in governance research.

### 3.1.1 Discourse analysis

The discourse concept has gained an ever increasing role in social science and can have many meanings depending on the wider theoretical approach in which it is embedded (c.f. Howarth, 2007). In the field of political science, in which this thesis is located, Keller (2013: 65-66) notes two dominant and contrasting perspectives. On one hand there are approaches that primarily view discourses as conversations and argumentative processes. Accordingly,

> "[…] discourse matter if the better argument wins over the material interests of (the most) powerful actors" (Keller, 2012:50).

Consequently, this approach pays attention to actors and strategic behaviour in meaning making. The second and opposing approach entails an understanding of discourse as 'constitutive' of social life and is proposed by Foucault inspired post-structuralists. Here discourse is inescapable and approached as social knowledge, (re)produced or challenged in the social and political interaction of people in different sites (Bacchi and Rönnblom, 2014).

The second strand draws more on post-modern and post-structuralist approaches, and pays attention to the role of pre-existing structures shaping how people understand problems as well as how they perceive themselves (Bevir and Rhodes, 2002; Bacchi, 2015). This approach to discourse takes its point of departure in the notion that language is not merely representing a reality 'out there', but is what shapes our experience of the world. As social beings, we always interpret the material world through symbolic systems,

including concepts and categories, produced in and through discourse. According to this reasoning, discourses are both an expression of and a prerequisite for social interaction. It is through discourse that subjects and objects receive particular qualities and positions, and are thereby formed through discourse Keller (2011). Using language is thus a form of social *practice* - something interacting people do - based on conventions, habits, and/or values in the cultural context in which it takes place (Bergström and Boréus, 2005: 17).

Drawing on two Foucault-inspired discourse scholars, Bacchi (2009) and Keller (2005, 2011), this thesis belongs to the latter category of discourse perspectives and conceptualises discourse as constitutive of social life. Bacchi (2009) has been particularly influential in policy research in the Nordic countries, inspiring feminist scholars to study policy in discourse analytical terms (Rönnblom and Eduards, 2010; Rönnblom, 2011). Keller's (2005; 2011) research focuses on sociological theory, analytical discourse methods, and analysis of contemporary society involving risk, technology and the environment (Keller 2005; 2011; 2013).

While neither Bacchi (2009) nor Keller (2005, 2011) are interested in questions whether actors shape problematisations for instrumental ends, Keller (2011: 55) draw attention to agency in discourse production and argue that social actors are related to discourses in two ways: as those who *speak* within a discourse and thus (re)produce it; or as *addressees* who are targeted by discourse and that can adopt, reject, or transform the identities given. In Paper II, where I draw on Keller (2005, 2011), much attention is thus paid to the role of the actors, that is the major REDD+ programme hosts and their role as discourse producers. Paper III is more inspired by Bacchi's (2009) framework, and used in order to demonstrate the (re)production of deep-rooted social structures, in terms of values. The latter leading to a more structural account of the meaning making where agency is toned down and focus is directed at the subject positions produced. In sum, by drawing on Bacchi's (2009) approach, the focus is on the doings of certain meanings which destabilises 'truths'. On the other hand, drawing on Keller (2013) sheds additional light on to those who 'does' meaning and 'truth'. For an overview of the aims, research questions and theory used, see Table 2 in Chapter 4.

The understanding of discourse as constitutive of social life has consequences for how *policy* is conceptualised in this thesis. As suggested by Bacchi (2009), policies are to be seen as productive and constitutive as it is when policies are formulated that problems are created. State and non-state actors are thus active in the production of policy problems, which in turn have implications for how the issue in focus is thought about, what is excluded, what

people are associated with the issue, and how these people think of themselves (Bacchi, 2009). This contrasts more commonly used approaches to policy analysis where the conditions under which specific policy problems came to be are often neglected. Consequently, policies thus tend to be produced in instrumental terms, promising efficiency and effectiveness through a language of neutrality, objectivity and rationality which distorts their political character and masks the power relations involved (Shore and Wright, 1997; Bacchi, 2009).

However, discourse analytics are not only concerned with language and what language creates and restricts in terms of policy making, discourse analysis is also concerned with *how* the productive role of discourse can be explored in practice. This will be further dealt with in Chapter 4 where I elaborate on my research strategy.

### 3.1.2 Governmentality studies

The second type of literature central in this thesis is Governmentality studies. Whereas Keller (2005, 2009) and Bacchi (2009) have helped me conceptualise discourse theoretically and analytically, the Governmentality literature has been an inspiration of how to think of 'governing' from a discourse analytical perspective. According to Foucault  Foucault (2006: 135-136), government is about disposing 'things' to an end that is convenient for each of the things that are to be governed. With 'things' Foucault focuses on people, their relationships, interconnections with other things such as resources, territory with its particular qualities (such as forest types at different locations), means of subsistence as well as ways of thinking and acting. Focusing on early modern history following the Middle Ages, Foucault (2006: 130) discerned a new form of government emerging that was directed at steering, ordering, nursing and controlling the population in a way that made it more capable and competent, which in the end strengthened the state. Foucault thus suggested that government was to be seen as an activity where individuals are conducted so as they conduct themselves towards certain objectives (Foucault, 2003: 259) and:

> "to govern in this sense is to structure the possible filed of action for others" (Foucault, 2003: 138).

Based on Foucault's Governmentality lectures, different scholars (Shore and Wright, 1997; Bacchi, 2009; Dean, 2010; Miller and Rose, 2011) have brought Foucault's ideas of government as the 'conduct of conduct' or 'steering from

distance' forward in order to understand and capture contemporary society. In particular how liberalism has come to function as a central government technique in the Western world throughout the 1980-1990s.

The liberal government rationale is based on the individual, and that the individual govern her/himself in an optimal way. That is, in a way that benefits her/himself as well as the society as a whole. At the core it is about managing individual freedom in a responsible way, which purports a great amount of self-discipline (Nilsson, 2008: 130-133). Miller and Rose (2008: 59) conceptualise political rationalities as 'morally coloured, grounded upon knowledge, and made thinkable through language'. As such, they address the 'proper' division of actions and tasks and include the ideals towards which government should be directed, such as growth, fairness, or citizenship (Miller and Rose, 2008: 58-59).

Miller and Rose (2008) argue that the main aim of the Governmentality literature as well as its value is that it sheds light on the smaller activities of government. This is particularly important in times when the state has withdrawn and its practices moved below the threshold of visibility among many policy approaches (Miller and Rose, 2008). Feminist scholars like Rönnblom and Eduards (2010) and Bacchi (2009) further emphasise the effects of the liberal rationale, such as the dominance of customer and entrepreneurial ideals and the increased depoliticisation. The depoliticisation implies that issues previously considered political issues now are conceived of as private issues, bundled off to the market, administration, law or even to moral. Paradoxically, as societal conflicts are increasing, the reach of the political sphere is decreasing (Rönnblom and Eduards, 2010).

When it comes to governance and different sites of governing, the Governmentality literature seeks to denaturalise the 'global' and 'domestic' as the sites demarcating political power, and illuminate overlooked governing sites and strategies (Bulkeley, 2005). In this thesis, I stay with the State as an important actor *amongst* other groups, such as development agencies, professional groups (e.g. foresters), journalists, and others that alter the kind of 'governing' knowledges drawn upon (Bacchi, 2009: 26). While departing empirically from classical sites of political power, this thesis brings attention to how the climate-forest policy intersection is conceptualised and problematised in global or national terms. The articulation of the State as an empirical question is also brought up by feminist scholars, who draw additional attention to global-national relationships. As illustrated in the following section, feminist political scholars provide complementary understandings of e.g. the connection between national hierarchies and the positioning of countries on a global scale.

### 3.1.3 Post-structural feminist theory

It should be noted that there are a multitude of feminist approaches spanning the classical divisions between actor-structure and ideas-materialities. There are approaches that focus on material structural oppression and inequalities, such as incomes, access to resources and legal rights. Others focus more on ideational dimensions, such as discourses, norms and values (c.f. Bryson, 2003). Yet, classical schoolbooks in political theory, such as Marsh and Stoker (2002), classify feminist approaches as one 'approach', similar to institutionalism, interpretive theory and rational choice. This is problematic as there are deep theoretical disagreements and lively debates within feminist political theorising. The various positions largely reflect diverse needs and perspectives in different societies, different ideological traditions (Bryson, 2003: 1-4), as well as diverging theoretical approaches in the interpretive research tradition (c.f.Bacchi and Rönnblom, 2014). In other words, feminist political theory is not easily put into one single 'box'.

A common denominator among feminist political theorists is that they: (1) see women and women's situation as central in political analysis; (2) question how it is possible that men, in merely all societies, have more privilege and power than women; and (3) ask how this can be changed (Bryson, 2003: 1). Over time, the analytical focus has gone from being directed at women and improving women's situations, to a focus on power relationships between men and women (Rönnblom and Eduards, 2010).

In this thesis, I draw on post-structural feminist political theorists, in particularly Bacchi (2009), Eduards (2002) and Rönnblom (2012) who draw attention to the power dimension and productive role of meaning making. Post-structural feminist approaches are especially valuable for demonstrating more subtle forms of governing. That includes how e.g. norms, values, knowledge production, networks, and participation are intertwined in complex relations of power, allowing some groups to be (dis)advantaged e.g. due to gender, spatial location, and/or ethnicity (Bacchi, 2009; Bacchi and Rönnblom, 2014). This includes studies of the state and how the construction of a national identity, through a language of consensus and harmony, distort domestic hierarchies, conflicts, and power relationships (Jansson et al., 2007). In total, general characteristics of post-structuralist scholars are that they are sensitive to power, practices of depoliticisation, social organising, resistance, and relations of domination. In addition, they bring people and citizens into focus. From a post-structural feminist perspective, patterns of (dis)advantage are however not conceived as predictable or even in their distribution – i.e. we need to know *how* power works, which implies that references to static conceptions of

patriarchy or capitalism are not viable explanations for exclusion or oppression (Bacchi, 2009: 44-45).

When it comes to terminology, *gender* is a central concept. Originally, feminist scholars included gender in political analysis to identify how masculinity and femininity influenced women's lives. The idea was to distinguish between the biological sex and the socially constructed gender, of which the latter was changeable. At that time, gender was conceptualised as a problem for women and was subsequently criticised for excluding masculinities and for naturalising women as a universal category. Since its start, the gender concept has been subject to criticism and debate amongst feminist scholars (Eveline and Bacchi, 2010). In this thesis, I draw on the post-structural account of gender as a verb that is continuously *done.* Accordingly, gender is not a fixed entity but a social process that results in certain effects, such as power hierarchies and privileges. This implies that the focus of analysis is directed at the gender*ing* processes, such as *how* policy, organisations and institutions do gender and produce gendered relationships of power (Eveline and Bacchi, 2010).

Taken together, the suggested theoretical perspectives 'destabilises' and puts relations of power centre stage primarily by drawing attention to the *processes* where problems are constructed, identities formed, power relations (re)produced, and responsibilities distributed. The addition of a feminist perspective entails: (1) a focus on how gendered categories are done; *and* (2) how this categorisation reflects broader social and political processes of forest governance. In the following section, I define a few central concepts that are commonly referred to throughout this thesis.

## 3.2 Defining key concepts

### 3.2.1 Discourse, knowledge and power

Foucault is not known for his distinct and unambiguous definition of discourse. What is characteristic is the productive and constitutive character of discourse. Here discourse is seen as the whole set of practices that produces a certain type of utterances (Bergström and Boréus, 2005: 309), whereby creating the objects and areas it sets out to describe (Bacchi, 2009: 275). Discourse cannot merely be regarded a synonym for language. Discourse is as Barad (2003: 819) suggests:

> "not what is said, but that which constrains and enables what can be said".

A discourse is consequently that which enables and constrains thinking, speaking and acting within certain periods of time. Accordingly, any given time poses limits on what is possible to think or do about certain issues (McHoul and Grace, 1993: 26-34). Accordingly, discourse can be seen as more or less dynamic complexes of knowledge and power. Here knowledge is not to be confused with technical knowledge or 'know how'. Knowledge has a much broader meaning as the historical, social and political conditions that render ome statements true and other false (McHoul and Grace, 1993: 26-34). Discourse is thus intimately linked to the production of 'truth' as well as with 'power' as some people are privileged with the status of saying what counts as true, as well as what knowledge, procedures and techniques are required in the production of truth (Foucault, 2000: 131). The production of truth simultaneously entails an exclusion of certain knowledge and procedures. (Foucault, 1993: 24) notes how a whole 'teratology' of knowledge is pushed outside the boundaries of discourse, and 'truth' is only produced within the boundaries of the already 'true'. Truth is thus circularly linked to systems of power, or 'regimes of truth' that simultaneously produces and spread it (Foucault, 2000: 132). As emphasised by feminist scholars, power is thus also about silences, where political phenomena and relationships are taken for granted and not problematised (Rönnblom and Eduards, 2010).

Intimately related to this idea of discourse as productive or 'constitutive' and excluding is the understanding of power as relational, productive and exercised. Foucault uses the term 'relations of power' to indicate that power is a relationship rather than something possessed. In order for a power relationship to exist there has to be certain amount of freedom on both sides which opens up for resistance also in situations when the power is unbalanced (Foucault, 2000: 326-348). Yet, in cases where power relations are so asymmetric that freedom, or reversal of the situation, is barely possible Foucault prefers to speak of states of domination. Foucault's conception of discourse as knowledge/power complexes has been criticised for being too structural as opponents argue that if power is everywhere - there is no room for freedom (Foucault, 2003: 35) or agency. Yet, Foucault's productive and relational understanding of power has been highly influential among feminist scholars as it renders power relations based on gender mutable. Many feminist scholars argue that it is the idea of discourses as practices requiring repetition, and the understanding of power as relational, which create space for action, agency and changed relationships (c.f. Bacchi and Rönnblom, 2014). As several discourses exist in parallel, there is space for tensions and contestation which is what ultimately opens up for change (Bacchi, 2009: 275).

### 3.2.2 Problematisations and subject positions

A core feature of Governmentality studies is, as Bacchi (2009: 265) argues, to get 'in behind', or 'at the thought' of government. That is at the 'regimes of governance' or govern-*mentalities.* The main way of reaching at these broad patterns is to study problematisations, which is how problems are conceived (Bacchi, 2009). A central part of governing is thus to problematise and Bacchi (2009) consequently purports that every policy constitutes a problematisation. This approach acknowledges that there are conditions that require measurement, but emphasises how policy gives shape to implied problems (Bacchi, 2009). From this perspective, problems are not out there waiting to be revealed but have to be made and visualised. Problematisation thus refers to the process where things are rendered problematic (Miller and Rose, 2008).

As argued by Miller and Rose (2008: 14), the concept of problematisations is intimately linked to the conduct of individuals. If individuals or collectives seem to require conducting, it stems from that someone somewhere found something in their conduct problematic. The act of problematising is thus intimately linked to finding ways of solving it. Problems and solutions are merely inseparable and generally, when the problems become the focus of expert analysis, some aspects of collective or individual conduct become responsible for the problem (Miller and Rose, 2008: 14-15). Problem representations thereby usually implicate who is responsible for the particular problem and this attribution of responsibilities often puts people in opposition to each other. The stigmatising of some groups serves a purpose in the sense that it indicates and encourages desired behaviour among the majority. From this perspective, policies set up social relationships and our position within them (Bacchi, 2009: 16-17). Overall, the problematising process tends to make certain subject positions or identities available, thus informing how people ought to behave in different social settings (c.f. Keller, 2011).

### 3.2.3 Values – a social unconscious

Another concept that deserves some clarification is 'values', which is put centre stage in Paper III. Among some critical scholars, 'values' as a concept is used with great circumspection due to the fear of conflating presumed or claimed values with values that are articulated *through* practices of governing (Dean, 2010: 45-46). According to Dean (2010), values are fundamental in shaping the rhetoric of government and expressed in connection with programmes and practices of government. The articulations of values are expressed in practical and often implicit know-how, specialist knowledge, expertise and competences, and through the training of professionals and

public servants (Dean, 2010:.45). The difference between claimed values and their articulation in governing practices is not obvious at first glance. It is however important. To exemplify, an analysis of the *presumed or claimed values* would, in Paper III of this thesis, have implied a focus on the social, cultural, environmental and economic values explicitly promoted by the government. Yet, in Paper III attention is directed to deep seated cultural values upon which the problematisations of climate change and gender equality rest. We argue that by studying problem representations and identity formations connected to two separate issues, climate change and gender equality, we can make patterns of deep rooted values shaping Swedish forest governance visible.

Despite scepticism towards 'values' among critical scholars (c.f.Dean, 2010), Bacchi (2009: 4-10) and Keller (2005, 2011) include the concept in their analytical frameworks. Where Keller (2005, 2011) gives the concept little consideration in his methodological discussions, Bacchi (2009: 5) elaborates on the concept when discussing her analytical framework (see second question in Table 3). In her approach, the analysis of meaning and conceptual logics includes "a search for deep-seated cultural values – a kind of social unconscious – that underpin a problem representation" , which works "at the level of basic or fundamental worldviews, akin to Foucault's notion of epistême". Exploring the cultural values of a governance area, or the 'social unconscious' guiding meaning making, is thus key for understanding how particular problem representations come to exist, make sense and cohere (Bacchi, 2009: 5).

Paper III originated in my dissatisfaction with how values is used and referred to, primarily in the new-institutionalist literature where values along with norms and beliefs is a central concept (Lowndes, 1996; Peters, 2006). In the new-institutionalist literature 'norms' and 'values' appear rather frequently, even interchangeably, and values are referred to as examples of informal institutions without any further theoretical or methodological specialisation. I missed a discussion around the definition of the concept, and of *how* one can study values as stable yet changeable implicit rules guiding social behaviour. Hitlin and Piliavin (2004) confirm my perceived lack of clarity in a review of how values are used across different social scientific disciplines. The review reveals how 'values' has been used to refer to various factors in e.g. sociology as well as political science – such as norms, needs and attitudes - often without reference to each other. They conclude that there is a tendency to treat values as static structures with unclear ontological and epistemological premises (Hitlin and Piliavin, 2004). Accordingly, in Paper III we refer to the institutional literature in the sense that it is a central concept in this theoretical

tradition, but draw on post-structuralist scholars to make the concept dynamic. By approaching values as 'cultural structures' (re)produced or challenged through discourse, values are dependent on continuous repetition.

In the following section, I locate this overall critical approach to the main schools of thought in governance research.

## 3.3 Main schools of thought in environmental governance research

'Governance' is often used to denote the erosion of traditional bases of political power, a process that has taken place over the two past decades. It also often refers to the increased complexity involved in contemporary governing when it comes to actors, scales, instruments and relationships (Pierre, 2000). That is also how governance is read in this thesis. Yet when choosing how to investigate issues related to governance one inevitable relates to particular ideas of how the world works (ontology); what knowledge is; and how knowledge can be obtained (epistemology). In the following sections, I illustrate how the chosen critical approach differs from major approaches in environmental governance research in ontological and epistemological terms.

### 3.3.1 Governance – different approaches

As illustrated in Section 1.2, there is an epistemological bias in environmental governance research towards institutional and rational choice approaches (c.f. Arts et al., 2013). Similarly, Pettenger (2007) and Stripple and Bulkeley (2014: 1) note how the increasing amount of social scientific literature focusing on climate change has largely been dominated by approaches where concepts and representations of the political and social world have been taken as given. Simultaneously, social scientific enquiry on forests has a similar tendency primarily due to its roots in forestry science and policy advice which by tradition favour a positivist epistemology (Arts, 2012).

Based primarily on European environmental governance research, Bäckstrand et al. (2010: 9-12) categorise governance studies into three main approaches. In Table 1, these approaches are summarised in terms of scope of studies, understanding of the scientific claim, epistemological position, theoretical approaches and relationship to the practice of politics. The categorisation offered by Bäckstrand et al. (2010) has been complemented by Stoker and Marsh (2002: 6-7) categorisation of political theories as well as by Arts et al. (2013)'s discussion around dominant approaches in environmental governance studies. Tables are always disputable, yet the rough and simplified

categorisation in the table provides a brief overview of the main approaches and their theoretical orientation. Above all, it gives the reader an overview of how this thesis, located in the critical 'box', is situated in relation to other governance approaches commonly used in studies of the environment.

As illustrated in Table 1, there are three main approaches to governance that are based on different epistemologies leading to different empirical orientations and scientific claims: (1) *empirical governance*, focusing on the changing nature of state and the role of non-state actors in connection to globalisation and an increased complexity and interdependence; (2) N*ormative governance*, advances proposals for legitimate and effective governance associated with openness, participation, accountability; and (3) *critical governance*, consisting of a range of approaches interested in more or less structured relations of power.

Above all, the three governance approaches have different ontological and epistemological positions, which imply different methodologies and understandings of the role of the researcher in relation to the research topic. *Empirical governance* is based on positivism, a scientific tradition suggesting that the world exists independently of our knowledge about it, which is also referred to as a foundationalist ontology. Empirical governance thus rests on an objectivist epistemological position and pursues value free policy recommendations. *Normative governance* is located within the realist scientific tradition, which implies that it shares the ontological position with positivism, suggesting that there is a 'reality out there' (Marsh and Furlong, 2002). As noted by Marsh and Furlong (2002: 31), contemporary realism has however been highly influence by the interpretive tradition and now acknowledges the social construction of 'reality' as important for explaining social phenomena. Normative governance generally strives to improve governance. In comparison to empirical governance, the normative approach makes no objectivist claims.

Characteristic for *critical governance*, resting on an interpretative research tradition, is that it rests on a social constructionist or 'antifoundationalist' ontology. Accordingly, there is no world 'out there' that exists independent of the social meaning actors attached to it (Marsh and Furlong, 2002). Language is further given a performative role and is not merely conceived of as a passive medium through which reality is represented and through which we express ourselves. Social meaning is constructed through interaction, is culturally and historically contingent, and intertwined with action - i.e. how and what knowledge we construct effects what action is taken and not. Characteristic for social constructionist ontology is that it destabilises (Burr, 2001). The interpretative approach challenges positivism and the objectivist position in the sense that it acknowledges the role of the researcher in knowledge production,

and thus rejects objectivism (Arts, 2012). The latter has long been a common undertaking among feminist scholars, whose explicit reflection around the own position is conceived of as the only way towards trustworthy knowledge claims (Yanow, 2007; Haraway, 1988).

In Table 1 I bring together the discussions around environmental governance research conducted by Bäckstrand et al. (2010) and Arts et al. (2013: 6-9), with the classical divisions of political thought offered by Stoker and Marsh (2002: 6-7). Based on this literature, what theoretical perspectives can be distinguished among the three governance approaches? Where *empirical governance,* with its rational choice (RC) approach, perceives individuals as rational, striving at maximising their own benefits; *normative governance* with its institutional approach focuses on formal (regulations) and informal rules (norms and values) as guideposts for social behaviour. In comparison, the focus of *critical governance* studies with its interpretative approach is often on smaller activities of government, such as 'ways of thinking' and 'practices' that shape problems and the conduct of individuals (Bäckstrand et al., 2010). In the following section, I move on to the main limitations of the chosen approach.

Table 1. Categorisation of main approaches to governance. Inspired by Bäckstrand et al. (2010), Marsh and Stoker, (2002), and Arts et al. (2013).

| | Scope of political studies | Understanding of the scientific claim | Scientific tradition | Theoretical approaches | Relationship to the practice of politics |
|---|---|---|---|---|---|
| **Empirical governance** | Governance as an empirical phenomenon connected to globalisation. Focus is on multiple actors, multiple levels, networks, fragmentation and diffusion of authority, changing role of the state. | Explain, predict and organise collective environmental management in an effective way. E.g. in terms of delegation of responsibilities, authority and competencies between governance levels. | Positivist. | Rational choice. | Offers value free (objective) expert advice on the organisation of environmental politics |
| **Normative governance** | 'Good governance'. Emphasis is on reformation and improvement of democratic institutions; exploring more creative and active roles of non-state actors. Focus is on procedural (openness, participation, accountability) and substantive (coherence, effectiveness) ideals. | Normative. Contribute to 'good' governance. Increase accountability, performance and legitimacy in democratic institutions. | Realist. | Institutionalism. | Work close with policy practitioners. |
| **Critical governance** | Governance as an integral part of globalisation. Focus on how governments and international organisations are part of a neoliberal governing order, shifting what was previously political to an economic sphere (neo-gramcian). Or governance as an historical transformation of statehood, focus on the ways of thinking that shape the conduct of individuals (Foucauldian), | Challenge common sense assumptions and show how governance is shaped by certain problem representations, marketization processes, and subject positions, including gender categorisations. | Interpretist. | Interpretive theory. | Reflexive. Commenting on or engaging in political power struggles. |

## 3.4 Limitations of the approach

The conception of discourse as constitutive, which this thesis draw upon, is often criticised for being too structural, leaving no room for freedom. Bacchi (2009) and Keller (2005, 2011) counter this criticism with different arguments. Keller's SKAD can itself be seen as a response to the criticism. He emphasises actors in discourse production drawing on micro-sociology scholars (sociology of knowledge and symbolic interactionism). As multiple discourses exist simultaneously, social actors are not restricted to one subject position or problem understanding, but can draw on multiple positions or understandings which opens up resistance. For example in terms of rejection or alteration of given subject positions (Keller, 2005; 2011) or production of alternative problematisations. At the climate-forest policy intersection resistance has been demonstrated in the mobilisation of counter expertise, and unforeseen activation of agents in local and global contexts (Gupta et al., 2012). When it comes to the proponents of the post-structural approach, such as Bacchi (2009), it is the idea of discourses as *practices* requiring repetition, and the understanding of *power as relational*, which create space for action, agency and changed relationships (c.f. Bacchi and Rönnblom, 2014).

In terms of Governmentality, one critique is that scholars tend to approach 'governmentalities', such as sovereignty and neoliberalism as stable templates or ideal types. Consequently, the empirical material is interpreted in accordance with these templates and the analysis lose track of resistance, heterogeneity and contingency (Stephan et al., 2014). Rather than a top down analysis with predetermined templates, this thesis emerged with an interest in grasping and describing context specific meaning making around climate change and forests. In a second step I have drawn on Governmentality scholars such as Miller and Rose (2008) to contextualise the findings in broader societal trends, referred to as 'advanced' liberalism. Although referring to advanced liberalism in a way that may seem as a rather stable template in the synthesis of this thesis, my analysis in Papers II and III started from the bottom rather than the top, all in an attempt to demonstrate contingency and process at the climate-forest policy intersection.

When it comes to feminist policy studies, the traditionally strong emphasis on women, women's situation and emancipation, has meant that feminist scholars tend to be accused of being more normative in comparison to their non-feminist peers (Rönnblom and Eduards, 2010). In a discipline where interactions with the political establishment is commonplace, Rönnblom and Eduards (2010) refer to the criticism as paradoxical. Moreover, as there is no

single feminist scholarship, critical discussions amongst feminist scholars are ongoing, and the debates largely follow the main schools of thought illustrated in Table 1.

Originating in the 'too structural' critique, critical governance in general is, as noted by Stripple and Bulkeley (2014:14-16), often seen as insensitive to people's actual experience of power, and the variations of 'ways of thinking' existing at different sites. Acknowledging the relevance of this criticism, I have chosen a macro-level approach in order to exemplify different ways of thinking at different sites, and to be able to fill research gaps (c.f. Winkel, 2012; Leipold, 2014). My analysis thus runs short when it comes to peoples *experiences* of power, of how they *resist* power, *conform* to or *alter* the subject positions offered by discourse.

In the next chapter, I describe *how* I have studied the climate-forest policy intersection in discourse analytical terms.

# 4 Research strategy

Using a critical governance approach, that draws on Foucault inspired scholars, implies that theoretical assumptions are inseparable from methodology. In the interpretative tradition of political science research, in which this thesis is located, there has been increased attention paid to methodology and the transparency of analytical procedures. These methodological discussions are partly a response to the common criticism that 'anything goes' in interpretive research, and aimed at demonstrating regular and trustworthy procedures (Yanow, 2007: 205). In general, critical scholars have tended not to talk about the methodological aspects of interpretive processes (Alvesson and Sköldberg, 2000: 145), which I at times have experienced with a sense of frustration. In particular, my interest as a PhD *student* often has been to learn *how* others have gone about doing their analysis. Yanow (2007: 205) points to this important value of methodological discussions - they make it easier for students and others to grasp *how* interpretive studies are carried out. Ultimately, the methodological discussions involving questions of reflexivity, transparency and positioning as the road towards trustworthy knowledge claims (Yanow, 2007) are about research quality.

In this the following sections, I describe how the theoretical framework outlined in Section 3 has been translated into structured analytical procedures. The ambition is to provide the reader insights into how these theoretical assumptions have played out during my research process, and to reflect openly on my research strategy and analytical procedures.

## 4.1 Combining qualitative methods

When it comes to analytical procedures, this thesis is based on qualitative methods including content and discourse analysis. In the following section, I

describe the methods used and consider advantages and drawbacks. For an overview of theories and methods used in the different papers, see Table 2 below.

### 4.1.1 Content analysis

In comparison to the interpretive Papers (II-III), Paper I is a review article based on a content analysis of Swedish forest policy research from 1990 to 2009. As mentioned in the Introduction, its main findings have largely influenced the following work on this thesis. Our aim was to provide a structured overview of Swedish forest policy research and our focus was on who is publishing, what is covered, how, when, and how much. In the paper, we have categorised the selected publications content wise based on topics in terms of key words, methods and theories used. The choices made when it comes to selection of material and considerations taken when categorising are well described in Paper I and will not be repeated here. However, the paper involves a rather strict delimitation of forest policy research to the conventional boundaries of policy studies in terms of its empirical and theoretical scope. As with all knowledge production, we thereby create boundaries around our research discipline, which lead to an exclusion of research not fitting what we conceptualise as ´forest policy studies'. In total, the paper is a discursive practice that is set up to identify discourses in forest policy studies, and is as part of the process of establishing a forest policy research area at our University.

Despite the inevitable interpretation process related to the delineation of forest policy studies and the empirical material, Bryman (2008: 273) argue that content analysis can be referred to as an *objective* method, and thus differ from the interpretive papers in this thesis. The coding scheme and the procedures for selecting material can be clearly described, consequently replications become realistic. Another aspect is that content analysis facilitates longitudinal analysis, also done in Paper I, and can be applied to a wide range of materials (Bryman, 2008: 288-289). In the language of natural science, it is a 'reliable' method (c.f. Bergström and Boréus, 2005: 34-35). However, Bryman (2008) mentions the near impossibility to construct coding schemes that do not involve interpretation. Again, the 'objectivity' becomes questionable.

In our work with the review paper, the categorisation of theories, methods and key words definitely involved interpretative work and one of the challenges was to establish mutually exclusive categories, such as key words aimed at grasping the content of the publications. Consequently, at an early stage we identified problems with the coding scheme after applying it to a

minor part of the literature. Thereafter we revised the categories in order to better fit the content and minimise the appearance of overlapping categories. As there were three authors of the review paper we had the possibility to discuss coding questions whenever we were unsure.

Moreover, content analyses do not generate answers to 'why' questions, and are sometimes accused of lacking theoretical foundation (Bryman, 2008: 291). The lack of theoretical foundation is exemplified in our paper, whose research questions cannot be derived from a particular theoretical perspective. In the following sections, I move on to the research procedures of the interpretative papers of this thesis, which are far more theory driven and tend to be subject to far more discussion.

Table 2. *Methodological overview Paper I-III.*.

| Paper | Aim | Theoretical approach | Research questions | Context | Methodology |
|---|---|---|---|---|---|
| **Paper I** | Provide a structured overview of trends and blind spots in Swedish forest policy research. | Empirically driven - review. | What research on forest policy has been done over the two past decades?<br>How and with what theoretical approach?<br>Where is the research conducted?<br>What are the main findings? | National (academia). | Content analysis |
| **Paper II** | Demonstrate how REDD+ programme hosts take part in the production of REDD+ discourse. | Interpretivist, SKAD. | What frames are the REDD+ programmes (re)producing?<br>What classifications are produced in relation to the core problem and its solution?<br>How are the phenomena produced by the programmes structured?<br>What narrative, including who is doing what, how and why are the programmes producing? | Global (international organisations) | Discourse analysis |
| **Paper III** | Demonstrate how gender equality and climate change are represented in Swedish forest policy.<br>Demonstrate implicit values dominant in the Swedish forest policy domain. | Interpretivist, WPR and SKAD. | How is climate change and gender equality represented?<br>What subject positions are produced?<br>What values underpin these representations and subject positions? | National | Discourse analysis |

### 4.1.2 *Doing* discourse analysis

As argued by Alvesson and Sköldberg (2000: 135), 'good' interpretations require well-developed frames of references. This is of particular importance for critical approaches, as the aim is often to go beyond explicit articulations. So, how have I translated my critical governance approach into concrete analysis? As discussed in the theoretical chapter, I have chosen to draw on the discourse analytical frameworks developed by Reiner Keller and Carol Bacchi. I find these approaches particularly appealing as they provide concrete analytical tools with a firm theoretical basis. In Table 3 the two analytical frameworks are presented next to each other.

Table 3. *Analytical frameworks used in Paper II and III. Modified version of Keller (2011) and Bacchi (2009).*

| **SKAD** | **WPR** |
|---|---|
| What is described as the core concern?<br>What is the suggested solution to the core concern?<br>How are objects, subjects, activities classified?<br>What is described as the cause/effect of the issue?<br>Who is given responsibility for the issue?<br>How those are responsible supposed to act?<br>Which solutions are offered?<br>Self-positioning: who are we? How are we described?<br>Other-positioning: Who are the 'others' or 'they'? How are the others or they described? (Characteristics, qualities, competences.)<br>What value references are associated with the answers of the above stated questions? | What is the 'problem' represented to be in a specific policy?<br>What presuppositions or assumptions underlie this representation of the 'problem'?<br>How has this representation of the problem come about?<br>What is left unproblematic in this problem representation? Where are the silences? Can the problem be thought about differently?<br>What effects are produced by this representation of the problem?<br>How/where is this representation of the 'problem' produced, disseminated and defended?<br>How could it be questioned, disrupted and replaced? |

When placed next to each other, it becomes clear how the SKAD questions are more actor and agency oriented by including questions of responsibilities and self/other representations. The WPR questions are more general and focused on power and context. Although formulated differently, the questions in the two frameworks largely overlap. While questions related to problematisations are explicitly included in both frameworks, questions of e.g. categories, values, classifications and binaries are indirect in WPR and surfaced through the

question on presuppositions. Meanwhile, questions of context, silences and power are not explicitly referred to in the SKAD column but are inevitably part of the analysis. The frameworks are to be seen as complementary; SKAD is oriented more towards actors and agency and WPR towards power and structural change.

In Paper II, I used SKAD and in the process I found the rather detailed questions valuable for moving beyond the surface meanings of the texts. In paper III, we draw on WPR; through my previous use of SKAD, it acted as a pre-understanding of 'how to go about' using WPR. Although the SKAD and WPR frameworks are rather similar, Bacchi's (2009) explicit references to policy analysis and political science is helpful as it neatly bridges the gap between discourse, policy and method. Bacchi (2009) furthermore encourages inventive policy analysis such as analysis across cultural and national contexts, and between policy areas, in order to reach at the differences among problem representations and the 'thought' in governing populations. In a similar manner, this thesis study problematisations across spatial contexts and policy areas. Paper III combines the analysis of two seemingly disparate issues in the Swedish forest policy domain, climate change and gender equality. Instead of 'thought' we use the concept of values to refer to the deep rooted 'social unconscious' (Bacchi, 2009: 5) underpinning the problem representations, and Swedish forest governance more generally.

When *doing* the discourse analysis I have used the questions offered by SKAD and WPR and applied them to a limited number of texts. After reading the texts repeatedly, I wrote comments in the margins and marked sentences belonging to particular questions. In a next step, I copied the answers into a table, structured according to the questions offered by the framework, and thereafter categorised and paraphrased the answers. As I circled the problematisations, subject positions and major narratives I also marked sections in the texts to be used as quotes in the presentation of the analysis. It is however important to note that the analysis has not been a linear process. In between the deep readings of the texts I have moved between the theoretical as well as the empirical literature of REDD+ and Swedish forest policy.

From my perspective, the advantage *and* disadvantage with these two analytical frameworks are the open or bottom-up approaches. The main advantage is the avoidance of predetermined categories or problems, and the related risk of overseeing important phenomena. However, a problem working without predetermined categories is that it is initially difficult to focus the analysis. It has been a challenge to stick to the issue and not get lost in the material and interesting side-tracks. At the other end of the spectrum, the procedure may lead to too much reduction, which can result in a seemingly

imbalanced analysis. Through the work on Papers II and III I have managed to cover both ends of the spectrum before finding what I consider a reasonable and acceptable middle way. Hence, it has been a challenge to sustain the research quality, which is discussed in the following section.

### 4.1.3 Encountering Questions of Research Quality

*Validity* and *reliability* are central concepts in natural sciences. Here validity refers to whether the method one uses to measure something actually measures what it was intended to. Reliability refers to accuracy in measurements and calculations (Bergström and Boréus, 2005: 34-35). In interpretive research, questions of validity and reliability have other meanings. Validity here refers to reflexivity and awareness around the researchers own position in relation to the topic, and the wider research culture of which s/he is part. Reliability refers to the transparency and argumentation of the interpretation process. Transparency in procedure and argumentation is crucial for good qualitative research. If the research process is transparent and well described it is then possible for (1) others to reconstruct it and reach similar results; and (2) the same person to conduct the analysis of the same material at a later occasion and reach the same results (Bergström and Boréus, 2005: 34-37).

As many of the most interesting theoretical concepts are formulated on a rather abstract level, such as institutions and democracy (Esaiasson, 2003: 63) or in my case 'discourses' and 'values', they are easily criticised for lacking consistency when translated into research practice. I have long reflected on these issues when working on Paper II and Paper III. One of the main reason why I chose to draw on Bacchi (2009) and Keller (2005, 2011) is that both scholars provide an analytical 'toolkit' for how to *do* discourse analysis that is consistent with and firmly based on theory. In that sense, the scholars facilitate the move from abstract theoretical concepts, such as discourse, values and power, to analytical practice. In the end, the drawing on these frameworks has been helpful in my interpretive process, but above all they have helped me improve transparency. In Paper II I firmly follow Keller (2005, 2011) throughout, maintaining transparency in the interpretation process. However, the paper suffers somewhat from the rigid structure in that the analysis follows SKAD stepwise character. In Paper III we draw more loosely on Bacchi (2009) and Keller (2005, 2011), which provided a less rigid and 'box' like structure of the paper. However, it implies a less transparent analysis in the sense that the analysis not is described stepwise. Moreover, Paper III was overall more challenging due to the two fold meaning of 'values' flourishing in the paper.

The primary difficulty was to provide logical argumentation and make the difference obvious for the reader.

Another question related to transparency is how the researcher exemplifies interpretations and chooses quotations. During my work with Papers II and III I was criticised for being anecdotal. Anecdotalism refers to lack of clarity of how representative the chosen quotes are for the rest of the material. My strategy to overcome anecdotalism has been to choose quotes more generously, i.e. pick the mainstream rather than the extremes. Hence, the criticism helped me be me more careful and explicit about what the text says in addition to the quotes. This is particularly important if opposite descriptions of the phenomena exist. The exemplifying of contradicting or complementing descriptions of issues, makes the argument towards the conclusions more transparent as logic. Another aspect connected to transparency is whether it is likely that I (or someone else) would obtain the same results on a different occasion. Apart from being transparent about the research procedure, my strategy has been to continuously ask myself what would have been required from the text for me to reach another conclusion. How likely was it that the text would have delivered this 'other'? Another important question is the choice of texts, and why study the chosen texts first place?

## 4.2 Why study texts and which ones?

As argued by Bergström and Boréus (2005: 15), texts are particularly interesting in the sense that they can be used to demonstrate relations between groups and individuals that are outside of the texts. Hence, texts reflect, reproduce and/or challenge power but are not power in themselves (Bergström & Boréus (2005:15). As texts are the basis of my discourse analysis the question of how I have selected the texts is of central importance.

As mentioned by Keller (2013: 94), discourse analysis generally brings together a large number of various kinds of documents. Throughout the work on this thesis I have gone through large numbers of texts, including legal documents, newspaper articles, internet texts, expert reports, advertisements, pamphlets, action plans, scientific papers, and governmental reports and documents. I have also taken part in public hearings and seminars held in Sweden involving top level bureaucrats, researchers, policy makers and key stakeholders both when it comes to REDD+ related issues, the climate-forest interlinkage more broadly and on Swedish forest policy more specifically. When it comes to Paper II, I have primarily read expert reports and some of the vast amount of scholarly literature aimed at evaluating, improving and facilitating REDD+ implementation, either with a focus on land use change,

carbon sequestration, or governance. In Paper III I have primarily read expert reports and governmental documents. In Chapter 2 of this thesis, I have moved between scholarly literature on REDD+ and LULUCF as well as policy documents, in order to make connections between the global and national contexts.

However, after dealing with a broad set of materials in both Papers II and III, I radically limited my empirical material for more in depth analysis. The focus of the analysis was then centred on particular *actors* in terms of REDD+ organisations and the Swedish state; and particular *policy programmes* (REDD+ and the Forest Kingdom), established to solve particular problems related to forests and climate change. I have therefore studied rather specific discourse producers and contexts with the ambition to show how discourses are done at particular sites or by particular actors. The limited texts subject to in depth analysis were selected because of their public character and availability. This implies that the texts cannot be seen as a single utterance of one individual; they are rather to be seen as representative for the context in which they are produced. Above all, these texts are biased views intimately related to the actors and the contexts in which they are produced. This is also what makes them interesting in their own right. It is important to note that these texts do not give any insights into the discussions that preceded their production, or of the interests and strategies involved. In line with the post-structural discourse approach, this is not part of the analytical focus.

Discourse analysts are in general rather uninterested in actors or the motives that can make actors behaviour understandable. The most important thing is what the discourse produces (Bergström and Boréus, 2005). I argue that apart from delineating the discourse analysis and production to a certain topic in time and space, the highlighting of actors is important for avoiding 'free floating' discourses. I maintain that it is up to the analyst to ground the discourse production in relation to the actors producing the discourse (as in Paper II) or in relation to the particular context (Paper III). However, not in order to explain interests or intentions, but to avoid 'free floating' discourses. The latter easily reaches the status of common sense, releasing their creators from responsibility.

# 5 Summary of Papers I-III

## 5.1 Research on Forest Policy in Sweden – Review

In this paper we review peer-reviewed articles and PhD theses on Swedish forest policy from 1990-2009 with the aim of providing a structured overview of what has been done, how, from what theoretical perspective, and with what results. A second aim was to identify major trends and blind spots. The review illustrates that there has been an increase in studies over time; that there is a favouring of institutionalist perspectives; and an empirical bias towards small-scale forest owners and private governance in terms of forest certification schemes, such as FSC. When it comes to blind spots there is an empirical gap with respect to: studies linking Swedish forest policy to political processes beyond the nation; studies that focus on large-scale forest owners and the forest industry; and studies focusing on climate change. When it comes to theory use, there is little use of critical approaches, which can be seen as an important ingredient for widening the scope of forest policy studies in Sweden. Despite the ordinary comment in both scientific and policy settings, that the Swedish forest sector is central for the Swedish economy, our analysis illustrates how forest policy research and in particular *critical* forest policy research, is a marginalised research area in Sweden.

## 5.2 REDD+ in the making: orders of knowledge in the climate-deforestation nexus

On a global level, REDD+ is one of the most prominent issues in the climate-forest interface. In this paper I explore REDD+ discourse as produced within four international organisations running REDD+ pilot projects, which are aimed at informing UNFCCC and the REDD+ negotiations. Based on a sociology of knowledge approach to discourse (Keller 2005, 2011), the paper

demonstrates how the REDD+ agencies draw on scientific arguments about the need for climate change mitigation and adaptation, and the technical features of forest discourses. Combined with the normative appeal of poverty reduction, the REDD+ programme hosts form a powerful narrative that is not only difficult to oppose, but that entails a simplistic understanding of causes and effects of tropical deforestation and bias interventions to 'local forest dependent communities' and local livelihoods. In effect, more distant causes of tropical deforestation are distorted.

## 5.3 The Forest Kingdom – with what values for the world?

In this paper we analyse the Forest Kingdom – a governmental strategy for the Swedish forest sector launched in 2011. The overall aim is: (1) to demonstrate the meaning making around climate change and gender equality; and (2) make visible deep-rooted values guiding meaning making in Swedish forest governance. By focusing on the representation of two different forest policy issues – climate change and gender equality – we argue that it is possible to demonstrate the (re)production of more stable social structures, such as values, underpinning Swedish forest governance more generally. Our findings illustrate how climate change is turned into a business opportunity and way to revitalise the industry and create new jobs in decaying rural areas. Likewise, gender equality becomes a strategy to secure the work force and uphold forest production, by activating female forest owners. The problematisations and subject positions produced reflect values such as economic growth, individualism, and faith in markets. These values lead to a privileging of forest production above environmental protection, and favouring of private interests and economic profit above public interests. We conclude that these underlying values largely contrast the equal goals of forest production and environmental protection articulated in Swedish forest policy.

# 6 Concluding discussion

Before the discussion, the three objectives of this thesis ought to be revisited:

1) To demonstrate how the climate-forest policy intersection is constituted in different contexts using Sweden and UNFCCC as examples; and to draw attention to similarities and differences across these contexts.
2) To demonstrate how climate change as an issue intervenes in Swedish forest policy, taking the institutional context into account.
3) To demonstrate how gendered relations are produced at the climate-forest policy intersection, using Sweden as a case.

The following discussion is structured according to the three objectives and departs from the analysis of Papers II and III and Chapter 2 of this thesis.

## 6.1 The constitution of the climate-forest policy intersection

First, similar to previous research (c.f. Pistorius et al., 2012), this thesis confirms how climate change entail narrow conceptions of forests. The focus on carbon sequestration turns forests into trees rather than ecosystems, habitats, or places for people to live or work in. Whereas the meaning making around climate change and forests entails a view on forests as carbon sinks, the dominant categorisation of forest types has fundamentally different consequences for human-forest relations in the different contexts. In 2010, The Swedish Academy of Agriculture and Forestry (KSLA), a self-proclaimed objective platform and mediator of knowledge, produced a publication aimed at defining concepts and explaining why and how forests are important in climate change mitigation. In the publication, high-level bureaucrats, researchers as well as representatives of forest owners and consultants provide a coherent picture of how forests can play a role in climate change mitigation,

and how the role differs depending on forest type and spatial location. Below I cite the back page of the report since I think it summarises the ongoing categorising of forests– a categorisation prevalent at all sites explored in this thesis. Accordingly:

> […] In this issue of KSLA three typical cases of how forests and forestry can contribute to a better climate are described, depending on preconditions in terms of state of the forest, as well as social, economic and other prerequisites. In the 'rationally and sustainably managed' forest, a high flow of woody bio mass should be more effective than carbon sequestration in standing forests. In thinned forests with low growth the focus should probably be on increasing density and thereby the carbon sequestration. The third distinguished type, tropical forests with high wood density, probably contributes best to climate change mitigation by standing unaffected, which also conserve many other values (KSLA, 2010, back page, translation made by the author).

Here, forest carbon cycle research serves as a basis for how forests best ought to be managed in distant contexts, which have far-reaching social and political consequences. There is also a differentiation in the LULUCF (involving Sweden) and the REDD+ context when it comes to acknowledgement of safeguards. In tropical forested contexts, the question of using standing forests as a sink has expanded and involves biodiversity, and questions of indigenous rights, local participation and democratic decision making. In Sweden, such issues do not have the same resonance. Here climate change is primarily turned into a production issue and social issues are reduced to recreation in forests.

This thesis illustrates how forest categorising in UNFCCC, by Northern as well a Southern governments, reproduces the conventional North-South dichotomy. Despite increased attention to safeguards, Paper II illustrates how the REDD+ mechanism is based on a narrative where tropical forests are to be conserved and protected from local populations' irrational and unsustainable forest use. In contrast, Paper III illuminates how Swedish forests are described as rationally managed and subject to further intensified management. Here, female forest owners are assumed to be irrational and are consequently subject to education efforts, so they too learn to contribute to intensified production. In both narratives, favouring conservation or intensification, forests benefit national carbon accounting of Southern and Northern countries. In line with advanced liberalism (Miller and Rose, 2008), attention to and responsibility for political change in the studied contexts is directed at lower governance levels. The steering thus consists of controlling and changing individuals or particular categories. Bacchi (2009:17) notes how this creation of particular categories

(such as forest dependent communities and female forest owners) as themselves responsible for the problems, at the same time allow governments to appear to be taking responsibility for problems and taking an active role in developing solutions. According to this thinking, representations of the poor, rural, and forest dependent as the 'problem' allows e.g. REDD+ donors and agencies to seem compassionate and generous. Likewise, making female forest owners active allows the Swedish government and 'forest sector' to seem equal and progressive, while leaving gendered power relationships unchanged.

Despite this North-South differentiation of forests and forest use, one representation is common to all contexts – the 'rural' as problematic. In the REDD+ context this entails a story of tropical rural forest areas as sites of poverty, unsustainable forest use and dependence, and unemployment. In Sweden, the corresponding story reproduces a picture of the rural as in decline, coloured by unemployment, depopulation and forest dependence. The negative representation of rural areas not only opens up space for 'improvement', but also for exploitation and conservation. In Sweden, forest owners are to be active and rational in their forest management, so that they contribute to supporting the forest industry and Swedish economy. Climate change thus entails new opportunities for forest industrial innovations that can revitalise decaying rural areas (Paper III). In Southern contexts, development assistance and education will enable forest dependent communities to find alternative social and economic livelihoods that do not destroy forests (Paper II).

Bacchi (2009:13) notes the importance of identifying silences and the problemtisations that were *not* taken up. When it comes to the urban-rural binary prevalent the in global and Swedish contexts, the 'urban' and its interlinkages with the 'rural', repeatedly fails to be problematised. In the silence lies an implicit privileging of the 'urban', and overlooked interdependences and power relationships. These are relationships of power that are reproduced through dichotomies of the developed versus the undeveloped, the rural and the urban, the retrogressive versus the innovative and future optimistic. Summarising, the rural-urban dichotomy entails an implied difference between those immediately dependent on forests for survival and those more distantly dependent on forest resources that approaches a civilised/uncivilised dichotomy.

The similarities and differences in the different contexts and the analysis of the constitution of the climate-forest policy intersection illustrates what Miller and Rose (2008) refer to as classical steering techniques of 'advanced liberalism'. These steering techniques not only entail a focus on activating individuals such as female forest owners, or making forest carbon tradeable on global markets. They also imply what Wendt Höjer (2002) and Rönnblom

(2012) refer to as depolitising practices as the question of forest sinks become a market issue, a development issue, business opportunity, or a question of cost-efficiency and morals. Consequently, the contestable role of forests in climate change strategies is excluded from public decision-making and political change. The latter tendency is particularly evident in the Swedish context, where climate change has moved from being a threat to becoming a business opportunity.

## 6.2 Climate change as an intervening issue

As demonstrated in Paper III, climate change is largely an opportunity in the Swedish forest policy context. The main question is how to increase forest production and thereby maximise the carbon sequestration in growing forests and forest products. Meanwhile, the role of standing forests for carbon sequestration purposes is more or less completely off the agenda. In the era of climate change, Swedish forests are described as spaces used in different ways for multiple purposes. Above all, forests are constituted as spaces where fibre yields are maximised under proclaimed conditions of increased scarcity, competitiveness, and under declared needs of entering the 'low carbon' future (see Paper III).

So, how can we understand the development illustrated in Chapter 2, where climate change has gone from being a threat in the 1990s to currently being an opportunity? As shown in Chapter 2, the opportunity discourse gained momentum parallel to one, the launch of the Stern review in 2006, which implied that the 'low carbon economy' became a popular concept. A second important event was the governmental change in 2006, which altered Swedish climate policy from being oriented towards domestic emission reductions at source, to an increased use of flexible mechanisms and forest sinks. That is achieving emission reductions at a cheaper price in e.g. developing countries (c.f. Anshelm, 2012). Third, there was a domestic media debate where industrial representatives frequently were given the opportunity to present problems and solutions suiting their interests and preferences (Anshelm, 2012; Kleinschmit and Sjöstedt, 2014). In total, it shows how the meaning making of climate change in the Swedish forest policy context is interdependent with the development of UNFCCC, through science, politics, and media debates, but with twists and turns that originate in domestic politics.

Taken together, the findings of this thesis reveal how forests, bioenergy, and wood products are abstracted from local cultural contexts, and relocated in the formation of a Swedish national identity. The narrative envisions a development of new innovative forest products, and increased use of wood and

bioenergy, which will bring decaying rural communities back to life. In the dominant governmental representation, climate change is a production rather than an environmental issue, which ultimately challenges the co-equal policy goal of production and environmental protection. As demonstrated in Paper III, this largely reflects the old timber production paradigm, which has long dominated Swedish forest governance.

## 6.3 Bringing in a feminist perspective

So, how has the feminist perspective contributed to this thesis? First, as claimed in Chapter 1, shedding light on gendering practices is important in its own right as it opens up for political change. More specifically, it has implied that I have been able to nuance the relationships of power in Swedish forest governance, where power rarely has been part of empirical analysis (see Paper I). The post-structural feminist approach has further enabled an analysis that has moved beyond the conventional power struggles in Swedish forest governance, and the argumentation of those favoring e.g. nature conservation, forest production, or reindeer herding. It has shed light on how gendering practices are connected to more deeply rooted values of Swedish forest governance. These are cultural premises that not only shape the 'doing' of gender or climate change, but are to be seen as what Bacchi (2009: 7) refers to as the 'knowledges and perceptions of our age'. Accordingly, just as gender equality becomes a strategy to uphold the competitiveness of the Swedish forest industry, climate change is turned into a business opportunity (Paper III).

Moreover, the feminist perspective has contributed with an understanding of how the State can be approached as a contingent process of identity formation, based on exclusion, subordination and hierarchies, rather than a fixed entity waiting for discovery (Jansson et al., 2007). As illustrated in Chapter 2, the center-conservative government elected in Sweden in 2006 was very active in building an image of Sweden as a role model, in climate change mitigation (Anshelm, 2012) and in forestry (Paper III). Jansson et al. (2007) notes how national identity formation, often in times of crisis, gives impression of a consensus around certain values and problems. At the same time as unity is constructed, there is however a risk that domestic conflicts and hierarchies are maintained and concealed. If applying this thought to the Swedish context, the making of Sweden as a role model only gained momentum in a period of crisis – such as the climate and the economic crisis. The self-representation has also given the impression that there is a consensus around the Swedish forestry model, which has allowed climate change to become a production issue that has, to date, superseded the environmental policy goal.

Summarising, this thesis has drawn attention to how global and national discourses on climate change and forests are created, paying attention to agency (Paper II) and structure (Paper III). It has increased our understanding of *how* discourses on climate change and forests create problems involving particular identity formations – on state, community and individual levels. Bringing these different discursive practices together has brought light to how forest governing takes place in the era of climate change. That is, how individuals (female forest owners); (carbon) markets; and populations (forest dependent communities) are made governable under the label of 'freedom' in contemporary societies.

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