



Norwegian University
of Life Sciences

Master's Thesis 2016 - 30 ECTS
Department of International Environment and Development Studies,
Noragric

An Analysis of Norwegian Forest Resource Management, from Statskog's State Management to the Privatisation of their Properties

Brit Nerhus
MSc International Environmental Studies

The Department of International Environment and Development Studies, Noragric, is the international gateway for the Norwegian University of Life Sciences (NMBU). Eight departments, associated research institutions and the Norwegian College of Veterinary Medicine in Oslo. Established in 1986, Noragric's contribution to international development lies in the interface between research, education (Bachelor, Master and PhD programmes) and assignments.

The Noragric Master Thesis are the final theses submitted by students in order to fulfil the requirements under the Noragric Master programme "International Environmental Studies", "International Development Studies" and "International Relations".

The findings in this thesis do not necessarily reflect the views of Noragric. Extracts from this publication may only be reproduced after prior consultation with the author and on condition that the source is indicated. For rights of reproduction or translation, contact Noragric.

© Brit Nerhus, June, 2016

britnerhus@gmail.com

Noragric

Department of International Environment and Development Studies

P.O. Box 5003

N-1432 Ås

Norway

Tel.: +47 67 23 13 00

Internet: <http://www.nmbu.no/om/fakulteter/samvit/institutter/noragric>

Declaration

I, Brit Nerhus, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature.....

Date.....

Foreword and acknowledgements

Writing this thesis has been demanding and complex, but nevertheless an interesting and eye-opening journey.

I want to thank my advisor professor Pål Vedeld for his help and guidance, patience and friendliness throughout the past year. Statskog for their interest in my thesis and help along the way. NJFF, DNT, Naturvernforbundet and NIBIO for sharing their views on the case. The Centre Party and the Conservative Party and for informing me on the political process of the case and their agenda with it. Least but not at last, I want to thank my informants for their information about the specific properties of my case studies. I am forever grateful for all the help and friendliness I have received during this research. I wish you all good luck with the continuation of a sustainable Norwegian forest management.

Abstract

This thesis analyses how Norwegian state forest properties and their different resources are managed and have been managed through different institutional and organisational stages throughout history. It presents the history of Norwegian forest management systems, including all the different resources, actors, and institutions, and the various discourses and resource regimes involved. The thesis further links up with global perspectives on environmental resources and more general on environmentalism. The thesis highlights an ongoing issue that has not been subject to much research. It provides an analysis of Norwegian state and public forest properties, resources and the public interests at stake following Statskog's purchase of the Borregaard properties and their current land consolidation sale. The purpose is to identify and describe the possible outcomes and consequences of these processes.

The thesis presents different political and organisational voices, and it is relevant for several actors: scholars of different disciplines, politicians, organisations and the public. The research shows that in general these processes do not serve dramatic outcomes, but that it affects certain members of the public, potentially leading to an increased political debate and higher acceptance of further land consolidation sales of state forests.

The thesis presents social science research methods such as purposive sampling, interviews, discourse analysis and literature review, in order to present the different voices involved. The ambition has been to present and give way to the different voices involved, and to provide a general, unbiased presentation of the processes of study.

Abbreviations

- AS – Aksjeselskap (Stock Company)
- ASA – Allmennaksjeselskap (Public Stock Company)
- BOF - Bergen og Omland Friluftsråd (The outdoor recreation board for Bergen and the areas around)
- BJF - (Bergen Hunting and Fishing Society)
- CSR – Corporate Social Responsibility
- DNT – Den Norske Turistforening (The Norwegian Trekking Association)
- DSS – Direktoratet for Statens Skoger (The Directorate of the State Forests)
- ENGO – Environmental Non-Governmental Organisation
- MAFI – Market- and Agent-Focused Instruments
- MDG - Millennium Development Goals
- NGO – Non-Governmental Organisation
- NIBIO – Norsk Institutt for Bioøkonomi (Norwegian Institute for Bioeconomy Research)
- NJFF – Norges Jeger- og Fiskerforbund (Norwegian Association of Hunters and Anglers)
- NTFP – Non-Timber Forest Products
- Os JFL (Os Hunting and Fishing Society)
- SDG – Sustainable Development Goals
- SF – Statsforetak (State Enterprise)
- UN – United Nations
- UNDP – United Nations Development Programme
- UNEP – United Nations Environment Programme
- UNFCCC – United Nations Framework Convention on Climate Change
- WW2 – World War Two

Table of Contents

Foreword and acknowledgements.....	iv
Abstract	v
Abbreviations	vi
1. Introduction.....	1
1.1 Environmental resource management and environmentalism in a global perspective	1
1.2 Norwegian forest resource management	4
1.2.1 The history of Norwegian forest management	4
1.2.2 Public versus private forest properties	6
1.2.3 Statskog SF.....	7
1.2.4 The public rights of the forest	9
1.3 Problem formulations, method and field study	10
1.3.1 Problem statement.....	10
1.3.2 Research objectives.....	10
1.3.3 Accompanying research questions for each objective.....	11
1.4 Justification of thesis	12
1.5 Flow of thesis.....	12
2. Theoretical approach.....	13
2.1 Institutions and institutionalism	13
2.2 Environmental governance	14
Figure 1. The resource governance model (Vatn, 2015).	15
2.2.1 Globalisation and environmental governance	16
2.2.2 Decentralised environmental governance	17
2.2.3 Market- and Agent-Focused Instruments (MAFIs).....	17
2.2.4 Cross-scale environmental governance	18
2.3 Resource governance	19
2.4 Analysing environmental governance: resource regimes	20
Table 1. Different types of resource regimes based on Vatn (2015).	20
2.4.1 Access to the resource	20
2.4.2 Interaction rules	21
2.5 Discourses of environmental governance and discourse analysis	22
2.5.1 Ecological modernisation	23
2.5.2 Green governmentality	23
2.5.3 Civic environmentalism	24

Table 2. Discourses of environmental governance, based on Bäckstrand and Lövbrand (2006) .	26
2.5.4 Discourse analysis (and narrative review).....	26
2.6 Norwegian ‘good agronomy’	28
2.6.1 The social construction of good agronomy	29
2.6.2 The public mode of production – the responsible life mode	29
3. Methodology	31
3.1 Sampling and description of study area	31
3.1.1 Criteria investigated in case studies	32
Table 3. Ownership and criteria for the case studies.....	33
3.2 Triangulation	33
3.2.1 Semi-structured interviews	35
3.2.2 Narrative review	35
3.3 Limitations, challenges and ethical considerations.....	36
3.3.1 Limitations and challenges	36
3.3.2 Ethical considerations.....	37
4. Findings and discussion	38
4.1 The historical evolution of Norwegian forest resource governance approaches with an emphasis on changes in institutional structure(s) and interplay between actors.....	39
4.1.1 Historical stages in Norwegian forest management	39
4.1.2 Key actors, resources, institutions, organisational and policy changes in Norwegian forest resource governance	42
Figure 2. Norwegian forest resource governance model, based on Vatn (2015).	43
4.2 The political motives and processes behind the Borregaard purchase and Statskog’s land consolidation sale	45
4.2.1 Why did the political system demand a land consolidation sale of Statskog’s properties?	45
4.2.2 The timeline and key political motivations behind the processes; economic, rights issues, environmental conservation, and outdoor recreation interests	46
4.3 Outcomes of Statskog’s land consolidation sale	55
4.3.1 What are the outcomes and consequences of the land consolidation sale; the successes and challenges of the shift in property rights structure?.....	55
4.3.2 Different groups of actors’ response to the shift in property rights structure and view on sustainable forest management.....	61
5. Summary and conclusion	65
References.....	68
Appendix.....	74

1. Introduction

The ambition for this thesis is to examine and analyse the Norwegian forest resource management; its history, the actors and interplay between these, and the balance between private and public access to forest resources. More specifically, it aims to take a deeper look at Statskog's state management, and analyse the shift in property rights structure to forest resources that are currently taking place during their land consolidation sale. The analysis will link this to the concept of global environmental governance and theoretical approaches of these, in order to gain a broad environmental perspective on the theme. This includes examining theories of institutions and institutionalism, environmental and resource governance, and discourse analysis including the Norwegian concept of 'good agronomy'. In my earlier paper, "Environmental governance" (Nerhus, 2015), I have outlined and analysed some of the features mentioned here, and I will refer to this throughout the thesis where this is relevant.

1.1 Environmental resource management and environmentalism in a global perspective

Throughout history, the nature has formed human beings and human beings have affected and even destroyed nature. Humans have however had no other choice than to encounter nature and its elements and resources (Berntsen, 2011, in Nerhus, 2015). A *natural resource* can be understood as "(...) *a substance in the physical environment that has value or usefulness to human beings and is economically feasible and socially acceptable to use*" (Bradshaw et. al, 2005, p. 479).

It is common to divide natural resources into two categories: non-renewable and renewable resources. Natural resources are part of the larger environment, and thus I will from now use the term 'environmental resources' when examining these. Non-renewable resources often have a finite availability within a certain time scale, because it takes millions of years for nature to produce it, like oil and coal. However, some non-renewables are recyclable after use, even if the natural production of the resource is finite. Renewable resources on the other hand, naturally renews itself, such as wind power or water resources. Nevertheless, some

renewable resources needs proper management by society in order for their availability to sustain, like forests or fish stock. These types of renewables are categorised as critical. Thus, resource management is important to ensure that critical renewable resources are not misused to the extent that they cannot longer reproduce themselves (Berntsen, 2011, in Nerhus, 2015; Bradshaw et. al., 2005).

Humans have gradually seen the value of using the nature in a sustainable way rather than destroying it, and realised the responsibility to act according to the nature's "own" principles. However, increasing economic and technological growth can to some extent collide with these principles. Therefore, there is a need for nature conservation and sustainable use (Berntsen, 2011, in Nerhus, 2015). Many of the issues identified today as relating to global climate change, were actually identified already in the 19th century and early 20th century but they did not get politically accepted as environmental issues until the second half of the 20th century. The reason for this lies in how politicians and bureaucrats have viewed the environment (Berntsen, 2011). Actors from different political parties and other organisations view the environment from different discourses also today. This is outlined later in the thesis, in chapter 2 and 4.

Climate change, environmental management and nature conservation are emerging social issues. The first previsions and suspicions of an increasing ecological crisis erupted in the decades after WW2. The rise of the modern environmental movement, also called the *environmentalism*, gained attention in the late 1950s and during the 1960s. This attention, which happened around the same time in parts of the Western world as well as in Japan, is seen in the great number of newspaper articles and popular journals written about concerns of the economic development's impact on the environment during the 1960s and 1970s. This shows a growing awareness of environmental issues among the public. The early environmentalists had three main areas of concern: pollution from increased technology, nature conservation, and population growth. What specifically and officially signalled the start of the environmentalism were to many the publication of "Silent Spring" by biologist Rachel Carson in 1962, which stressed the potential consequences of intensive agriculture. Following this, researchers (social scientists and other concerned scientists) began to speak up about environmental problems. Several environmentally based NGOs, or *ENGOS*, were also established during this time; organisations who later became central in global debates about environmental issues. Not long after, in 1968, biologist Garrett Hardin introduced his theory about the "tragedy of the commons" – of which he argued that economical short-time

achievements eventually would lead to vandalism of natural common pool resources, because individuals are likely to seek personal advantage of a given resource on behalf of the common benefit of it. Hence, both researchers and ENGOs spoke up in the early stages of environmentalism (Berntsen, 2011; Bradshaw et.al., 2005).

During the 1970s, politicians and bureaucrats also began contributing to global debates about environmental issues. Among these were bureaucrats of the United Nations and politicians from different Green parties around the world (especially in Germany, New Zealand and Switzerland as the Green parties in these countries gained seats in their national parliaments). Then, in 1972 the Stockholm Conference found place, after a Swedish initiative at the UN General Meeting in 1968. The goal of the conference was to enlighten governments as well as public members around the world about these emerging issues (the same year, Norway established its Ministry of Environment). In 1986, the World Commission on Environment and Development, or the “Brundtland Commission”, were established. The commission were asked by the UN General Assembly to formulate policies on trade-offs between environment and development policy goals. Issues on development and environment had earlier been seen as separate and incompatible issues belonging to different political contexts, but now the global political system saw an emerging need for a complementary agenda for long-term environmental strategies and long-term development strategies. In their report “Our Common Future” in 1987, the Brundtland Commission launched the term «sustainable development» for the first time. The substance of this term is that the resource use and needs of current generations should not destroy the opportunities for future generations to maintain the same resource use and needs. The commission argued that cooperation between countries should be a prioritised feature in order to find a way out of both world poverty and global environmental threats towards the year of 2000 and beyond. The content of the report became significant around the world, including Norway, for establishing sustainable environmental governance structures (Council on Foreign Affairs, 2015, and FN-sambandet, 2015, in Nerhus, 2015).

All these contributions of researchers, ENGOs, politicians and bureaucrats from the mid-20th century and onwards, together made up a type of “road map” of milestones in forms of environmentally based conferences and publications, including the Earth Summit in Rio in 1992 and beyond. The Rio Conference in 1992 was a significant global event for environmental concerns, with the Climate Convention and the Convention of Biodiversity, together with the *forest principles* (principles about sustainable forest management) as examples of important, current conventions and principles evolving from this conference. In

addition, from the 1980s and 1990s and onwards, environmentalism began focusing on environmental problems caused by scientific and technological advances and on how many environmental issues becoming issues with increased global impact. This resulted in increased awareness of how changes at local levels in societies could help resolve environmental issues at global levels. Furthermore, the UN arranged the Rio+20 Conference on Sustainable Development in 2012, twenty years after the Earth Summit. The focus for Rio+20 was to make development goals towards a more “green” economy, to move away from the “business-as-usual” discourse and into a more environmentally concerned economy. This resulted in green economy policy guidelines, and decisions to develop the Sustainable Development Goals (SDGs) with the ambition of converging these into the post-2015 agenda of the Millennium Development Goals (MDGs). The SDGs focused towards green growth, by contributing developing countries with opportunities and allowances to find environmentally friendly development paths and by increasing the international coordination towards these goals (Bradshaw et. al., 2005; Berntsen, 2011; UNCSD, 2011).

1.2 Norwegian forest resource management

The predecessor of Statskog SF, *Statens Skovvæsen*, together with the employment of the Norwegian foresters in the last part of the 1850s, established the first permanent administrative system of forest management in Norway. Ever since the Middle Age people have been hunting and fishing in Norway, and some kind of laws and regulations over these forest resources has been around in the same amount of time. As the population grew during the 16th century, the forest resources gradually declined, and hunting for moose and stag became restricted except for a month every year where a certain quota could be hunted. These early regulations created conflicts between business interests versus conservation interests, and have existed for as long as humans have used forest resources in their own favour (Berntsen, 2011, and Fageraas, 2009, in Nerhus, 2015).

1.2.1 The history of Norwegian forest management

Ever since the early ages and first settlements in Norway, environmental resources, especially forest resources, have been an important part of human life. Timber, harvesting of NTFP (Non-Timber Forest Products) and mineral extractions have been crucial for the development of the first settlements and societies. We do not know much about Norwegian forest

management before the 16th century, but some attempts of regulations are discovered in “Gulatingsloven” from the second part of the 11th century. When the ‘water powered saw mill’ emerged in the 16th century, the forest management was to some extent industrialised by making it more efficient and cost-effective to cut wood. This led to people starting to fear destruction of the forests and further led to the first real conflict between growth and conservation. The authorities imposed taxes and restrictions for the water powered saw mills because of this conflict, marking the start of modern-day Norwegian forestry regulations (Berntsen, 2011, in Nerhus, 2015).

The first public forestry organ, the “generalforstamt”, was founded in 1739, and was mainly managed and operated by Germans, as the Norwegian foresters at that time did not have proper academic education within forest management. Germany already had an established and functioning generalforstamt and a science-based education in forestry. In addition, as they were engaged in the mining industry, they needed proper timber and therefore saw potential in the Norwegian forests. Thus, a forester and several administrators from Germany were sent to Norway to develop a Norwegian forest administration, with the ambition of a more efficient usage of forest resources as well as protection and treatment of the forests. Educating locals about forest management was a crucial part of the work, as they charted both private and public properties. The first attempt at a generalforstamt dissolved after seven years, because the reorganisation and change in property rights structure was unpopular among the Norwegian public. Until this time, they were able to use the forests in their own way and could cut their own wood. The second attempt (1760 to 1771) also failed to establish a “well-functioning” administrative system. Although the state management of Norwegian forests started in the 18th century, the forestry was still liberal in its politics, and free of legal regulations by the end of the century. People continued to cut wood for private use, and some even used this situation to gain jurisdiction over the values of the forests. Because of the failed attempts for a more sustainable administration system, the situation around Norwegian forest management was critical, and it was not until *Statens Skovvæsen* (an early predecessor of Statskog SF) eventually was founded in 1860 that a national forest management developed an expert leadership on the field. The forest management associated with Statskog today, can therefore be said to have existed for about 150 years. The first Norwegian foresters, Jacob Bøckmann Barth and Thorvald Mejdell, participated as experts at the new attempt to establish a permanent management system in 1858 (that eventually led to Statens Skovvæsen). Potential Norwegian practitioners within the field of forest management were sent to

Germany to get education since there was still at this point no academic education available in Norway (Berntsen, 2011, in Nerhus, 2015).

“Skogloven” (the forest law) was created in 1863, and one outcome of this law was the desire to divide the forests into five regions, with five different managers. This decentralisation was a step towards more efficient and sustainable management (an approach that are further examined in chapter 2 and 4). At the time when the Ministry of Agriculture was established in 1900, the situation and conditions of the Norwegian forests were to some extent still critical. The Forest Directorate, which operated under the ministry, therefore established a commission that was set to analyse how this type of management functioned. The commission concluded with a solution of less bureaucratic controlled management of the state forests, which led to the foundation of the DSS (the Directorate of State Forests) as an independent directorate in 1957. The new directorate was characterised by increased mechanisation and rationalisation efforts for the state forest management, while the old bureaucratic directorate continued to regulate private forest properties (Berntsen, 2011, and Fageraas, 2009, in Nerhus, 2015).

1.2.2 Public versus private forest properties

A majority of the forest properties in Norway are private-owned (Statskog, 2016). These are not included in the analysis of forest management in this thesis, since my main focus is to look at public or state-owned forest properties, the management of these and how the institutional structures might change when sold to private actors. Still, it might be reasonable to mention some important contradictions between public and private forest properties within Norwegian forest management throughout history

Today, 3% of Norway’s forests belongs to Statskog (Statskog, 2016). Other actors, like “Opplysningsvesenets fonds skoger” (The Norwegian Church Endowment) and the army, have also been in possession of public forest properties. Nonetheless, much of the Norwegian forests has originally been private properties, and the history of state versus private ownership is complex. Large estates was transferred to the King after the reformation in the 16th century, estates that had been possessed by the church since early times. During the King’s reign, farmers leased and managed a great deal of the so-called *crown lands* (in Norwegian called “statsallmenning”). According to Sevatdal (1989, in Nerhus, 2015), crown lands are categorised as properties that might provide collective user right to the local community.

Statskog divides their properties into two categories; crown lands and state forests. Crown lands might also be sold to private actors (this is further outlined in chapter 4), and some of them was sold already while the King reigned. Farmers, who already leased some of the properties, together with lumber dealers and some other private actors, purchased the most productive properties. Even after Statens Skovvæsen was established in 1860, the property and user rights and even the border of the properties were unclear. Hence, the issue of public versus private property rights has been one of the most central political issues for centuries. Because these issues was so big and complex, the first forestry officers in charge put down a separate court to deal with them, after several attempts of making suitable regulations. Later, from 1957, it became the DSS's responsibility to manage the forests and their property rights, as well as facilitating for public access to outdoor recreation activities (Fageraas, 2009, and Sevatdal, 1989, in Nerhus, 2015).

1.2.3 Statskog SF

The DSS was in charge of the Norwegian forest management for over three decades. In 1989, the Parliament compiled the White paper "A better organised state", which laid the foundation of a new State Enterprise. Then, in 1992, a State Enterprise law was legislated, and Statskog SF eventually established in 1993. With their headquarter in Namsos, Nord-Trøndelag County, Statskog SF replaced the former directorate's management (Statskog, 2015, in Nerhus, 2015). Today, approximately 1/5 of Norway's state forests, crown lands and mountains are possessed and managed by Statskog SF. Norway's inhabitants owns 100% of Statskog (Statskog, 2016).

The idea that the new management system should run as an enterprise model according to commercial principles was seen as a better solution than a directorate model, as Statskog was also set to protect the social obligations of it. Business development based on the environmental resources of the properties has by using environmental concerns as main guidelines, been a comprehensive focus and political goal ever since the establishment of Statskog SF. Further, global environmental concerns increased towards the 2000s, leading to national impacts also in Norway, and towards a concern for nature and outdoor recreation activities as part of Statskog's management approach. The concern for and protection of nature and outdoor recreation activities was already a focus of the DSS's management, and it increased after the establishment of Statskog SF in collaboration with landowners, the

government and a variation of ENGOs, in order to provide an even more environmentally friendly and sustainable forestry. Social benefits, like public access to hunting and fishing opportunities and other recreation activities that improves the public's life quality, are included as sustainable aspects of Statskog's forest management. This results among other things in 1500 felled animals and 20 000 fishing licenses sold every year, through Statskog's cooperation with other actors, like NJFF (Norwegian Association of Hunters and Anglers) and DNT (The Norwegian Trekking Association). Schools and kindergartens are also important collaborators, since a sustainable development approach also includes facilitation and encouragement towards future generations, in order for them to maintain the public use of the state forests in the future (Fageraas, 2009, in Nerhus, 2015).

Due to their acquisitions and divestment of productive forest properties, there has regularly been discussions and political debates about Statskog's properties. One of Statskog's objectives, or goals, for the past 50 years have been to supplement property purchases (acquisitions) with divestments of their own properties.

The newest acquisition occurred in 2010, when Statskog SF became the formal owner of Borregaard Skoger AS after having purchased Orkla ASA's Borregaard properties. This acquisition differed from earlier ones because of the large size of the property areas, as areas as large as these are rarely up for sale. Statskog SF applied for a state loan to purchase these properties, and the government approved with a request that they reviewed and divested a great deal of their own forest properties. This opened up for a major redistribution of Statskog's forest properties, and at an extraordinary general meeting of Statskog SF in 2011, several criteria for a comprehensive redistribution were established. Based on the political request, Statskog SF set out to sell scattered forest properties in the period 2011 – 2017. The reason to sell scattered forest properties and not properties of larger sizes, is an ambition of more efficient management of these properties when sold to local, private actors (Fageraas, 2009, and Statskog, 2015, in Nerhus, 2015), and to avoid large properties being sold to private or foreign investors, as further outlined in chapter 4.

1.2.4 The public rights of the forest

In many countries, including Norway, the public access to and use of forest properties and their resources is regulated through laws. The Norwegian law and term for this is called “*allemannsretten*” and is equal to the English term “rights of way” or “rights of access” For this thesis, I will use the term “rights of way” when examining the public access to Norwegian forest resources. The establishment of the “outdoor activity law” (“*Friluftsloven*”) in 1957 led to the formal established the “rights of way” in Norway, which includes public rights to access, move and reside in the Norwegian outfields (forests, mountains, rivers, waters and the sea) regardless of who the landowner is (Reusch, 2012), in Nerhus, 2015). This type of public access to environmental resources is based on a community interaction rule (this will be further examined in chapter 2).

Even if the “rights of way” includes access to reside on the properties, there are some restrictions to it. If the property includes housing, any temporary residence must be set up at least 150 metres away from the housing, and if someone wants to reside there for more than one night, the landowner must give permission to it (see Table 1). Further, the “rights of way” includes possibilities to harvest from nature when such possibilities are available, like picking berries, mushrooms and flowers, and fishing in saltwater. The main responsibility to look after the “rights of way” lies with the Directorate for Environment. Fishing in freshwater and waterways, together with hunting, is not part of “the rights of way”. This follows the landowner, and he must give permission to hunt and fish on his property. Where Statskog is a landowner, everyone is permitted to hunt and fish as long as they have the required licenses. They facilitate hunting and fishing opportunities for everyone, and by building forest roads and offering courses, hunting training and the like, they remove obstacles like lack of experience or lack of social environment for public access. Statskog works towards physical and practical possibilities, and furthermore towards rational and professional management. They want expertise, capital and land to be utilised in the best (most efficient) way possible, and to create and ensure profitable jobs. Statskog’s responsibility for economic growth and CSR (Corporate Social Responsibility) shows in their vision to “(...) create value from - and take care of – something we own together”. Part of their ambition is therefore that the results should contribute to the whole community (Statskog, 2015, in Nerhus, 2015).

1.3 Problem formulations, method and field study

I have collected data mainly by literature reviews on theory of the field and through other qualitative research methods such as semi-structured interviews with specific informants. For my case of study, I think these methods serve as suitable tools to find satisfying answers to the objectives. I have looked into a few specific properties that Statskog has sold during the years from 2011 and until today. These are properties of different size and degrees of conflict, in order to give a broad analysis. The choice of methodology and field study has both positive aspects and of course also ethical challenges, which will be further examined in chapter 3.

1.3.1 Problem statement

An analysis of Norwegian forest resource management, from Statskog's state management to the privatisation of their properties.

1.3.2 Research objectives

(1) The historical evolution of Norwegian forest resource governance approaches with an emphasis on changes in institutional structure(s) and interplay between actors.

(2) The political motives and processes behind the Borregaard purchase and Statskog's land consolidation sale.

(3) Outcomes of Statskog's land consolidation sale.

1.3.3 Accompanying research questions for each objective

(1) The historical evolution of Norwegian forest resource governance approaches with an emphasis on changes in institutional structure(s) and interplay between actors.

1.1 Are there distinct historical stages in Norwegian forest management?

1.2 What are the key actors, resources, institutions, organisational and policy changes in Norwegian forest resource governance?

(2) The political motives and processes behind the Borregaard purchase and Statskog's land consolidation sale.

2.1 Why did the political system demand a land consolidation sale of Statskog's properties?

2.2 The timeline and key political motivations behind the processes; economic, rights issues, environmental conservation, and outdoor recreation interests.

(3) Outcomes of Statskog's land consolidation sale.

3.1 What are the outcomes and consequences of the land consolidation sale; the successes and challenges of the shift in property rights structure?

3.2 Different groups of actors' response to the shift in property rights structure and view on sustainable forest management.

1.4 Justification of thesis

This study is important because it includes covering some present knowledge gaps. Not much research, barely any within social science, have been carried out on the case of the Statskog property sale. This is a newly developed case, and one that is currently going on. Thus, it has caused some challenges in finding and collecting relevant data, although I hope I will be able to give a satisfying analysis of the cases by presenting theoretical backgrounds on environmental governance, Norwegian forest management and the public rights of Norwegian forest resources, alongside interviews with actors involved.

1.5 Flow of thesis

This first chapter introduces natural resources and environmentalism in a global perspective, and more specifically the history of Norwegian forest resources and management, including Statskog SF as the current state landowner, public access to the resources and the case of Statskog's current property sale. I also introduce my problem statement, objectives and research questions in this chapter. The second chapter examines the theoretical approaches mentioned above. Chapter 3 presents the methodology I have used, including the shortcomings and ethics involved. Chapter 4 provides my findings and personal analysis, before the fifth chapter wraps it all up with a summary and a conclusion.

2. Theoretical approach

In this chapter, I will examine different approaches to environmental governance, explain the theories of institutions, resource governance, resource regimes and interaction rules (Nerhus, 2015), and discourses of environmental governance including the Norwegian concept of “good agronomy”. Throughout the chapter, I will link these theories to my research questions about Norwegian forest resource management and Statskog’s land consolidation sale.

2.1 Institutions and institutionalism

Institutions constitute the structural feature of every society. An institution is the sum of the informal norms, formal rules and conventions, and the understandings and routines that establish the structure of a society (March and Olsen, 1989, and Peters, 2001, in Nerhus, 2015). Institutions give the members of a society understandings and predictability of how to interact with each other. Because of institutions, every society has some kind of stability. Institutions coordinates our interests and protect our values, they give meaning to our lives and are thus essential to human existence (Vatn, 2005, in Nerhus, 2015).

Institutionalisms are some sort of discourses that explains human behaviour within institutional theory. There are, according to Peters (2001, in Nerhus, 2015), six different types of institutionalisms: Normative Institutionalism, Rational Choice Institutionalism, Historical Institutionalism, Empirical Institutionalism, International Institutionalism, and Societal Institutionalism. These institutionalisms might be complementary, or they might be contradictory. For my research, Norwegian forest management seem to include historical, empirical and societal institutionalisms. I will come back to this in chapter 4. Historical institutionalism claim that historical decisions within a governmental system are of great importance also in present and future institutional decision-making. For Norwegian forest resource management, this institutionalism takes into account the public interests of the forest resources. Empirical and societal institutionalisms claims the governmental structure, and the relationship between and within the government, the state and the society to be crucial aspects of how the government make policies and choices. These institutionalisms and their content seem to occur in Norwegian forest management, as I will examine further in chapter 4 (Vatn, 2005, in Nerhus, 2015).

In order to understand the role of institutions, we must understand the reciprocal influence between institutions and individuals. Furthermore, institutions structure the relationship between humans and their use of environmental resources, and thus all actors with an impact on the environment must work together towards a more sustainable environment. The United Nations Environment Programme (UNEP) states that approximately 50% of the global workforce takes place within environmental and agricultural businesses, like forestry, and that a sustainable use of these resources - like the focus of my research - is essential in order to maintain functioning livelihoods and economics around the world (Vatn, 2005; UNEP, 2009, in Nerhus, 2015).

2.2 Environmental governance

Governance includes a broad spectre of actors, as well as relationships and interplays between these (see Figure 1). The actors involved are different political, economic and civil society actors who deals with the rights, responsibilities and interests regarding environmental properties and their resources. A government might be one (political) actor within a governance system, but they are not the same. Other political actors might be state authorities, or international governmental organisations (IGOs) like the UNEP. Political actors has the power to define and change the user rights and interaction rules involved. The economic actors are those with (private or state) ownership over the properties and resources. The last category of actors, civil society actors, includes the public, ENGOs, local communities, some private actors, and transnational networks. These actors work towards democratic processes regarding environmental resources. When it comes to Norwegian forest management and Statskog's land consolidation sale, as we will look more into in chapter 4, we can see the interplay between the government as a state authority and political actor; Statskog SF, the state and the new landowners as economic actors; and the public and NJFF and DNT (ENGOs) as civil society actors. Furthermore, a governance system involves processes, structures and coordination within and across all its actors. In addition, it includes several notions on institutions, resource regimes, property rights and the like. Hence, the concept of governance and governance systems is complex. Figure 1 below illustrates the resource governance model (Vatn, 2005, and Lemos and Agrawal, 2006, in Nerhus, 2015; Vatn, 2015).

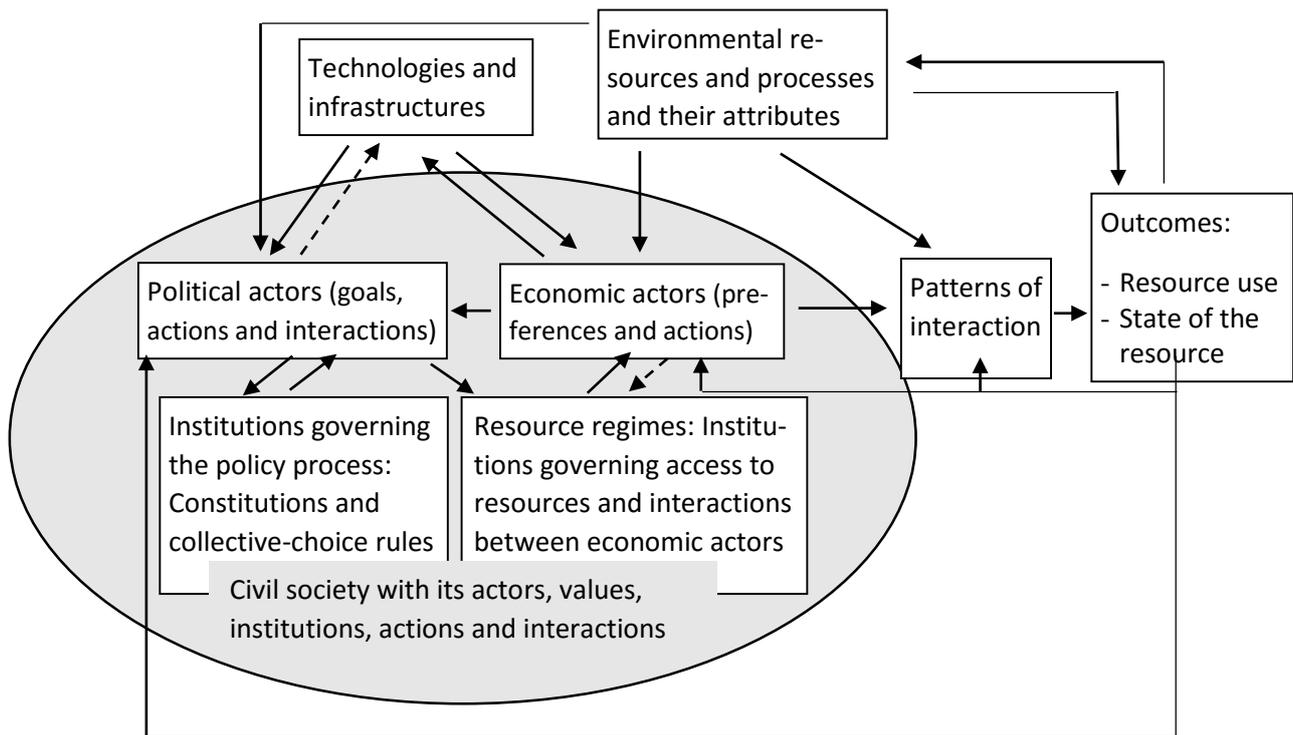


Figure 1. The resource governance model (Vatn, 2015).

All the institutions and actors that are involved within a society's relationship with, management of and action towards the environment and its resources, in sum makes up an environmental governance system (Peters, 2001, in Nerhus, 2015). The term *environmental governance* can be defined as “(...) *the set of regulatory processes, mechanisms and organisations through which political actors influence environmental actions and outcomes*” (Lemos and Agrawal, 2006, p. 298, in Nerhus, 2015, p. 6). An environmental governance system often involves conflicts between the actors involved (regarding property rights and access to environmental resources), and a crucial aspect of any governance is thus about finding trade-offs and satisfying power relations in order to manage the different interests involved.

Environmental governance systems can take form as national or international policies or legislations, or as ENGO's actions, to mention some. They take various forms, and there are different approaches to and hybrids of environmental governance. Four of these approaches are presented here, whereas two of them (number 2 and 4) apply to Norwegian forest management and will be analysed further in chapter 4. These are 1) globalisation and environmental governance, 2) decentralised environmental governance, 3) Market- and

Agent-Focused Instruments, and 4) cross-scale environmental governance. All these approaches includes the challenges for the actors involved (state and market actors, ENGOs and local communities) to address environmental issues. Different actors need to work together in order to find the most efficient and sustainable environmental governance strategy (and therefore, different hybrids of environmental governance has appeared) (Vatn, 2015, and Lemos and Agrawal, 2006, in Nerhus, 2015).

2.2.1 Globalisation and environmental governance

The increased globalisation the world is facing today includes both positive and negative impacts on environmental issues and the governance of these. Globalisation processes involves free flows of information, technologies and knowledge, and thus better access to this across the world. In turn, this leads to increased international participation within environmental issues and their governance, with several environmentally focused institutions, actors (including local communities and ENGOs) policies and regimes. Contradictory, the increased globalisation also includes some negative aspects and pressures of environmental governance, across local, national, transnational and global levels. Globalisation processes might lead to intensive use and reductions of environmental resources. In addition, waste production increases while environmental concerns decreases, because of actors wanting to take part in the “free trade” market, which often neglects the environmental issues involved (Lemos and Agrawal, 2006, in Nerhus, 2015).

Hence, using a global approach to environmental governance has its advantages, but also its shortages. The shortages includes imbalanced allocations of knowledge, power and resources between actors, which can influence international environmental governance systems and their outcomes. On the other hand, nations alone cannot solve international environmental issues. Local communities, ENGOs, state actors and transnational networks must cooperate in order to build common environmental governance systems based on innovation, mobilisation, technology and knowledge across nations (Lemos and Agrawal, 2006, in Nerhus, 2015).

2.2.2 Decentralised environmental governance

Although international cooperation is important when it comes to governance related to environmental issues, much of the challenges involved erupts at local levels. Therefore, national state governance of environmental challenges and democratic decision-making at this level is also of great importance. This is where the decentralised environmental governance approach appears, as a tool for involving national communities and citizens within the decision-making. As we have seen, Norwegian forest management implemented this approach already in the 19th century, when Statens Skovvæsen and the forest laws were established, which further divided the forest management into five regions. I will analyse this further in chapter 4. Decentralised environmental governance approaches provides shorter distances between the decision-making and those affected by it, as well as it increases the participation and responsibility of the actors with local knowledge about the environmental resources involved. Environmental governance at local, decentralised levels are crucial because of the local actors' knowledge and capacity about environmental resource governance (Lemos and Agrawal, 2006, in Nerhus, 2015).

There are various outcomes of decentralised environmental governance approaches. While some communities have experienced success within their local governance, other communities have not experienced many changes. As seen in Figure 1 above, it is the actors involved who decides the outcomes. The actors involved might use personal political motives towards a decentralised governance, which can have both positive and negative outcomes. Outcomes of a successful decentralised governance can be seen in how decision-makers at different levels cooperate and treat their environment (Lemos and Agrawal, 2006, in Nerhus, 2015).

2.2.3 Market- and Agent-Focused Instruments (MAFIs)

MAFIs are environmental governance approaches that deals with incentives like subsidies, eco-taxes, certification and labelling, and other informational systems. The intention of these types of approaches is to develop responsiveness and a willingness-to-pay from actors at all levels, in order to increase the transparency within environmental governance systems and create environmentally friendly and focused communities across the world. Several countries,

organisations and companies have implemented incentives such as reducing emissions through a polluters-pay-principle. Many countries have also increased their energy efficiency. However, there are some challenging aspects within a MAFI approach. First, there is a lack of expertise in the field, due to few actors on higher levels that are environmentally focused. Second, a MAFI approach might lead to uncertainties, economic fears amongst actors, and difficulties with distribution of the products involved, since environmental incentives are often costly. The positive aspects of a MAFI approach, on the other hand, is increased focus on environmental issues at local and individual consumer levels. In turn, this has resulted in increased willingness from states and companies to implement different incentives. Thus, the positive outcomes of a MAFI approach is similar to the decentralised environmental governance approach, since both approaches are positive towards decentralised and local environmental resource governance and the power of consumers to internalise their preferences into their daily lives (Lemos and Agrawal, 2006, in Nerhus, 2015).

2.2.4 Cross-scale environmental governance

The last environmental governance approach, and the second approach that are relevant to my study of Norwegian forest management and Statskog's land consolidation sale, is the cross-scale approach. This combined approach contains actors across local, national and international levels and across social and political actors at all these levels, with an aim to face the complex environmental issues that continue to increase. Norwegian forest management including Statskog SF and their current land consolidation sale has followed this type of environmental governance over forest resources, with a mix of social and economic-political actors at a national level. Social actors involved in Norwegian forest management is Statskog SF, different ENGOs and the public, while political actors are different political parties, Statskog SF and the new landowners. I will analyse this further in chapter 4.

Cross-scale environmental governance approaches aim to decrease decision-making organised only by one or a few social or political actor groups, and increase the interest from a diversity of actors in order to strengthen the participation, transparency and representativeness within environmental governance. The actors involved includes - among others - local communities, ENGOs, national policies, and international agreements like the UNFCCC (the United Nations Framework Convention on Climate Change) with the intention that these actors will

contribute with different innovative mechanisms in order to govern environmental resources. Moreover, also this governance approach involves some challenges. Cross-scale governance includes uncertainties and disagreements across actors of how to tackle environmental issues. Some actors are determined to invest in future technology, while others stresses the need for lower level actors and their determination towards environmentally friendly choices (Lemos and Agrawal, 2006, in Nerhus, 2015).

2.3 Resource governance

Resource governance includes different actors and institutions, resource regimes, environmental resources and technology, as seen in Figure 1. Environmental resource governance is a mix of environmental socio-political concerns and economic concern, and reflects a general concern for society and our standard of living. Throughout history, the use of environmental resources and the institutional structure of them has gone through several changes, from the hunter-gatherer society with a reciprocal institutional structure, to the present western economic society with redistribution of environmental resources as the main structure. The latter society is partly defined by political processes as well as being regulated through institutional structures, as we can see in Norway today where political processes in the Parliament and institutional structures within and between actors make up the forest resource governance system (see chapter 4). Individuals have always created structures of laws and institutions in order to gain security and protection from the state. Institutional structures influences our preferences of, and which outcomes we get from, environmental resources, and they affect what we see as efficient. When actors tries to value environmental resources, it influences their preferences about which resources they can consume, which they want to modify, and which they need to preserve. Because of these challenges, the actors involved must find out what the physical consequence(s) or outcomes of an act regarding the institutional structure of a resource regime is. Further, the actors must find out if there is any rights or moral obligations involved, before valuing the outcomes of their act (Vatn, 2005, in Nerhus, 2015).

2.4 Analysing environmental governance: resource regimes

Resource regimes describes the institutions and institutional structures within environmental resource governance, and we must analyse these regimes in order to see the effect of human action on environmental resources. Resource regimes are built up by the *access to the resource*, and the *interaction rules* between those with access (see Table 1 below). The former involves property rights and responsibilities (ownership) of the resources, while the latter deals with the use and coordination of the resources and their products (Vatn, 2005, and Vatn, 2015, in Nerhus, 2015).

<i>Resource regimes</i>	Private property/ use rights	State/public property/ use rights
Trade	Applies when properties from Statskog SF are sold to private landowners.	The land consolidation sale of Statskog's properties applies here.
Command	Some of the "rights of way" applies here, f.ex if residing on a private property for more than one night, the landowner must agree.	
Community rules - cooperation, reciprocity	Some of the "rights of way" applies here, f.ex rules about residing 150m away from housing.	The "rights of way" applies here.

Table 1. Different types of resource regimes based on Vatn (2015).

2.4.1 Access to the resource

Access to a resource includes the rights to enter, manage, acquire, and sell or lease environmental resources and their products. The validity of these accesses depend on the *property regime*, whether it is (1) private property, (2) common property, (3) state/public

property, or an (4) open access property. Each of these types has their own institutional structures. Private and common property regimes contains private property rights, whether the ownership is individual or it includes a group of people. Within state/public property regimes, the rights to ownership is in the hands of the state or the public (like in democracies like Norway, where the public is in possession of the state forests' resources). At properties of open access, there are no defined rights. It might be difficult to make clear distinctions between the different property regimes, since they often have similar features, and we therefore consider them as extensive categories (Vatn, 2005, and Vatn, 2015, in Nerhus, 2015). As seen in Table 1 above, Norwegian forest properties and the access to their resources are mainly categorised within private and state or public property regimes. I will examine and analyse these features further in chapter 4.

2.4.2 Interaction rules

Individuals living in a society must often, during their daily lives, interact with other individuals of that society through communication, coordination, cooperation and even through competition. A majority of these interactions happens through different *interaction rules*. Interaction rules consists of trade-, command- and community rules, as well as the “no rule” interaction. The interaction rule of trading is voluntarily and often impersonal, and the interaction usually involves payment in exchange of a product. The actor's wealth as well as the price and quality in question, strengthens the actor's power before and during the interaction. This is the interaction rule currently finding place within the land consolidation sale of Statskog's properties, where private actors are trading money in exchange of forest properties. Command rules exists within hierarchical power systems, like within property rights structures where private landowners can execute power over their properties and those using it (the public). Community based interaction rules consists of norms and cooperation, and they exist within and between communities. They aim to strengthen the relationships between actors in these communities, as we can see with the “rights of way” within Norwegian forest management. Regarding the interaction rule of ‘no rule’, this simply means that people may do whatever they want to do without considering the consequences this may have for others, like in cases where conventions and rules about pollution does not exist. Interaction rules deals with the use and coordination of environmental resources, and includes (1) available technology and characteristics of the resource; (2) institutions; (3) actors and

their choices; (4) the interaction patterns of choices made by the actors (see Figure 1) (Vatn, 2005, and Vatn, 2015, in Nerhus, 2015).

If the (1) attributes or values of a resource and the available technology includes conflicts and coordination problems between the actors involved, there might be a need to regulate the access to the resource, because if there are any issues regarding the resource, the attributes of this resource will influence the outcomes. The (2) institutions deals with how the property regime(s) respond to the attributes/values and available technology regarding the resource, and the interlinkages between different property regimes if there is more than one involved. Regarding the third factor, the actors with their motivations and choices (3), are in possession of the central role in order to analyse the resource regime. The attributes/values and available technology of a resource (1) together with the institutional structures involved (2), influence the actors' choices. At last, the interaction patterns of actors and their choices (4), plays a crucial role within any interaction rule, since all potential conflicts and coordination problem is a consequence of this interaction.

If the actor does not welcome the outcome of an institutional structure, he can change the structure. This might involve a lot of time and capacity, and cause conflicts or coordination problems that did not exist in the first place, but he is nevertheless in his full right to change the structure. We can see examples of this within the current land consolidation sale, where new landowners choose to change the public access to hunt and fish on their newly purchased properties. I will analyse this further in chapter 4, together with the interaction patterns between the other actors involved.

2.5 Discourses of environmental governance and discourse analysis

A *discourse*, by the Oxford dictionary defined as “written or spoken communication or debate”, provides a shared meaning for those ‘speaking the same discourse’ (Oxford Dictionaries, 2016). In other words, a discourse can be viewed as a knowledge regime. When it comes to environmental resource governance, different discourses serve different narratives (stories) on how to communicate the cases of environmental and sustainable development.

Bäckstrand and Lövbrand (2006) highlights three main sub-discourses of global environmental governance: 1) ecological modernisation, 2) green governmentality, and 3) civic environmentalism. In the following, I examine these three discourses, of which all three

to some extent can be related to the Norwegian forest management case (see Table 2). In addition, I will close this chapter with examining the concept of Norwegian “good agronomy” and include this as a type of a discourse within Norwegian forest management. This will all be further analysed and linked to my problem objectives and research questions in chapter 4.

2.5.1 Ecological modernisation

Bäckstrand and Lövbrand argues that the discourse of ecological modernisation came into being in the western world in the 1980s with the Brundtland report “Our Common Future”. This discourse is classified as technocratic and economic neo-liberal, involving an engagement in economic growth, environmental protection, sustainable development and a liberal market order. In other words, unlike the radical green movement working towards total reconstructions of market and state structures, ecological modernisation is all about gradual regulations of these in terms of including green technology, innovation, trade and investments into the already existing markets within and between states. Thus, this discourse is a market-oriented approach to environmental governance, seeking to make capitalism and industrialisation more ‘green’, or environmentally friendly. If we view this discourse at a national level, it seems to suit the Norwegian state forest management, where both Statskog and politicians communicate the importance of sustainable development, both within economic growth and environmental protection (Bäckstrand and Lövbrand, 2006)

As with any discourse, or concept in general, ecological modernisation has its weaknesses. Proponents of this discourse may not always take into account necessary considerations of societal institutions. On the other hand, a strong ecological modernisation can, according to Bäckstrand and Lövbrand, arguably overlap with the common global dialogue on sustainable development, involving a reflexive analysis of institutions and democratic environmentalism.

2.5.2 Green governmentality

Green governmentality is, as the term implies, a governmentality with an increased environmental focus. Now, *governmentality*, is a term that in the 18th century were seen as covering the administration of human health, including the biology, criminology and medicine in question. Later, philosopher Michel Foucault, formulated the term as being related to the

“(...) multiplicity of rationalities, authorities and agencies that seek to shape the conduct of human behaviour (...)” (Bäckstrand and Lövbrand, 2006, p. 54). The recent industrialisation and global focus on the environment has given governmentality a new, ecological aspect, thus the term or discourse ‘green governmentality’. This discourse is also a discourse in favour of modern industrialised societies, like ecological modernisation. Green governmentality is a discourse with a serious notion on the increased environmentally focused politics that permeates all aspects of human societies. Governance is not just about governing human life and the material world in which we live, it is also a matter of governing and to some extent controlling our relationship with nature.

The critical aspects of this discourse involves the notion that it might seem to disregard other understandings of nature than those defined by state controls. Through the weak version of the discourse, nature is understood as a subject of state management and protection. On the other hand, a strong green governmentality involves democratic participation with individual and societal approaches of self-reflection (Bäckstrand and Lövbrand, 2006)

2.5.3 Civic environmentalism

The last sub-discourse highlighted by Bäckstrand and Lövbrand, civic environmentalism, is seen as emerging from the Rio Conference in 1992. This discourse holds a storyline of democratic efficiency and civil participation, including all actors in a society to have a voice on environmental issues, and opportunities to use it. Hence, this is a “bottom-up” approach to environmental governance, as Bäckstrand and Lövbrand puts it, and one that has been increasing in both academic debates as well as in policy-making since the Rio Conference in 1992. It has emerged even more from the World Summit on Sustainable Development in Johannesburg in 2002 and onwards, where the so-called “multi-stakeholdership” sprung as a trial of a collaborative environmental problem solving.

A critical aspect of this discourse is the divided views it holds on the sovereign state and the capitalist economy, and the roles of these. While a reform-oriented view of the discourse highlights civil participation and the effect it has on an increased link between global and local environmental issues, a more radical view of the discourse stresses the power-powerless relations at ground within international environmental negotiations and how an enduring neo-liberal power structure like the UN only helps increasing the environmental crisis. On the

other hand, this divergence creates a pragmatic discourse of civic environmentalism, being sceptical to the “top-down” approach - from states to local communities - of green governmentality and the win-win rhetoric of ecological modernisation (Bäckstrand and Lövbrand, 2006).

Overall, these three sub-discourses are competing and conflicting in their differences, but also integrated as instruments to environmental policies and united in actual politics. An example of this is how ecological modernisation and green governmentality together dominates the policy-making of international environmental policies. Furthermore, civic environmentalism serve as a complement to this in its critical views on international environmental policies, which to some extent have gained attention at the negotiation table and helped making ground for projects at local levels (Bäckstrand and Lövbrand, 2006).

	Ecological modernisation	Green governmentality	Civic environmentalism
Key function	Legitimising	Operational	Critical
Framing of sustainable Norwegian forest management	View sustainable management in terms of economic cost-effective development, and a management that benefits future generations with labour opportunities within green innovation.	View sustainable management in terms of both economic and environmental values.	View sustainable management in terms of biodiversity.
Key narratives	<ul style="list-style-type: none"> • Cost-effectiveness • Market-flexibility • Maximised synergies 	<ul style="list-style-type: none"> • Scientific precision • Standardisation 	<ul style="list-style-type: none"> • North-South equity • Local participation
Degree of discourse	High	High	Low
Institutionalism	Historical	Empirical	Societal
Main discursive actors	<ul style="list-style-type: none"> • Statskog SF • The Conservative Party • The Centre Party 	<ul style="list-style-type: none"> • Statskog SF • The Centre Party • NIBIO 	<ul style="list-style-type: none"> • DNT • NJFF • Friends of the Earth Norway

Table 2. Discourses of environmental governance, based on Bäckstrand and Lövbrand (2006)

2.5.4 Discourse analysis (and narrative review)

Discourses are often institutionalised in policies and politics, and analysing different political discourses may therefore serve as a useful instrument in order to look at the power-knowledge relations involved in the dominant narratives of resource management, including the

interactions, overlaps and conflicts between the different discourses. For that matter, (E)NGOs and policy papers among others, may serve as entrances to the different discursive landscapes they behold (Bäckstrand and Lövbrand, 2006). Bryman (2008) defines discourse analysis as “[a]n approach to the analysis of talk and other forms of discourse that emphasizes the ways in which versions of reality are accomplished through language” (Bryman, 2008, p. 693).

Discourse analysis applies to different types of texts, as well as to talked language, like research interviews. Discourse analysis is complex and comes in different versions. The version Bryman highlights, is a version that is anti-realist and constructionist; where language is not only an instrument of understanding the social world, but also seen as producing this world. It is anti-realist because it simply denies that there is a reality outside of the discourse(s) investigated, and constructionist because the discourse in question constructs or produces its own reality – and it is this reality that is investigated by the researcher. This version builds on the work of philosopher Michel Foucault, an important academic voice for the theory and use of discourse analysis, who viewed discourse not only as a type of language but as a framework and constitution for our understanding of the social world itself. In other words, a discourse is more than a narrative or a story told by a society of how they view the social world that they live in. It is much more than that; it is an internalised reality of those beholding it. Thus, when put down on paper or used in oral talk, people try to accomplish something with their discourse; they want others to view the social world the same way as themselves. This might be an unconscious or conscious strategy, however analysing discourses within this version means to look into the effect that these strategies have. This version of discourse analysis is action-oriented and the researcher can use it by asking what the discourse is doing, how it is constructed to make this happen, and what resources are available to make it happen (Potter, 2004, in Bryman, 2008).

I will look further into the different political discourses involved in the Norwegian forest management in chapter 4, and try to analyse it through discourse analysis as described here, as well as with narrative review. The researcher can use narrative review in order to further analyse certain discourses. While discourse analysis is a systematic and structured method for the researcher to analysis specific discourses, narrative review is a less systematic and focused, and more uncertain, method of understanding something in the social world. Thus, narrative review is also a contrast to a systematic review of literature, where the researcher seek to give an unbiased presentation of the literature. In this sense, systematic review lies

closer to the method of discourse analysis, but neither these are the same, as discourse analysis is more complex than reviewing specific literature (as we have seen above). Narrative review is simply about reviewing and presenting the literature as it is told, in order to enhance the understanding of it rather than seek to add new knowledge. Narrative review is about reviewing the narratives as they are told, in order to understand the theme(s) that is investigated. The challenge but also interesting part of narrative review is that the researcher cannot know beforehand what the review will lead to of discovery. However, also narrative reviews seek in the end to arrive at a critical analysis of the literature (Bryman, 2008).

Rhodes and Brown (2005, in Bryman, 2008) outlines certain principles that they found within a case study of narrative review (where they reviewed literature on narrative analysis within business and management organisations), that can also describe what narratives themselves consists of, I will argue. Narratives create culture and power structure (communication); they create identity (identification); they help people learn and make sense of events and changes (learning and making sense); and they give control (politics and power).

2.6 Norwegian 'good agronomy'

Since 1900, the amount of inhabitants living in rural areas and working within agriculture in Norway has rapidly decreased, because of economic and structural changes. Following this, perceptions of the Norwegian agricultural and environmental sectors has also changed. While the earlier focus of agriculture were on its traditional products, the later focus has been on biodiversity, smaller niches and thus more diverse production processes. This is mirrored in the farmers' decreasing incomes from traditional private goods products, while a more modern income base are highly a political matter, defined through political decisions and economic frameworks such as subsidies and conservation plans. Following these changes, an increased public ambition for land management has evolved, and are still evolving. In addition, the cooperation between the farmer or the landowner and the public continues to be important, as the landowner seek to secure his or her livelihood and income, and the public seek to secure the public goods of their interest (Vedeld, Krogh and Vatn, 2003). This cooperation is one of the core issues within the current sale process of Statskog's properties, where the public needs to build new relations with the new landowners.

Common cultural features typical for Norwegian agriculture can be classified as a concept of “good agronomy” (in Norwegian called “sunt bondevett”). This concept is part of the Norwegian public management culture of both the agricultural and environmental sectors. The concept consists, according to Vedeld, Krogh and Vatn (2003), of the *social construction of good agronomy* and the *public mode of production – the responsible life mode*. This concept can also be seen as a discourse, adding a fourth sub-discourse of environmental governance approach towards Norwegian forest management. I will look more into this in the analysis in chapter 4.

2.6.1 The social construction of good agronomy

Agronomy is constructed of both social norms and values as well as of agricultural competence and skills among farmers. These social values and practical skills are more often than not, internalised through generations. Furthermore, a strong family ideology is often foundational within Norwegian (good) agronomy with the meaning that there is a shame to sell the family farm to someone outside the family. Within the concept of good agronomy, the farmer is seen as a specialist in producing agricultural products and need therefore to prove that he/she is qualified to manage his/her farm and property. Every farm needs both technical and physical management skills, including the social, economic, cultural, political and legal aspects of it. This includes values of independence, propriarityship, proficiency, management responsibility and production orientation, and together these features forms an experience-based competence (Vedeld, Krogh and Vatn, 2003).

2.6.2 The public mode of production – the responsible life mode

The social construction of good agronomy are often classified as a “self-employed life mode” characterised by small production units where the farmers must face both private and public markets and to a large degree are responsible for generating their own income. Although, the other aspect characterising good agronomy is namely that of “the responsible life mode – a public mode of production”, involving farmers as public employees.

This aspect, or life mode, is characterised by the publics’ recreational relation to the environment and a focus on production of public goods that satisfies their recreational interests. Furthermore, this life mode seek to produce - or rather secure – production of public

goods for the sake of society's common good, and social values on behalf of the public. It also seek to moderate certain mechanisms when needed in relation to the variations of international markets. To finance this public mode of production, among other various instruments, the state is involved in different types of enterprises – as the case is with Statskog SF (where “SF” in Norwegian is short for “state enterprise”). Through this mode of production and state-involved mechanism, the country's inhabitants together serve as the owners of the common goods. Certain elected politicians at both national and regional/local levels are elected specifically to protect the inhabitants' interests. Following this, the producers of the common goods are expected to implement the decisions made by these elected politicians.

“Obviously a society has an obligation towards management for the common good, but it matters also how the state treats all its citizens” (Vedeld, Krogh and Vatn, 2003, p. 27).

Norwegian resource management is built up by a strong relationship between culture and governance. Rational actions within resource management is not reduced by any aspects of culture, in fact Norwegian culture and tradition is rather perceived as the context in which meanings of values and action arises. In addition, the humans' relation to their environment are regarded as a crucial background for the social construction of meaning within Norwegian good agronomy. The concept of good agronomy combines practical farming skills and cultural aspects of the public life mode of production. With that said, producers within the public life mode may be sceptical of private actors in the field. Moreover, as the state has a right to control their inhabitants' resource use, understandings of and for good agronomy where the features of public and private production seek to integrate, might therefore slowly disappear amongst political decision-makers. This will be further analysed in chapter 4.

3. Methodology

For social science research, the researcher can choose either a quantitative or a qualitative research approach, or a combination of both by using mixed methods. The approaches are useful for different purposes. While quantitative research for the most part deal with and emphasizes its concerns through numbers to test correlations and relations within the topic of its studies, qualitative research are more concerned with words and ideas. More specifically, it contains epistemological and ontological research strategies. It is epistemological because it seeks to understand the social world(s) through the subjective explanations of the informants involved in the study, and it is ontological because this is described as results or outcomes of the continuously integrated interaction between actors. The purpose of qualitative research is primarily to give a deeper knowledge of a specific phenomenon, often a phenomenon that is perceived differently from different actors. To gain this knowledge, the researcher needs an appropriate and satisfying sampling from a case study. Since this was my main ambition for my research, I chose to use a qualitative research approach. Thus, my research is a result of methods such as purposive sampling, narrative literature review, discourse analysis and semi-structured interviews. This serves as suitable tools to find satisfying answers to all my objectives (Bryman, 2008).

3.1 Sampling and description of study area

Sampling in qualitative research often consists of what is called *purposive sampling*, which is a sampling approach where the researcher selects units of informants (people, organisations, documents and the like, as I have done) purposively. This means that those who are selected have a direct reference to the research questions. For my research, I chose this method of sampling because a research of the specific case I have looked into, the ‘Statskog case’, would not provide a satisfying analysis had I not spoken to the decision-makers and other relevant organisations with specific interests in the property purchase and land consolidation sale (Bryman, 2008).

Twice a year from 2011 until 2017 (2020), 10-15 properties are put out for sale. Since this is a qualitative study, I chose to sample and conduct research from a few of these properties instead of collecting data from a wide range of them. More specifically, I sampled and

conducted research from three properties sold to two people and a municipality. I have been in dialogue with Statskog throughout the research and they have assisted me with information on how to look up the new owners. All names are anonymised and Statskog themselves could and did not provide me with names or other personal contact details on these. What they could provide though, and which is also published through Kartverket, was the number and the name of the properties. Then, I could look these up through Kartverket's official web database where all the properties in Norway are published, find the names of the new owners, look up their contact details and thus get in touch with them (Kartverket, 2016).

When it comes to sampling of informants, my aim was to seek information from different actors involved in, or with interests in, my study. I did not decide on a number of informants beforehand, since the number itself was not of specific importance besides conducting information from as many different actors involved in the case as possible, in order to make a satisfying impartial analysis. I aimed towards a broad perspective on the theme of my problem statement, and not just a lot of 'voices' from actors sharing the same view. My ambition is to present the views of actors like Statskog themselves; non-governmental/interest organisations; the different political parties that took part in the decision of the processes in 2010; and a few of the new landowners of the properties for my case studies.

3.1.1 Criteria investigated in case studies

These are criteria investigated in order to analyse the consequences of the sale:

- if there is any hunting or fishing opportunities on the property;
- if there is/was a conflict between actors before or during the sale process;
- if the properties are crown lands; and
- if the size of the property have provided any coordination problems cf. property rights structure and interaction between actors.

<i>Properties</i>	Hunting/fishing opportunities	Conflict	Crown lands	Coordination problems
Private actor	Yes	Some	No	Some
Private actor	Yes	Some	No	Some
Municipality	Yes	No	No	No

Table 3. Ownership and criteria for the case studies.

3.2 Triangulation

The specific phenomena I wanted to gain a deeper understanding of through my research constitutes a social phenomenon with particular interpretations and perspectives. To gain increased understanding of this, I therefore decided to use *triangulation*. Triangulation describes research conducted by using more than one method. In doing so, the researcher can compare results from different types of data collection, thus validate and verify the information. To gain a broad social understanding on the consequences of the property sales and the different perceptions on sustainable forest management by the actors I have looked into, I found it sensible to use a combination of semi-structured interviews and narrative review based on discourse analysis. The challenge with triangulation, and with my study, is the biased representation it gives of specific actors’ perceptions and the limits of replicating the study for further validation (Larsen, 2007, in Bakke, 2015; Bryman, 2008).

This brings us to the terms of validity, generalisation, reliability and representability, which are also worth mentioning here. *Validity* and *reliability* are well-known features within quantitative research, while the importance of these within qualitative research have been questioned but also argued for. Validity is an instrument looking for “(...) *whether you are observing, identifying, (...) what you say you are*” (Mason 1996, p. 24, in Bryman, 2008, p. 376), thus has to do with the integrity of the research. Further, LeCompte and Goetz (in Bryman, 2008) divides validity into internal and external terms. Internal validity has to do with the relation between the researcher’s observations of a study and the theories emerging from these, while external validity has to do with the degree of *generalisation* that the study might have across different social settings. For my study, this has to do with social and public reactions towards structural changes of well-established institutions, and how these changes are welcomed into society. Hence, this study might teach us something about public interests in general and might apply to other areas of institutional change where the division and relation between private and public rights occur. LeCompte and Goetz also divides reliability into similar internal and external terms. Reliability refers to how stable a study’s measurement(s) is and to what degree the sampling affects the result(s). Internal reliability appears in studies with more than one researcher, and has to do with whether they all agree about their findings. External reliability on the other hand, refers to the available degree of replicating a study, and are thus a challenge within qualitative studies. Nevertheless, it is possible to gain some extent of replication within ethnographic research, if the researcher adopts a similar role to that of the original researcher in order to find a comparison between the studies. *Representability* refers to whether the sample is representative of the population or society of the study (Bryman, 2008). I will argue that my study is valid and representative, and to some extent generalizable. When it comes to reliability, it is difficult to satisfy the criteria; I am not in a research team with other researchers, nor am I doing an ethnographic research. Regarding the samplings, these undoubtedly have an effect on the results as I have chosen purposive sampling for my study. Although, the results might have turned out different had I spoken with other new landowners, but I will still argue that my findings provide a general understanding of the responses and relations involved in the processes I have looked into.

3.2.1 Semi-structured interviews

I chose to interview my informants using semi-structured interviews because it seemed to be the best fit for my study. A semi-structured interview is a type of an interview where the interviewer has partially structured the interview beforehand with an interview guide containing questions or topics to discuss, but where the questions not necessarily needs to be discussed in a specific order and where there is also room for improvised follow-up questions. Semi-structured interviews differ from structured interviews, which usually apply to quantitative research and take form as formal questionnaires. It also differ from unstructured interviews where there is no interview guide or pre-made questions but rather functions as an informal conversation discussing one or more specific topic(s). Furthermore, the researcher can choose between doing the interviews face-to-face or by telephone, and between using a recorder and transcribe the interviews or by taking notes using pen and paper (Bryman, 2008). For my study, I wanted to do the interviews face-to-face. My ambition were to do as many as possible this way, and I managed to do almost all of them face-to-face. A few interviews had to be done by telephone because of the informants' time limit. However, I got satisfying answers to my research questions also by doing interviews by telephone. I took notes by using pen and paper, as I find this method more natural and less intimidating for both myself and especially for the sake of the informants.

3.2.2 Narrative review

Narrative reviews is focusing on presenting different interpretations on specific subjects in order to enhance the reader's understanding of these. This type of literature review is more uncertain than the systematic one whose purpose is a replicable study of the literature involved, because the researcher does not know what he or she will discover through the reviews before investigating the literature further. I have used a narrative review approach by looking through documents, articles and organisational web sites produced by the actors involved in my study, as an instrument to further be able to analyse their discursive approaches and views. Discourse analysis involves looking at narratives and reviewing these, however there is significant differences between narrative reviews and discourse analysis. Narrative reviews contains reviewing and take into account the narratives that the actors themselves implement as part of their worldview, and for the researcher to present an unbiased approach of these. Discourse analysis, on the other hand, goes more in depth of

these narratives and analyses them in relation to the theories presented in the study and sometimes also with the researcher's own views (Bryman, 2008).

3.3 Limitations, challenges and ethical considerations

There are, I will argue, undoubtedly some positive sides of doing fieldwork in my own country. Besides making efficient appointments for interviews within both short time and mostly short distance, I have also been less prone to culture and language barriers as opposed to doing field work in another country. This may have saved me some time and worries. However, within any research, including mine, issues occur. While quantitative research often have been criticized by qualitative researchers for investigating the social and the natural world by the same measurements and thus creating a static view of the social world, qualitative research have also been criticized by quantitative proponents. Qualitative studies are criticised for being too subjective, unsystematic and difficult to replicate and generalise into other settings. Qualitative research is an intense and often chaotic process on several levels, since the units are few but the variables are many. Therefore, it is important that all actors involved are ethical and theoretical justified (Bryman, 2008).

3.3.1 Limitations and challenges

One of the challenges with my study contains representing a satisfying and more-or-less balanced analysis of the subjective discourses from the actors involved, by using different methods. Social changes are complex, and so is any attempt at theoretically analysing them. There is no obvious link between the theory I have used, the data I have collected, and the reality perceived by society in general. Instead, I have tried my best to present the different discourses and interaction of the actors involved as unbiased as possible, in order to give a satisfying analysis of the topic. No research are entirely objective, as all researchers are in possession of both conscious and unconscious interpretations of their own worldview (Bakke, 2015; Berg and Lune, 2012; Stake, 2000)

Another limitation of my study is time. The property sale itself does not close until 2020. This means that I will not be able to give an analysis of the overall outcome and the perceptions of the topic subsequently. The study might have given a more interesting analysis of perceived

consequences of the sale a few years after the case is closed, when all outcomes are available and actors' perceptions might have changed. Although, one can still learn much about the topic from what is already done and by looking into a few cases like I have done.

3.3.2 Ethical considerations

In order not to risk the privacy of my informants, I have chosen not to publish their names or positions but only the party or organisation they represent. My ambition is to present the views and perceptions of the agencies/actors and not the individuals involved. Obviously, the informants might have biased personal perceptions of the case, although this is not for me to purposively publish. When it comes to the specific properties I have looked into, with the exception of where a municipality is the new owner, I have not published the area nor the name of these properties. Even if this can be found through an online database, I chose to not make this process easier for the reader, as the specific properties of my case study serve only as examples for my research. When it comes to municipalities as new landowners, I do not see the same necessity to anonymise the name of the purchaser – simply because these are not private names but official sub-national actors, and because their purchases as well as their management plans is published in newspapers and online reports and thus easy to look up.

4. Findings and discussion

Forestry and forest management takes time, and in order to manage the resources for both present and future generations, it needs to be done with a sustainable approach. Those working within the forest field does not only need to figure out the best growing conditions and economic strategies for their forests, they also need to take environmental concerns into account (Statskog, 2015, in Nerhus, 2015).

The rise of environmentalism started, as we have seen, to gain attention from the late 1950s and throughout the 1960s – which happens to be approximately 100 years after the industrial revolution and *the great transformation* (“det store hamskiftet”) entered Norway. Around 1850 and onwards, Norwegian agriculture, alongside other industries, became more mechanised and thus the production rate increased. Fabrics such as the paper fabric of Borregaard were established, and Norway began exporting mechanic wood, to mention some. In addition, there were also a great population growth during the 19th century; through the last 50 years of the century people started to organise themselves in different labour and profession-related organisations, and some of the today’s largest political parties (The Labour Party and The Conservative Party) were established during this time. Hence, some great changes occurred during the 19th century, not the least within agricultural activities. ‘The great transformation’ meant large changes in both the culture and the economy of agriculture. These transformations, both within agriculture and within other societal and economic changes, had an effect on the climate also in Norway (Store Norske Leksikon, 2015; University of Oslo, 2016). Scholars have argued that climate changes started to occur not long after the industrial revolution due to the expansion in mechanics, population and global trade. This has expanded even faster from the middle of the 20th century and onwards, and we can see an increased environmental movement from around the same time. Thus, people have been concerned about the environment for as long as different actors have acted on behalf of it. This chapter presents my findings about the case of my research, together with an analysis of these findings in relation to the theory I have used and to my problem formulations. I have divided the analysis in three sub-chapters organised by the three research objectives. My first research objective relates largely to the theories about institutions and environmental governance, while the second and third objective relates more to the different discourses of environmental governance including Norwegian ‘good agronomy’.

4.1 The historical evolution of Norwegian forest resource governance approaches with an emphasis on changes in institutional structure(s) and interplay between actors.

4.1.1 Historical stages in Norwegian forest management

Several actors have functioned as managers of Norwegian forest resources ever since the beginning of forest management, and excluded the early times (up until the 18th century) we can divide the management into four historical stages. Even during the Middle Age, some people were worried about forest reduction due to the amounts of timber that were used in the mining industry, in addition to the forests that were burnt down for pasture and agriculture production. There have been several attempts of regulating the Norwegian forests since the 16th and 17th century, especially from the emergence of the *water saw*, as we have seen (Berntsen, 2011, and Fageraas, 2009, in Nerhus, 2015). However, although these early times marks an important stage within Norwegian forest management, I need to limit my analysis and have therefore chosen to focus on the management from the 18th century and until today.

My division of the management into four stages covers (1) the German period (1739-1860), (2) the Statens Skovvæsen period (1860-1957), (3) the DSS period (1957-1993), and (4) the Statskog SF period (1993 – today). The German stage begins with the establishment of the *generalforstamt* in 1739 as the first public forestry organ, and covers the German period of Norwegian forest management, until the establishment of *Statens Skovvæsen* and the first Norwegian foresters around 1860. The second stage with Statens Skovvæsen thus covers the beginning of the first Norwegian foresters, the decentralisation and the forest management for the next hundred years. The DSS stage starts with the establishment of the DSS in 1957 and covers the beginning of the neoliberal management, as we know it today, while the Statskog stage covers the last few decades from the establishment of Statskog SF as a state enterprise, and their management of the Norwegian state forests until today, including the land consolidation sale.

Before the establishment of the *generalforstamt* with German forest managers in 1739, Norway did not have an organised public forest management system, nor did we have any academic education system within the field (Berntsen, 2011, and Fageraas, 2009, in Nerhus, 2015). The public disliked this new, German management because they introduced regulations that contradicted with the public's procedure of cutting wood in their own way, free of regulations (Berntsen, 2011, in Nerhus, 2015). On the other hand, though, the Germans

might have had other interests involved in the agreement. Germany was involved in the mining industry at the time, and thus involvement in the Norwegian forest management could probably help with providing proper timber for their own industries as well. However, even if the German management were unwelcomed by the public, the first stage of Norwegian state forest management would not have occurred or existed the way it did, at this time in history, if the Germans had not agreed to help develop a forest administration with their academic knowledge and competence. Hence, the state management of Norwegian forests could have taken much longer to establish if the Germans did not get involved. However, the first few attempts at establishing a forest management in form of a *generalforstamt* based on German ideas did not succeed either, which means that the management system that came into being with *Statens Skovvæsen* in 1860 could still have occurred at that time or even sooner, if an academic education were established earlier. It does not seem like the Germans did a poor job with trying to establish a forest management system, but rather that their ideas or simply the fact that they came from another country with other ideas of forest management was not welcomed for the Norwegian public and their traditions of ‘good agronomy’ and how to manage the forest resources.

Nevertheless, after approximately 120 years of failed attempts at establishing a permanent state management system, a few Norwegian practitioners within the field were sent to Germany to take the education needed. Then, in 1858 there was a new attempt at establishing a permanent state management system, which in 1860 led to the formalisation of *Statens Skovvæsen* as the beginning of modern Norwegian state forest management - because for the first time in the history of trying to establish a permanent forest management in Norway, the foresters themselves were Norwegian. In addition, the forest laws were founded not long after, and the management was divided into regions and thus decentralised (Berntsen, 2011, and Fagerass, 2009, in Nerhus, 2015). All these features were introduced in order to establish a sustainable and efficient management of the forests, and they still seem to be valid features within Norwegian state forest management since the management today is still decentralised and controlled by Norwegians. Hence, these aspects of Norwegian forest management have existed for approximately 150 years and they seem to be more welcomed by the public than the German management were. This is also the focus of some of the political parties and environmental organisations involved in my study, which I will come back to in the next part of this chapter.

Later, Statens Skovvæsen turned into a directorate, and during this time, the forest management was analysed by a commission who concluded with a solution of a less bureaucratic management of the state forests. The old directorate continued to control private forest properties, while the establishment of the DSS in 1957 would regulate the state forests. From now, the DSS would control both the management and the property rights of Norwegian state forests, as well as regulate and facilitate public access to forest resources. The same year, the outdoor law was founded, and a formalisation of the “rights of way” was eventually established (Reusch, 2012, Fageraas, 2009, and Sevatdal, 1989, in Nerhus, 2015). Thus, 1957 marks the beginning of formal public access to forest resources, and is an important year in the history of public property rights structure; a structure and an institution that some now might see as being under attack.

The fourth and last historic stage of Norwegian forest management started with the establishment of Statskog SF in 1993, the first management system built on an enterprise model. Statskog have continued the sustainable approach towards the publics’ opportunities for outdoor recreation activities, building on the forest- and outdoor laws as well as the decentralisation of the management. In addition, Statskog have since their establishment implemented new collaborations and agreements with several other actors. They must, as landowners, be aware of the different environmental concerns regarding their properties, and look into how they best can contribute to and sustain the outdoor activities emanating from the forests. Statskog view these aspects as important for their management (Statskog, 2015, in Nerhus, 2015), and in order to gain a more environmentally friendly and sustainable forest management, they have decided to work together with actors such as DNT and NJFF. Thus, this apparent success seem to be both a matter of Statskog’s management since 1993 and a combined outcome due to all the different actors that have been involved in the management of Norwegian forests throughout history.

Hunting and fishing have been part of human life since long before laws, regulations and norms about these activities occurred. The last two historic stages of Norwegian forest management with the outdoor law and Statskog SF have therefore continued already existing activities, however in terms that are more formal by implementing them into an institutional structure of environmental governance within a community based interaction rule.

Furthermore, I will argue that Norwegian forest management seems to follow the decentralised governance approach in combination with the cross-scale approach. As we have seen, successes of a decentralised environmental governance shows in the outcome of a

positive and effective cooperation between actors and their approach towards and treatment of the environment, which it seems like Statskog has succeeded with during the last and current historic stage of Norwegian forest management. Moreover, the management does not consist of decision-makers across international levels, however it includes actors across social and political levels and thus I will argue that it applies to the cross-scale environmental governance approach. Norwegian decision-making within forest management is organised by several actors including local communities and ENGOS in addition to the state and national policies. The outdoor law of 1957 is a result of this, together with how all these actors have contributed and facilitated for the public's opportunities to use the forests for recreational activities (Lemos and Agrawal, 2006, in Nerhus, 2015).

4.1.2 Key actors, resources, institutions, organisational and policy changes in Norwegian forest resource governance

During the historic stages outlined above, we have seen some major changes within the organisation and policies within Norwegian forest management. From the failed management of Germans who was interested in timber for their own mining industry, through the implementation of Norwegian foresters and a permanent state forest management system, and from a bureaucratic directorate to a state enterprise including all the different rules and conventions this has involved. Along the way, the resource management have changed from being under centralised control to a decentralised management, and the implementation of the outdoor law has formalised the public right to access the resources. It can look like the public's voice have been strong during these years, since the German management came to a decline and the public access increased again afterwards. Under the management of Statskog it seems like the public access to the forest resources have increased even further, because of their collaboration with different ENGOS that wants to participate with and facilitate for recreational activities together with Statskog.

We can use Vatn's resource governance model (see Figure 1, chapter 2) to view and analyse Norwegian forest resources and how it is managed. The four factors of attributes and technology of the resources, institutions, actors and their choices, and the interaction between actors, are applicable to Norwegian forest management, as seen below (Vatn, 2015). It is hard to analyse each of the factors exclusively by themselves because of their interlinkages, and I will therefore try to analyse them as the complex governance system they build up together.

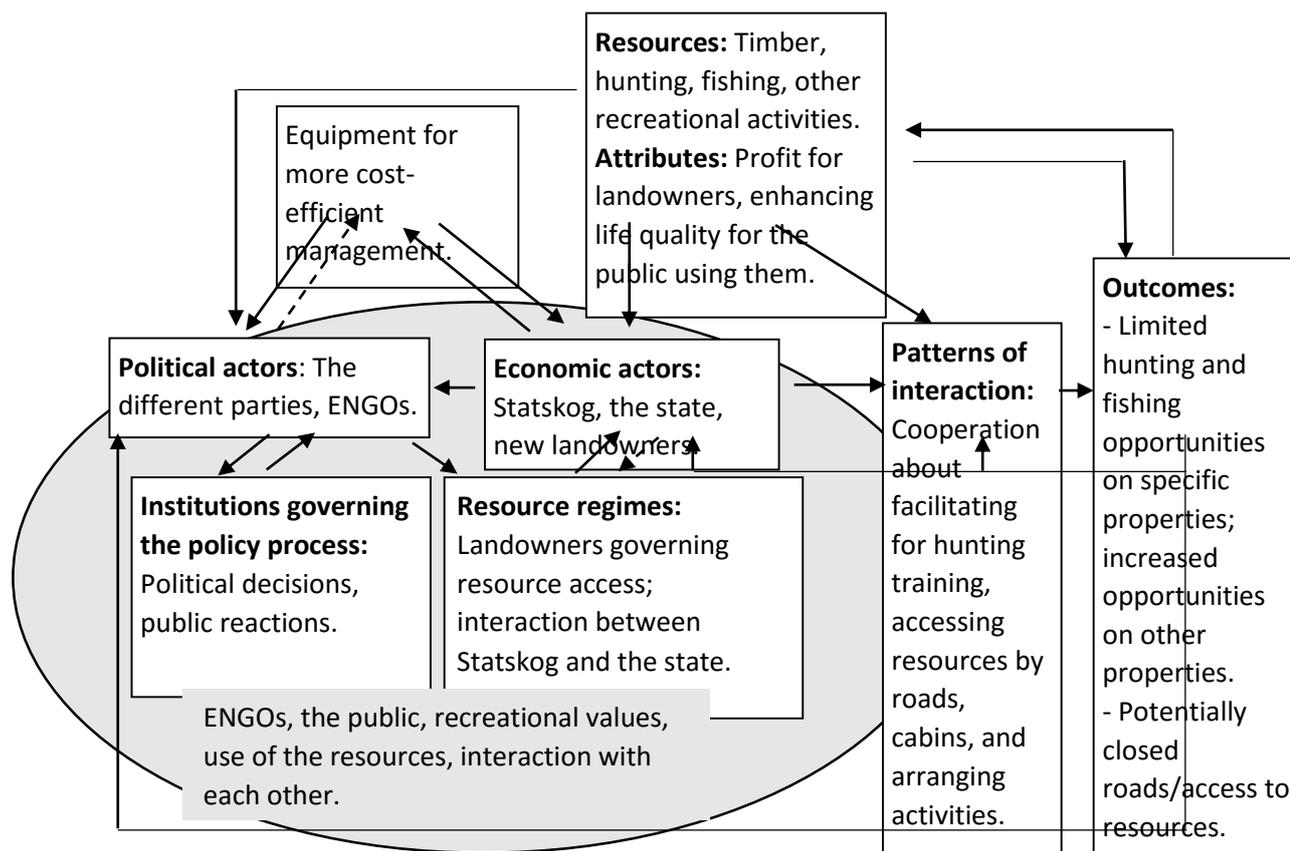


Figure 2. Norwegian forest resource governance model, based on Vatn (2015).

The key actors in Norwegian forest management throughout the historic stages of it has been the Germans and the generalforstamts; the Norwegian public who protested against a German management, leading to Norwegian practitioners; the state, *Statens Skovvæsen*, directorate(s) and Statskog SF; political parties and environmental organisations; and private landowners. All these actors have played different parts within their institutions and institutional structures. The state management systems, both the unsuccessful (the generalforstamts) and the more successful ones have operated through rules and conventions, while the public protests against the German management was probably based on Norwegian norms of the publics' relations with the forests or the environment around them. The latter state management systems might probably also have acted through such norms, hence their success and continuation until today (in contrast to the German generalforstamts). I will argue that it looks like the situation with the Norwegian practitioners that were sent to Germany to take the education needed to establish a permanent Norwegian management system, was a consequence of the public protests against the German management. Thus, this shows how institutions work, and how strong the reciprocal relationship between institutions and

individuals/societies are. Here we can also see the different institutionalisms play out. Historic decisions about forest management have been important for changing the governance structure later and for taking into account the public use of the forest; and empirical and societal institutionalisms plays out within the decision-making of Norwegian forest management and in the relationship between the state and the society/public.

The forest resources involved have mainly been timber and other NTFP, hunting and fishing and other recreational activities, as well as pasture for animals and cropland. The attributes and available technology of these resources are of high quality; the timber itself and the cost-efficient technology to manage it, as well as the recreational qualities the forests holds including hunting and fishing opportunities. All these attributes makes it necessary to regulate the access of the resources in order to reduce conflictual situations. Therefore, there are several regulations and rules concerning timber production, and hunting and fishing requires quota decisions and licenses. A possible conflictual situation or coordination problem could have been a decline by Statskog SF as an economic-political actor, of the civil actors' interests to use the forest resources for recreational activities (like hunting and fishing) as they do today. Economic or political actors like these can choose not to cooperate with ENGOs and local communities, even if the actors are representatives of the state and its inhabitants (Lemos and Agrawal, 2006, in Nerhus, 2015). Luckily, for the public and their interests, the Norwegian state forest management have traditionally included facilitation for public interests as one of their focuses. The change in property rights structure that are currently taking place during the land consolidation sale, might therefore lead to concerns and uncertainties. The property rights structure changes from being state/public property to private property, as seen in Figure 2 (chapter 2), and interaction rules of trade, command and community are involved in the process. The land consolidation sale itself contains the interaction rule of trading. Nevertheless, outfield properties are part of the "rights of way" no matter if the property is private or state owned, thus the publics' user rights of the resources (excluding hunting and fishing) will not change. In addition, community based interaction rule still seem to apply in communities affected by the sale, with the interaction and cooperation between the public becoming even stronger. Although, even if the public right to use the resources are decided upon by law, the structural change from public to private properties might affect other parts of accessing the forest resources. Because the new landowners are now in control to execute power within the interaction rule of command, they can choose not to let people reside there or they can shut down roads. Hence, there is not a direct threat of the land consolidation sale

towards the public right to access forest resources, but there is structural and institutional changes involved that might potentially lead to a decrease of the access, as we know it today.

We have now looked into the historical aspects of Norwegian forest management, governance of forest resources and the organisational changes of these that takes place during the land consolidation sale. In the following part, I will examine the political aspects of the purchase and land consolidation sale processes and analyse the different parties' viewpoints on these.

4.2 The political motives and processes behind the Borregaard purchase and Statskog's land consolidation sale

4.2.1 Why did the political system demand a land consolidation sale of Statskog's properties?

An important aspect of my research was to find out why the political system demanded a land consolidation sale of Statskog's properties. I thought of this as one of the core issues of my thesis, and expected interesting findings in order to analyse this research question. However, I found a short and concrete answer to this quite early in my research, namely that the land consolidation sale had a clear link to Statskog's purchase of the Borregaard properties, and probably would not have taken place if Statskog had not purchased these properties. A land consolidation sale, or an *efficiency sale* as Statskog themselves calls it (according to Statskog) is characterised as an extended property sale that leads to more efficient forest property management and that includes scattered forest properties. Statskog applied for a state loan in order to be able to purchase the Borregaard properties, and the government approved of fulfilling the loan on the condition that Statskog investigated their current properties in order to implement a land consolidation sale. This seemed not to be problematic for Statskog. The land consolidation sale follows their own objective of supplementing property acquisitions with divestments of their properties (as outlined in chapter 1), and my informants from Statskog argues that selling scattered forest properties will help them towards a more efficient and sustainable forest management. A majority of the political system (the former government) asked for a land consolidation sale, and both my political informants stated that "the land consolidation sale is partly to pay back the state loan" as well as enhancing the efficiency and sustainability within forest management. Of course, the decision to supplement property acquisitions with divestments is a political decision. Political decision-making can change the view on and regulate how much state forests a state should own, and in Norway

today, the state owns 12% (Statskog, 2016). My political informants did not seem to disagree much about these numbers, and the former government justified the land consolidation sale on the grounds that this would contribute to maintain the same amount of state-owned properties after Statskog's purchase of the Borregaard properties. Hence, the purchase itself caused the political debate in the first place (Innst. 345 S; Prop. 11 S; Sak nr. 3 (2010-2011)). I will in the following examine this purchase and analyse the political motives and processes behind both this and the following land consolidation sale.

4.2.2 The timeline and key political motivations behind the processes; economic, rights issues, environmental conservation, and outdoor recreation interests

The Borregaard purchase process started in February 2010 when Orkla ASA released their plans of selling the Borregaard forest properties, and in a press release in October the same year, they stated that Statskog SF would purchase the properties (Orkla, 2010). Thus, this whole process took place within eight months during the year of 2010.

However, when it comes to the timeline of the land consolidation sale, it is worth mentioning that representatives from The Progress Party already in 2002 came with a suggestion in the Parliament about selling part of the Statskog Enterprise. The suggestion implied their wish to enhance the private property rights structure and possibly increase the growth in areas or regions with private landowners. This led to the usual democratic process of being discussed in Parliament, together with a consultation and a decision made about the suggestion.

According to the Parliament's documents from the suggestion, the right wing parties seemed to be in favour of the suggestion while the left wing parties stressed to be against it. The centre parties (The Christian Democrats and the Centre Party) stressed that the representatives only suggested that a small part of Statskog SF were sold, hence that the state would still be the biggest land and forest property owner even if a small part of the State Enterprise were sold. Nevertheless, the suggestion was declined with 15 votes in favour of it, towards 79 votes against it (Innst. S. nr. 150 (2001-2002)). This suggestion from 2002 is the earliest case I could find in the Parliamentary proceedings where a suggestion about selling - or privatising - parts of the State Enterprise and its properties were proposed. As we can see, selling even a small part of Statskog SF was not a popular suggestion within the Parliament, as this implied less state and public control over forest resources. However, as we now know, a similar case turned up again eight years later when Orkla ASA published their plans about selling their forest properties, and Statskog SF stressed their interest to purchase these properties.

The government (consisting of left wing and centre political parties) was in favour of the purchase, and it was soon decided that the land consolidation sale would find place between the years 2011-2017, with 10-15 properties published for sale twice each year. However, with the new (right wing) government in 2013, new suggestions on privatisation of the Statskog estate came up. This caused massive protests from the other political parties, ENGOs and the public. Now people feared the State Enterprise could be sold to foreign investors and not be Norwegian-owned anymore. The government did not win through with this suggestion in the Parliament, and instead decided in 2015 to investigate if the land consolidation sale could increase. They asked Statskog to investigate their properties further, and the conclusion was that the land consolidation sale could increase by 150 000 ha. Thus, the total amount of properties is now 750 000 ha, and the timeline is extended until 2020. Twice a year, Statskog SF publish relevant properties, and they seek to sell their properties to the highest bidder. The process is open and “everyone” can be involved. For the most part, the properties are sold to the highest bidder, although in cases where the purchaser is already a landowner and the properties for sale lies close to these properties, Statskog looks at the total value of the properties and might sell it to those who will achieve the most cost-efficient and effective management for future sustainable development. The land consolidation sale was from the beginning based on certain criteria. These criteria are stated in a document from an extraordinary meeting. They include statements about what type of properties that should be sold (scattered forest properties); that they should be sold at market prices through bidding and that Statskog should seek to achieve the highest possible price for the properties; and that the land consolidation sale ought to increase the efficiency of Statskog’s own management (Statskog, 2016).

The political motivations behind the processes and an analysis of this could probably cover a whole thesis on its own. I will try to cover and analyse the main features of this. I choose to talk about the *processes* of both the purchase and the land consolidation sale as a whole, as these are interlinked. The motivations behind the processes are also interlinked, and has to do with ownership (rights issues), public interests (outdoor recreation interests), efficiency (economic) and sustainability (environmental conservation).

According to my informants from these actor groups, both Statskog and the former government viewed the purchase and the land consolidation sale as effective aspects of Norwegian forest management. The application succeeded because the government wanted to secure national and local ownership and public interests of the properties, as well as wanting

an economic efficient forest management with a purpose to increase Statskog's knowledge in both forestry and outdoor recreation activities. The process around the purchase was, according to some, partly regulated through Swedish interests, and thus if Statskog purchased the Borregaard properties, these properties and their resources would still be under Norwegian control. When Borregaard released the plans about selling their forest properties, some were concerned that foreign interests and in particular Swedish companies or investors would purchase them. Both Norwegian forest landowners and local politicians have stated their requirements about Norwegian ownership of the forests. According to the newspapers *Nationen* and *Dagens næringsliv*, at least two Swedish companies from the forest industry (*Bergvik Skog ab* and *Södra*) was among the interested actors towards the Borregaard purchase. For example did Hedmark county, where a majority of Borregaard's properties was localised, explain their interest in bidding for the properties with the argument that they would avoid Swedish acquisitions as well as securing local management and industry of the forest. Besides, the county was at this time ruled by the left and centre winged parties, and like the government, they feared that this could potentially lead to less Norwegian state and public control over forest resources. On the contrary, the leader of the Conservative Party's representatives in the county, Frode Knutzen, stated that "*[i]t is not a county's responsibility to purchase or own forest properties, and we wish they would close this bidding process as soon as possible*" (Nationen, 2010).

Hence, the parties' conflictual viewpoints on ownership shows here also on local levels. If we link this to the Norwegian forest governance model (Figure 2), we see that the institutions governing the policy process around the Borregaard purchase was a mix of political decisions and public reactions, much like the process towards establishing a Norwegian forest management in the first place in the 1800s. Further, we can see that political actors view the attributes of a resource differently: while some parties focus on the profit for landowners, timber production and the increase in technological equipment for more cost-effective forest management, other focus more on the communal interests and recreational attributes of forest resources.

The government wanted to secure Norwegian ownership over the properties and secure the continuation of state-owned property including the attribute of public outdoor interests within forest resources. At the same time, the following land consolidation sale was both required as well as it would lead to a more efficient management for Statskog. Statskog SF is an enterprise with an economic purpose, thus is an economic actor (see Figure 2), and the

scattered forest properties currently sold during the land consolidation process does not benefit Statskog's ambition of an effective management. It would also give local actors an opportunity to purchase and manage smaller forest properties.

All these motivations seem to build on a political discourse of what the former government and Statskog themselves consider to be the best property rights structure regarding the sustainability and management of environmental resources; a public property structure. These actors view environmental resources as best managed when it is the hands of the state and the public, and they are in favour of forest resources as communal goods and the public use of it. Further, we can look at the table of discourses (Table 2, chapter 2) when analysing the political motives behind the processes. During my interviews with politicians with different political viewpoints and through reviewing documents from the political process behind the property purchase, I learned that discourses plays an important part in cross-political processes and decision-making, simply because each party's political platform and goals originates from their different discourses (or ideologies). Political discourses also play a significant role for how each party view environmental resources, sustainable development and management. Right wing politics view private property rights as the most efficient and sustainable structure, while left wing politicians view public interests as the most important part when it comes to property rights. Centre parties' politics, at least the Centre Party itself, highlights a combination of public and private rights as most efficient and sustainable. I will here analyse the environmental discourses of Statskog, the Centre Party and the Conservative Party in particular - with the Centre Party as the voice of the government and since they with the Minister of Food and Agriculture played an important role during these processes. I also present the Conservative Party as an opponent to the government and their decisions. I will argue that Statskog and the Centre Party holds both an ecological modernisation and a green governmentality discourse, while the Conservative Party seem to stick to the former. When it comes to the discourses of the ENGOs I have interviewed, these will be outlined in the next part of this chapter when analysing different actors' response to the processes.

Statskog has an ambition of effective management, and they therefore wanted to purchase the Borregaard properties partly by selling scattered forest properties that does not contribute to this efficiency. They (my informants from Statskog) argue that the land consolidation sale is important both for themselves and for the new landowners, since local management of smaller properties might be more sustainable than state management in these cases. This implies both an ecological modernisation discourse and a green governmentality discourse; Statskog view

sustainable management both in terms of economic and environmental values (green governmentality) and in terms of a cost-effective development that ought to benefit future generations (ecological modernisation). Of course, as an enterprise with an economic purpose, Statskog might (and to some extent probably do) prioritise their own economic benefits on behalf of local management, and their own cost-efficiency was indeed what caused their wish to purchase the Borregaard properties and sell inefficient scattered forest properties. However, these processes still contributed both to a continuation of Norwegian state ownership as well as to sustainable, local management over forest resources. Nevertheless, the land consolidation sale undoubtedly involves insecurity over certain public recreation interests. Hence, I will argue that the market-oriented ecological modernisation discourse seem to operate as the strongest narrative for Statskog, including both the positive aspects of innovation and a more environmentally friendly industrialisation, as well as the weakness of prioritising own investments on behalf of societal institutions. Although, they are also a proponent of the green governmentality discourse, because of their implementation (or continuation after the DSS) of an increased environmentally focused governance. Also within this discourse, the positive aspects as well as the weaknesses seem to apply to Statskog and the state management of forest resources; they are seen as subjects of state protection but at the same time, they involve democratic participation and involvement (Bäckstrand and Lövbrand, 2006). Statskog SF as a resource regime is built up by their responsibility for forest resources including the norms of public rights to access forest resources on state properties, and community interaction rules that takes care of the relationship and cooperation between the state and the public including coordination of the resource use (Vatn, 2015).

The Centre Party build their political platform on stewardship and sustainable development in favour of future generations (Senterpartiet, 2016). These concepts are especially important when it comes to environment and economics, and they focus on an infusing environmental politics that includes all aspects of human societies and our relations to the nature and environment. Thus, I argue that this party also follows both the ecological modernisation discourse as well as being a proponent of the green governmentality discourse. The party themselves stresses that short-time consideration should give way to the more long-term stewardship perspective, however instead of conservation they work towards sustainable management and use of our natural resources. In terms of the ecological modernisation discourse, this highlights the interrelated engagement in environmental protection and sustainable development as well as in economic growth, innovation and investments. Further,

the Centre Party's political discourse shows a narrative of green governmentality in terms of their environmentally focused politics, including their view on state management and democratic participation (Bäckstrand and Lövbrand, 2006; Senterpartiet, 2016). The Centre Party was in favour of the Borregaard purchase, and they viewed it according to my informant as a "win-win situation for both the continuation of Norwegian ownership and public interest for forest resources, and for local actors' opportunity to purchase forest properties". The Minister of Food and Agriculture also clarified this viewpoint in the debate about the purchase in the Parliament in 2010 (Innst. 345 S; Prop. 11 S; Sak nr. 3 (2010-2011)):

"[t]he purchase is an industrially and commercially beneficial investment that strengthens Statskog as forest landowners, increasing opportunities for operational efficiency, and extends Statskog SF's opportunities to facilitate hunting, fishing and outdoor activities. The purchase will also open for the sale of scattered forest properties, which will strengthen the enterprise's economy further and give local forest landowners the opportunity to strengthen the business on their properties".

– Lars Peder Brekk, Minister of Food and Agriculture 2010

They want parts of the Norwegian forest to be in the hands of Norwegian ownership (as it is today), instead of being completely privatised and/or sold to investors or companies from other countries (like Sweden). My informant stressed that "Statskog is an enterprise with economic purposes" and that their purchase of the Borregaard forests would facilitate them to maintain their management structure, strengthen their position as a state enterprise, and increase their efficiency, as we can also see in the statement from Minister Brekk above. From the Centre Party's statements in the debate, we can see that their argument for the land consolidation sale is as much the strengthening this provides Statskog, as the opportunities it gives local landowners. Thus, it can look like Statskog's increased efficiency was a more important argument for the party than the opportunities that the purchase would give local landowners, which highlights their ecological modernisation discourse further. In addition, an important aspect of their focus lied also in the increased hunting and fishing opportunities the purchase would provide for the public, as my informant highlighted it: "the state and the public actually gain extended opportunities to hunt and fish now that the state are in possession of more property". The informant stated that in the original land consolidation sale, Statskog set out to sell 600.000 ha, while the purchased properties from Borregaard consisted of 1.1 million ha, which meant that Statskog would possess more properties than what they sold. Moreover, with the increased land consolidation sale, Statskog's total

possession of properties will still not decrease to less property than what they possessed before these processes started, but stay at the same amount of ha. Of course, also this outcome is worth taking into consideration when analysing these processes and their effect on the public (see Figure 2).

On the other hand, the Centre Party's green governmentality discourse is also highlighted in the debate, through their interlinked view and environmental focus on state management and democratic participation (Bäckstrand and Lövbrand, 2006). They did indeed state that the land consolidation sale of scattered forest properties also meant that local actors in Norwegian rural and decentralised areas would get the opportunity to purchase and manage properties at local levels, which again satisfies the party's view on decentralisation and private property rights. They aim for both national and local sovereignty over the resources, and are in favour of decentralised management. They argue that private property ownership to some extent is important for both the individuals themselves and for the country's development as they work towards a decentralisation of power, capital and settlement. They build their environmental politics on self-sufficiency arguing that the country should be as self-sufficient with food and environmental resource production as possible. In addition, the party stresses that the inhabitants need to feel a public ownership about environmental resources. To succeed with this, they argue that instead of focusing on either state or market, Norway should focus on both. Thus, the Centre Party's pillars of decentralisation, private property rights and Norwegian ownership, were all combined into a win-win situation for them in this case (Senterpartiet. 2016). It is therefore not a surprise that the party, as part of the government in 2010, supported Statskog's request for a state loan to purchase the Borregaard properties and at the same time were in favour of the following land consolidation sale.

"It is an important business in the districts, one of the businesses that are present in most municipalities. It has potential". – Gunnar Gundersen, The Conservative Party, talking about forestry in the debate about the purchase. The Conservative Party is a proponent of the ecological modernisation discourse, since they seek an active market-oriented approach towards environmental governance with innovation, entrepreneurship and competition as solutions to solve environmental challenges. They build their environmental politics on an ambition to reduce emissions by cost-efficient measures, and they claim that their conservative environmental politics build on a "future optimistic" discourse with a belief in technological innovations (Høyre, 2016). According to my informant, the Conservative Party was not satisfied with the 2010-government's loan to Statskog to purchase the Borregaard

properties, but they were positive towards the land consolidation sale of scattered forest properties to private actors, as we can also see in the statement from Gundersen above. This follows their view on less state-owned properties and their belief in private property rights as the most efficient and sustainable management structure in both economic as well as in environmental terms.

My informant stresses that political parties build on “different ideologies and viewpoints in property rights structure”, and that this is the core issue of this case. Ideologies is in this thesis presented as discourses. Private ownership increases the competition and entrepreneurship, which they are in favour of. My informant stresses that the Conservative Party view this as “the most cost-effective property structure”, and that “the “rights of way” is still protected through law and is therefore not a valid argument for state-ownership”. In addition, as we have seen, they wanted more privatisation of Statskog SF and their properties and requested this together with the Progress Party after they entered the government in 2013. These aspects are not surprising for an opponent party, and the former and the current government do build its environmental politics and governance on different discourses and beliefs. If the Conservative Party had been in government in 2010, these processes would probably turn out different.

When it comes to the other parties of the former government, the Labour Party and the Socialist Left Party, I did not succeed with getting interviews and hear their version on the processes. However, I will try to give a short presentation of these parties and their environmental politics and include them in the analysis as well. Both the Labour Party and the Socialist Left Party build their environmental politics on the precautionary and the polluter-pays principles. They work towards sustainable development, and are in favour of the public rights of the forest properties. (Arbeiderpartiet, 2015; Sosialistisk Venstreparti, 2016). As part of the government in 2010, they agreed to give Statskog a loan to purchase the Borregaard properties and they also agreed to the following land consolidation sale. However, when the current government released their suggestion about privatising more of the state forests, they protested against it together with the Centre Party (Dagens Næringsliv, 2015; Nationen, 2015).

The Socialist Left Party work towards economic justice and an ecological sustainable economy. Contrary to the market-oriented environmental politics of the Conservative Party and the Centre Party, the Socialist Left Party argue towards more nature-oriented environmental politics. They seek to protect environmental resources from capitalistic

investors, and thus I will argue that they follow the green governmentality and civic environmentalism discourses. They aim towards a more environmentally focused governance (green governmentality), and they aim to include civil participation when it comes to environmental issues (civic environmentalism). Their ambition is that all political sectors must collaborate in order to reach the goal of an ecological sustainable economy, and that people's knowledge and labour are the most important aspects of such an economy. Thus, the latter implies that the shift in property rights structure from state-owned to private ownership over forest resources seem to partly be in favour of their environmental political discourse, even if they argue against private ownership. Norway already has a large amount of renewable resources and a high percentage of educational competence, and the Socialist Left Party argue that these are prerequisites that Norway should use to be a pioneer towards an environmentally friendly society (Bäckstrand and Lövbrand, 2006; Sosialistisk Venstreparti, 2016).

The Labour Party's most important political pillar is to increase the labour opportunities in Norway. They want the workforce to be high, and to decrease unemployment with the possibilities of creating new, individual and innovative workplaces. Furthermore, they want to secure Norwegian environmental resources within the public (state) ownership (Arbeiderpartiet, 2016). Thus, they seem to follow the market-oriented environmental discourse of ecological modernisation, as well as green governmentality and partly civic environmentalism. They want to include all actors of society (civic environmentalism) and at the same time manage our environmental resources in a way that benefit present and future generations with labour opportunities (ecological modernisation). At last, they seem to view sustainable management in terms of both economic and environmental values (green governmentality). Hence, the Labour Party seem to be in favour of a mix of these environmental discourses. At one side, since these discourses are competing and conflicting, this can seem to be a vague and internally conflicting way of political decision-making. On the other side, though, this can also serve as an example of how the discourses unite and complement each other in actual decision-making (Bäckstrand and Lövbrand, 2006).

We have now looked at the political motivations behind the processes, and how both Statskog's and the different political parties' motivations includes different discourses of environmental governance, different views on the attributes of forest resources, and interrelations within economics, rights issues, outdoor recreation interests, and sustainability. They all seem more or less concerned about Norwegian ownership and communal interests of

forest resources, which in turn illustrates how different patterns of interaction between state-, market-, and public-oriented actors affect the outcomes of the resource (Vatn, 2015) (see Figure 2). The actual, current outcome is limited hunting and fishing opportunities on specific properties but increased hunting and fishing opportunities on other properties. In the next and last part of this chapter, I will analyse the outcomes of the land consolidation sale further, with examples from three case studies, and present different organisations' responses to the shift in property rights structure.

4.3 Outcomes of Statskog's land consolidation sale

4.3.1 What are the outcomes and consequences of the land consolidation sale; the successes and challenges of the shift in property rights structure?

As we now know, the public rights to access Norwegian forest resources are at large included in the "rights of way" and are valid on forest properties of both public, communal and private ownership, while the rights to hunt and fish depend on the landowner. Where Statskog is the landowner, they have chosen to facilitate for the public's rights to hunt and fish, instead of excluding the public from this, as they could have done had they chosen not to cooperate with the public through ENGOs and local communities (Reusch, 2012, Statskog, 2015, and Lemos and Agrawal, 2006, in Nerhus, 2015). This means that the structure of these rights may seem likely to change on the properties sold during the land consolidation sale, when the property rights structure change from public to private ownership. Thus, the potential challenges of the land consolidation sale are increased unpredictability and variations in hunting and fishing opportunities for the public, as well as uncertainty regarding the access to other forest resources. I will come back to the latter, while for the hunting and fishing opportunities these might vary a great deal depending on the new landowners. However, it does not mean that these opportunities will no longer exist for the public, but that the new landowners now can decide whether they want to continue to offer these opportunities for the public or not. The property rights structure will thus undoubtedly change, but the public's access to these resources might not change.

Positive elements of the property shifts, on the other hand, arguably includes more efficient management on local levels as well as for Statskog themselves when they now "get rid of" scattered forest properties and only manage large, coherent properties. Another positive

element seems to be that new landowners do preserve the public interests at large. During my case studies, I interviewed two new, local landowners (as well as looking into properties where a municipality became the new landowner). In both of these cases, the new landowners owned forest properties also before they purchased properties from Statskog, and in both cases these properties were close to their former ones. One of them is engaged in forestry, while the other is engaged in shepherding and might invest in forestry later. Both of them view their new property purchase as a contribution to a more efficient management on their land. When it comes to the opportunities to hunt and fish on their newly purchased properties, these opportunities exist, but their approach to the public access of it differs. One of the landowners have chosen to “keep the fishing opportunities open for public access, while I have chosen to personally benefit from the private opportunity to hunt and have shut down the hunting opportunities for the public”. The other landowner choose to let both opportunities still be open for public access, stating that “these opportunities will still be open for public access. I have no personal interest in hunting and fishing, and am buying these properties because of the shepherding, because of the increased pasture for the sheep” (see appendix for interview guides). On the question of what they view as the most sustainable management approach, they both stated that by “moderate use, common sense, and good agronomy” of the resources, the sustainable management of them are more or less secured for present and future generations. As we have seen, the public ambition for land management has increased during the last century, and their cooperation and relation with farmers and landowners are important. We can see this playing out in these cases, where the landowners wants to secure their livelihoods by investing in more forest properties, and the public want to secure their interests to access forest resources and thus needs to build new relations with the new landowners (Vedeld, Krogh and Vatn, 2003).

The concept of ‘good agronomy’ seems to be included by the new landowners both directly in their management approach of a sustainable common sense, and indirectly through a facilitation of the publics’ interests. Their management seem to include examples of how agronomy (in this sense forest management) in Norway are constructed through both specific competence as well as through internalised social norms and values. Through their “self-employed life mode”, the farmer or landowner needs to prove skills and independence as well as social and cultural aspects of management within both private and public markets. On the other hand, through “the responsible life mode – a public mode of production” the state through Statskog SF has earlier as public employees secured the public goods and social

values of these properties, a property rights structure that now changes. Now, the public no longer serve as owners of these common goods, and the political actors that once was elected by the public to take care of this no longer has the power of the state to secure these goods (Vedeld, Krogh and Vatn, 2003).

“Obviously a society has an obligation towards management for the common good, but it matters also how the state treats all its citizens” (Vedeld, Krogh and Vatn, 2003, p. 27) seem to be an appropriate quote regarding the land consolidation sale. The state has through Statskog managed these scattered forest properties until now, until the opportunity aroused to purchase and manage larger and more coherent properties on behalf of the smaller, scattered properties. Some actors will say that this is simply not a good way for the state or society to treat its members, even if the management of the resisting and now newly purchased public properties show to be more efficient and sustainable. The ethical issues involved in these processes are complex, as they seem to include both positive aspects as well as challenges. However, I will argue that these cases shows that the concept of ‘good agronomy’ are strongly internalised by Norwegian farmers and forest landowners both as a personal management approach, and also as a broader discourse of environmental governance. From my case studies, it seems like their “common sense” includes continuation of the public access to the resources, thus they view the relation between their land and the public use of it as an important aspect of their (sustainable) management.

Some actors argues that municipalities could be as good if not better managers of state forests than the State Enterprise itself, not because Statskog’s management is critical but simply because municipalities operate at more local levels and closer to its inhabitants and their interests. An example of a municipality that have purchased properties from Statskog is Os municipality in Hordaland County, and the ‘good agronomy’ approach as a discourse of environmental governance seems to be valid also in this case. In the autumn of 2013, Os municipality purchased two properties from Statskog; Raudlia and Stokkedalen (see Picture 1 below). According to local news press about the purchase, the properties were put out for sale only a few weeks before the purchase, and Os purchased them for recreational activities for the public and future generations of the public (this is also confirmed by Statskog). The properties, altogether 10 204 ha, makes up one of the biggest comprehensible environmental and leisure areas in the region, and contains 7% of Os municipality’s area. When in the hands of Statskog, these properties were popular recreational areas for the public with a great range of possibilities, including hunting and fishing possibilities where Bergen Hunting and Fishing

Society (BJF) and Os Hunting and Fishing Society (Os JFL) have been in charge of handling the rights. Apparently, these societies offer reasonable prices for hunting, as well as for hunting training. The possibilities for hunting and fishing seems continually to be divided between BJJ and Os JFL as of today. The outdoor recreation board for Bergen and the areas around (Bergen og Omland Friluftsråd, BOF), have in collaboration with Statskog been in charge of the management and adaptations of the area, and this seems to continue now that Os municipality have purchased the properties (Midtsiden, 2013; FNF, 2013). I have tried to get in touch with the municipality to confirm this, but unfortunately I have not succeeded.



Picture 1. Raudlia/Stokkedalen in Os municipality, Hordaland.

I will argue that all of the examples from my case studies exemplifies the theory of good agronomy in the way that we can see how Norwegian agriculture and forest resource management builds on a strong relationship between governance and culture and how the public view their relation to the environment (Vedeld, Krogh and Vatn, 2003). While the public's *right* to hunt and fish vanish on the properties sold during the land consolidation sale, it seems like the *possibilities to access* these resources in many cases are maintained by the

new landowners. However, the new landowners can at any time change their minds about this and deprive the public for the possibility to access hunting and fishing resources. They can execute power within the interaction rule of command (see Table 1).

When it comes to the criteria I introduced in chapter 3, which I sought to investigate in order to analyse the consequences of the sale, Statskog provided me with satisfying answers to these (see Table 3). According to Statskog, most of the properties that are included in the land consolidation sale contains hunting and/or fishing opportunities, and this is also exemplified by the properties of my case studies. Furthermore, my informant states that Statskog does not sell crown lands; these properties are regulated through the *Crown Land Law* and the *Mountain Law* (“Statsallmenningsloven” and “Fjelloven”), and managed not only by Statskog, but also by the mountain boards and crown land boards in each municipality where there are crown lands. Hence, Statskog is not entitled to sell these properties on their own.

Statskog also argues that there has not been much conflict or coordination problems between actors before or during the sales process, except in cases where municipalities and public organisations in the area have engaged and to some degree objected to the shift in property rights structure, because of their inhabitants- and members’ loss of outdoor recreation opportunities. This seem to occur in areas where a majority of the properties are about to be privatised and where municipalities no longer hold public forest properties at all.

This is not a big surprise, I will argue, when we see how much organisations like NJFF and DNT have engaged in public interests and use of outdoor state properties. This leads us back to the challenges of the shift in the property rights structure. My informant from DNT stresses that this shift in the property rights structure leads to “several new landowners that both we as an organisation based on public interests, and also the public themselves, now must cooperate with”. This will probably also relate to NJFF. This is not necessarily a negative aspect of the property sale, but it is a challenging one because it is hard to know in advance what the new landowners wants to do with their newly purchased properties and how this might affect the public interests in the area. DNT have earlier (not during this land consolidation sale process, although still worth mentioning) experienced to have no other choice but to shut down cabins because of closed roads and availability to get there because of shifts in the property rights structure. Thus, worst-case scenario for also this land consolidation sale would be that the new landowners did not continue to sell hunting and fishing licences to the public, and that they close existing roads on the properties leading to freshwater or DNT cabins at bordering

properties. For the public and their environmental resource interests, this seem not to be the general outcome, at least not for the time being.

Thus, a major challenge of Statskog and the state's land consolidation sale of public forest properties to private actors seem undoubtedly to be the uncertainties and variations of the publics' opportunities following this shift in the property rights structure. To secure the public's interests to hunt and fish when this is no longer a right but a "privileged" opportunity, and where this can suddenly change for the better or the worse, are challenging. As we know, producers within the public life mode might be sceptical of private actors in the field (Vedeld, Krogh and Vatn, 2003). In this case, organisations like DNT and NJFF represents the public life mode producers, and they do seem sceptical on behalf of the public interests at stake. A major challenge and setback, according to NJFF, is the "lost opportunities in certain municipalities who used to offer trainings and equipment for children and youth interested in hunting and fishing. These may now disappear because of new landowners". These members of the public are more or less dependent on hunting and fishing opportunities being available in their local community, in contrast to older generations who not only had these opportunities in their local community when they were younger but who are also (possibly) able to go hunting and fishing in other regions on their own supervision. Thus, the future generations do not necessarily benefit from this new 'efficient and sustainable' forest management.

As a summary of this section, several actors argues that practical outcomes and consequences of the shift in property rights structure seems not necessarily to be controversial for the management, nor critical for the public interests. New landowners do not exclusively mean reduced availability for the publics' opportunities of recreational activities. Especially areas where municipalities have purchased properties from Statskog, public interests seems to be the main reason for this acquisition. Another outcome is a more effective state management of the forests, according to Statskog themselves and certain political actors. In addition, new landowners who were already in possession of forest properties before purchasing more through Statskog's land consolidation sale, are now able to operate more effectively, and increase their profit from these properties, thus the land consolidation sale can arguably lead to more efficient local and state management.

4.3.2 Different groups of actors' response to the shift in property rights structure and view on sustainable forest management

I have already included the different political parties' and Statskog's view and discourses concerning the land consolidation sale, and will here outline the responses and views from the remaining actors I have interviewed; various organisations with different interests in environmental resources. These organisations are *DNT* (The Norwegian Trekking Association), *NJFF* (The Norwegian Association of Hunters and Anglers), and *Naturvernforbundet* (Friends of the Earth Norway). The last actor is not an organisation but a research institute; *NIBIO* (Norwegian Institute for Bioeconomic Research).

It seems like DNT and NJFF holds a combined environmental discourse of good agronomy and civic environmentalism. Their ambitions to facilitate the publics' interests on forest properties links to the same internalised discourse of good agronomy as with the new landowners, as mentioned above. They seem to view the relationship between the state and its citizens as an important matter in securing a sustainable development and management of forest properties. Their work illustrates how Norwegian (forest) resource management builds on a strong relationship between the two, and how this relationship is seen as a fundamental background for its social construction of meaning. It shows how values and perceptions of a sustainable management builds on Norwegian culture and tradition (Vedeld, Krogh and Vatn, 2003). Furthermore, their work illustrates the "bottom-up" approach of civic environmentalism and show the practical outcomes of democratic efficiency and civil participation, in how they actually include all actors in the society with opportunities to take action in relation to their interests. I will argue that these aspects and facilitations of the organisations might through civil participation - where the public is given available and accessible opportunities to use their environmental resources - increase the publics' view on not only local environmental issues but also global ones. Thus, through these practical outcomes of it, it shows the pragmatic approach of the discourse as presented in its theoretical approach in chapter 2 (Bäckstrand and Lövbrand, 2006).

We can see this in how DNT since their establishment in 1868 has worked with facilitation of outdoor recreation activities for the public in nature, by offering for example marked routes and cabins to sleep in for those wanting to spend some days and nights in the Norwegian outfields. They also arrange several events and trips for different groups of the public throughout the year. DNT wants the nature and its opportunities to be available for everyone, in an environmentally and cultural friendly way, thus their ambition and values builds on their

wish to be an exciting, including, simple and environmentally friendly organisation (DNT, 2016). A major part of their activities takes place within protected areas, and since they are the largest ‘outdoor- and recreational’ organisation in Norway and due to the challenges caused by climate change, they feel a responsibility to promote environmentally friendly activities and that they should take an active part in environmental management. They seek to enrich the environmental competence of those using the nature for outdoor recreation activities, and at the same time secure the “rights of way”. DNT argues that it is possible to combine an increased use of the nature with a consumptive resource use, and seek to base their activities on renewable resources; like promoting activities that are reachable by car-less transportation, and by contributing to the wider debate about climate change and sustainable resource use. In 2011, they made their own “climate paper” with such statements (DNT, 2016).

We can also see it in how NJFF work towards hunting and fishing opportunities for everyone who wishes to engage in these recreational activities. They view the current legislations about species protection and conservation of nature possible to combine with (moderate) hunting and fishing, and to make these opportunities available for the public they have a cooperation agreement with Statskog. This cooperation agreement builds on their common interest in facilitation of the public hunting and fishing interests as well as their wish to preserve biodiversity in order to secure a sustainable management of the resources (NJFF, 2013; NJFF, 2016).

When it comes to these organisations’ response to the land consolidation sale, my informant from DNT stresses the unpredictability of having several new landowners to cooperate with. At its worst, new landowners can choose not to cooperate with organisations like DNT, which might lead to closed roads and cabins. Of course, this causes insecurity and worries for both the organisation and its members. DNT counts 270.000 members, and thus several people might be affected by this insecurity (DNT, 2016). For NJFF, with 11700 members, their concern lies in the potential lack in the public right to hunt and fish on the properties that are now facing a shift in property right structure. It seems like the new landowners in many cases continually wish to include public interests on their purchased properties, and that the land consolidation sale therefore for the majority of the public does not lead to major structural changes. However, in those areas where the public *are* affected by a lack of hunting and fishing opportunities (for those taking an active part in these activities), no matter the size of the property or the community, some people might face personal issues including reduced life

quality. The question then remains; what is more valuable, one person's ability to perform a recreational activity, or another's possibility to increase his or her livelihood? This is an ethical issue, and as long as politicians disagree on these values (as shown earlier in this chapter), decision-making regarding resource management will probably continue to differ from government to government.

When it comes to Friends of the Earth Norway, I will argue that they follow the civic environmentalism discourse. This is the oldest organisation in Norway that are working with environmental protection and nature conservation, having existed since 1914. Their ambition is for human activity not to destroy the planet. Their civic environmentalism approach shows in the way they involve the public through campaigns as well as with providing them with information about environmental issues (Naturvernforbundet, 2016). Regarding the land consolidation sale, they are concerned with the shift in property rights structure both for the same reasons as the former organisations; but also because of their concern about increased investments within the forestry business. As they work towards protection and conservation of the nature, they are sceptical towards increased investments and efficiency in the forest management, which is understandable if they view efficiency as intensity. My informant from the organisation stresses that the threefold focus within the Norwegian state forest management where business, management, and research are interlinked, are unfortunate for the sustainable management namely because of the business interests involved. In addition, the informant stresses the difference in the Oslo area between the state (through Statskog) and Oslo municipality as landowners, whereas he argues that Oslo in contrast to Statskog prioritise protection before profit. However, as both my informant from the Centre Party and Statskog themselves states; Statskog is also a business based on economic principles as well as having environmentally friendly principles. It is an enterprise working as much for the development of Norwegian industry as they do to secure and facilitate for the public interest in recreation activities. This combined management approach is thus understandable when viewing it from their own principles and political ambitions of how a sustainable management should include and not exclude public interaction with the environment.

The last actor I have interviewed during my research is NIBIO, which is the leading Norwegian institute of research, development and knowledge of bio-economy. The institute involves research on plant- and food production, environment, forest and socioeconomics, to mention some. The institute's division on forests and outfields (earlier "*Skog og landskap*") is concerned with providing the scientific basis of sustainable management of forest resources,

and published a report in 2014 on “sustainable forestry” (NIBIO, 2015; Tomter and Dalen, 2014). My informant from this division argues that sustainable forest management is a prerequisite for all types of Norwegian forestry today and that it is hard if not impossible to manage forest properties without taking into account the sustainable development regulations, environmental laws and norms that have occurred in the last 20 years. These regulations applies to both state actors as well as private actors. For example, liquidation of trees/forests requires planting new trees/forests. In addition, both private and state actors can make mistakes. This might be due to the lack of competence in the field, as education-based knowledge is not required within all institutional aspects of forestry or forest management. On the other hand, my informant further argues that the state might be more careful with following these regulations, since both national authorities as well as international policies often follow state-owned properties closely, while private landowners does not have the same type of “supervision”. Regarding the land consolidation sale, NIBIO does not have strong arguments neither for nor against it. Since they are a research institute, their focus lies in finding the best possible solutions to forest resource management, whether this is by private or public landownership or a combination of these. The institute, I will argue, illustrates to some extent how the concept of ‘green governmentality’ works, taking the increased environmentally focused politics into account in their research. They seem to embrace the modern industrial society in their research, both on national and global levels, with their ambition towards finding a satisfying environmental solution to the administration of resource governance including the human relation with the environment. They seem to illustrate both the weak and the strong version of the discourse, showing that environmental governance is both a matter of state management by political decision-making; and a matter of public democracy as I am guessing they depend on individual and societal participation to be able to conduct research (Bäckstrand and Lövbrand, 2006).

We have now looked into different actors’ view on sustainable forest management and responses to Statskog’s land consolidation sale. The analysis reflects the complexity of this case, where several different discourses and values are at play, and where there seems to be no right and simple answer. In the next chapter, I will present a summary and a conclusion of the cases and the broader theme of (global) environmental governance.

5. Summary and conclusion

Throughout history, the Norwegian state forest management have gone through different stages of structural development, from being partly owned and controlled by the church, to the transfer to the King, and through implementations of taxes and restrictions after the reformation. Later, during the first attempts of a formal administration system for the state forests (the *generalforstamts*), German foresters were given a leading role. This did not last very long as many Norwegians resented. Until that time, they had been free to cut trees and use the forests the way they wanted to without any formal management around this use.

However, when the first Norwegians finished their forestry education in Germany and came back to work as foresters, the public seemed to view German influence more positively. In addition, when *Statens Skovvæsen* was established and the forest laws founded during the 1800s, Norwegian forest resource regimes progressed into becoming more manageable, and more like the present management system. Environmental issues started to gain attention in the second half of the 1900s when politicians and bureaucrats placed concerns for environmental resources higher on the political agenda. Eventually, in 1987, the Brundtland report and the term “sustainable development” became significant for environmental governance. Later, in 1992, the *forest principles* regarding sustainable forest management evolved from the Rio conference. Moreover, the Rio conference led to an increased awareness of how changes at local levels could help resolve global environmental issues. Statskog was established the year after the Earth Summit in Rio, and even most likely by coincidence and through unintentional forms, the forest principles and awareness of local management emanating from the conference can therefore arguably have evolved at a perfect time in history (Berntsen, 2011, Fageraas, 2009, and Statskog, 2015, in Nerhus, 2015).

Renewable but critical natural resources, like forests, needs proper management, and due to the collision between nature’s “own” principles and the modern growth in economics and technology, there is a need for sustainable use in order for forest resources to stay sustainable for future generations (Berntsen, 2011, in Nerhus, 2015). Environmental concerns and outdoor recreation activities for the public are important aspects for Statskog and their management. Norwegian forest management seem to have implemented the forest principles in sustainable ways, with Statskog’s continuation of the decentralisation approach of their management, and the public rights to access Norwegian forest resources. These two aspects

might have continued through tradition and despite the founding of the forest principles, but they are nevertheless aspects towards a more sustainable management approach for the Norwegian forests. All of Statskog's property acquisitions require further divestments of their current properties; hence, the case with the ongoing land consolidation sale that I have researched is not a remarkable phenomenon. However, the purchase and following land consolidation sale is of significant sizes, although it does not necessarily mean that it leads to dramatic changes in the Norwegian state forest management (Nerhus, 2015).

Institutions coordinates and protects our interests and structure the relationship between humans and their use of natural resources, like in the way Norwegian state forest management, at least since the establishment of *Statens Skovvesen*, have operated through institutional structures that support and protect the public values and interests for forest resources. Further, actors can change the structure of the institution if the outcome is not in their favour at first, as we have seen examples of with the new landowners. Therefore, the land consolidation sale currently taking place causes some concerns and worries among public actors, and challenges arises about the value of environmental resources. Even if Statskog and thus the state have gained more properties and increased the public access to hunt and fish through the Borregaard purchase, the land consolidation sale and the institutional changes caused by it will still affect certain members of the public in the specific areas where properties are sold to private actors.

We have seen that historical, empirical and societal institutionalisms plays out in Norwegian state forest management (Peter, 2001, in Nerhus, 2015). Now, for some (certain affected public actors) it might look like the history of earlier management is not as important anymore since Statskog and the political system decided to implement the land consolidation sale for economic-political reasons. These properties have been state-owned for centuries, and thus the concerns and uncertainties for the changes in institutional structures on these properties are understandable. It do not necessarily help the public that Statskog and the state have purchased the Borregaard properties, when certain members of the public lose their local rights to access hunting and fishing opportunities.

However, empirical and societal institutionalisms are still valid, as these are based on governmental structures and relations between the state and the public, which do not seem to have changed much. A multi-party government with political parties with different discourses builds up the structure of Norwegian governance and political decision-making. Governance is the processes, structures and coordination within and between a broad spectre of actors,

including institutions, resource regimes and property rights. Environmental governance thus, is the management, use and outcomes of environmental resources, like forest resources, including how political actors influence these resources. Since different political actors view resource management through different discourses, conflicts arises between actors (Peters, 2001, in Nerhus, 2015; Vatn, 2015; Bäckstrand and Lövbrand, 2006). This thesis shows the presence of such conflicts within the political system regarding Norwegian forest resource management regarding questions of whose interests are more powerful, private landowners' interests or the public's communal interests. In turn, this leads to compromises in order to find the most efficient and sustainable management, and hybrids of different environmental governance approaches occur.

Whether the interaction rules changes on the properties sold during the land consolidation sale, depends in one way on the new landowners. The properties at sale are scattered forest properties of more or less small sizes, and they are sold to several private actors because the political system wanted to avoid that a few (foreign) companies or other powerful actors purchased large pieces of state and public property. Nonetheless, altogether, this includes a large size of state property that now changes from state and public ownership to private ownership, and thus the concerns from different group of actors are understandable. Private properties is still part of the "rights of way" and thus for other NTFP than hunting and fishing, the public *rights* to access these properties will not change (Nerhus, 2015). However, new landowners can choose to change the *possibilities to access* these resources, for example by execute power about road access. They can also change the regulations (institutional structures) regarding access to reside on their properties.

Independent of the purchase and land consolidation sale, all actors with an impact on the environment must work together in order to secure a sustainable management of environmental resources. Further, as long as the political system, organisations, communities, Statskog and the new landowners continue their cooperation and pragmatic debates across social and political levels, their hybrid forms of environmental governance discourse, and their belief in 'good agronomy', Norwegian forest management and the public access to these will likely not change in any intense ways (Nerhus, 2015). In the case of the land consolidation sale, though, it does seems to lead to even more decentralised and local management of the Norwegian forests. In addition, if the new landowners choose not to make large changes within the institutional structures of their properties, this increased decentralised and local management seem to be a positive outcome of the process.

References

Arbeiderpartiet (The Labour Party). *Politikken A-Å: Klima, miljø, energi, Naturen tilhører oss alle, Friluftsliv/Allemannsretten* (2015)

<http://arbeiderpartiet.no/Politikken-A-AA/Klima-miljoe-energi/Friluftsliv-Allemannsretten>
(Retrieved 20.05.2016)

Arbeiderpartiet (The Labour Party). *Politikken A-Å: Klima, miljø, energi, Mer fornybar energi – bedre klima* [2016]

<http://arbeiderpartiet.no/Politikken-A-AA/Klima-miljoe-energi> (Retrieved 20.05.2016)

Arbeiderpartiet (The Labour Party). *Politikken A-Å: Arbeid og næringspolitikk, Arbeid til alle* [2016]

<http://arbeiderpartiet.no/Politikken-A-AA/Arbeid-og-naeringspolitikk> (Retrieved 20.05.2016)

Bakke, T. *Marine protected areas in Norway: A study of local participation in the establishment of Jomfruland National Park* (2015). Ås: Norwegian University of Life Sciences.

Berg, B. L., H. Lune. *Qualitative Research Methods for the Social Sciences* (2012) [8th ed.]. USA: Pearson.

Berntsen, B. *Grønne linjer: Natur- og miljøvernets historie i Norge* (2011). Oslo: Unipub

Bradshaw, D.S., Daniels, P., and Sidaway, J. *An introduction to Human Geography – Issues for the 21st Century* (2005) [2nd ed.]. Edinburgh: Pearson Prentice Hall

Bryman, A. *Social Research Methods* (2008) [3rd ed.]. Oxford: Oxford University Press

Bäckstrand, K., and Lövbrand, E. *Planting Trees to Mitigate Climate Change: Contested Discourses of Ecological Modernization, Green Governmentality and Civic Environmentalism* (2006). Massachusetts: Massachusetts Institute of Technology

Dagens næringsliv. *Statskog vil selge mer skog – Ap går i mot* (2015)

<http://www.dn.no/nyheter/politikkSamfunn/2015/03/02/1559/statskog-vil-selge-mer-skog--ap-gr-mot> (Retrieved 20.05.2016)

DNT (The Norwegian Trekking Association). *Bruk og vern* [2016]

<https://www.dnt.no/bruk-og-vern/> (Retrieved 05.04.2016)

DNT (The Norwegian Trekking Association). *Fornybart friluftsliv* [2016]

<https://www.dnt.no/fornybart-friluftsliv/> (Retrieved 05.04.2016)

DNT (The Norwegian Trekking Association). *Om DNT* [2016]

<https://www.dnt.no/om/> (Retrieved 13.04.2016)

DNT (The Norwegian Trekking Association). *Visjon* [2016]

<https://www.dnt.no/visjon/> (Retrieved 05.04.2016)

FNF (Forum for Nature and Outdoor Life). *Os kommune kjøper Raudlio/Stokkedalen til friluftsmål* (2013) [2016]

<http://www.fnf-nett.no/Docs/00000166-filer/7103.Os-kommune-kjoper-Raudlio-Stokkedalen-til-friluftsmal.html> (Retrieved 02.03.2016)

Høyre (The Conservative Party). *Energi og miljø* [2016]

<http://www.hoyre.no/politikk/temaer/energi-og-milj%C3%B8> (Retrieved 04.04.2016)

Kartverket. *Se eiendom* [2016]

<http://www.seeiendom.no/> (Retrieved 02.03.2016)

Midtsiden (Os local newspaper). *Os kjøpte 7% av Os* (2013)

<http://www.midtsiden.no/os-kjopte-7-av-os> (Retrieved 02.03.2016)

Nationen. *SV tviler på Listhaugs løfter om Statskog* (2015)

<http://www.nationen.no/naering/sv-tviler-pay-listhaugs-lafter-om-statskog/> (Retrieved 20.05.2016)

Naturvernforbundet (Friends of the Earth Norway). *About Norges Naturvernforbund* [2016]

http://naturvernforbundet.no/?lang=en_GB (Retrieved 05.04.2016)

Nerhus, B. *Environmental Governance* (2015). Ås: Norwegian University of Life Sciences

NIBIO (Norwegian Institute of Bioeconomy Research). *Om NIBIO* (2016)

<http://www.nibio.no/infoside/om-nibio> (Retrieved 14.04.2016)

NIBIO (Norwegian Institute of Bioeconomy Research). *Skog og utmarksdivisjonen* (2016)

<http://www.nibio.no/infoside/skog-og-utmarksdivisjonen> (Retrieved 14.04.2016)

NJFF (The Norwegian Hunter and Fisherman Society). *Adgang til jakt og fiske* (2016)
<http://www.njff.no/jakt/sider/njff-mener.aspx> (Retrieved .06.04.2016)

NJFF (The Norwegian Hunter and Fisherman Society). *Samarbeidsavtale* (2013)
<http://www.njff.no/Documents/Samarbeidsavtale%20Statskog.pdf> (Retrieved 29.01.2016)

Orkla. *Orkla selger skog til Statskog* (2011)
[http://www.orkla.no/Presserom/Nyheter/Orkla-selger-skog-til-Statskog/\(language\)/nor-NO](http://www.orkla.no/Presserom/Nyheter/Orkla-selger-skog-til-Statskog/(language)/nor-NO)
(Retrieved 01.03.2016)

Oxford Diaries, *Language matters* (2016)
<http://www.oxforddictionaries.com/definition/english/discourse> (Retrieved 31.03.2016)

Senterpartiet (The Central Party). *Politikken fra A-Å* [2016]
<http://www.senterpartiet.no/e/category12988.html> (Retrieved 04.04.2016)

Senterpartiet (The Central Party). *Senterpartiets verdigrunnlag* [2016]
<http://www.senterpartiet.no/verdigrunnlag/category15087.html> (Retrieved 04.04.2016)

Skog, *Statskog selger nye skogområder* (2015)
http://magasinet.skog.no/artikkel.cfm?id_art=7899 (Retrieved 20.05.2016)

Sosialistisk Venstreparti (The Socialist Left Party). *En økologisk bærekraftig økonomi* (2013)
<https://www.sv.no/wp-content/uploads/2013/12/3.-En-%C3%B8kologisk-b%C3%A6rekraftig-%C3%B8konomi.pdf> (Retrieved 04.04.2016)

Stake, R.E. *Handbook of Qualitative Research* (Case studies. Ch. 16 in Denzin, N.K. and Lincoln, Y.S.) (2000) [2nd ed.] Thousand Oaks, CA: SAGE Publications, Inc.

Statskog, *Hvem eier skogen* [2016]

<http://www.statskog.no/skogdrift/hvem-eier-skogen.html> (Retrieved 01.03.2016)

Statskog, *Statskog selger eiendommer* [2016]

http://www.statskog.no/eiendommene/skogsalg/Documents/Bakgrunnsinfo_eiendomssalg.pdf
(Retrieved 01.03.2016)

Store Norske Leksikon. *Norsk historie fra 1815 til 1905* (2015)

https://snl.no/Norsk_historie_fra_1815_til_1905 (Retrieved 04.04.2016)

Stortingsforhandlinger. Dokument nr. 8:71 (2001-2002) Innst. S. nr. 150 (2001-2002)

Innstilling frå næringskomiteen om forslag fra stortingsrepresentantene Øystein Hedstrøm og Lodve Solholm om salg av statlige eierandeler i Statskog SF (Report from Parliamentary debate, Sak nr. 2, 29.04.2002)

Stortingsforhandlinger. Innst. 345 S (2010–2011) *Innstilling fra næringskomiteen om*

kapitalforhøyelse og statlig lån til Statskog SF (Report from Parliamentary debate, Sak nr. 6, 15.12.2010)

Stortingsforhandlinger. Prop. 11 S (2010–2011) *Kapitalforhøyelse og statlig lån til Statskog SF*

Stortingsforhandlinger. Report from *Interpellation from Representative Gunnar Gundersen to the Minister of Food and Agriculture* (Sak. Nr. 3, 18.11.2010)

Tomter, S. M. og Dalen, L. S. [red.] (2014). *Bærekraftig skogbruk i Norge*. Ås: Norsk institutt for skog og landskap

University of Oslo. *Norges historie – Det store hamskiftet* [2016]

<https://www.norghistorie.no/industrialisering-og-demokrati/teknologi-og-okonomi/1522-det-store-hamskiftet.html> (Retrieved 04.04.2016)

UNSCD, *Rio+20* (2011)

<http://www.uncsd2012.org/about.html> (Retrieved 07.04.2016)

Vedeld, P., Krogh, E., and Vatn, A. *Good agronomy – Social institutions among Norwegian farmers and implications for public sector governance* (2003). Ireland: Congress of the European Society for Rural Sociology

Vatn, A. *Environmental Governance - Institutions, Policies and Actions* (2015). Cheltenham: Edward Elgar Publishing

Appendix

Interview guide 1) Statskog SF

- 1) What were the key political motivations behind the purchase of Orkla's properties?
- 2) What was your reactions towards the government's decisions on an investigation of the properties?
 - 2a) Were you prepared for this after the purchase of the Borregaard forests from Orkla?
- 3) How did you decide which properties you were willing to sell?
 - 3a) Did you decide on all properties at once (in 2010/2011), or did you decide to do it gradually from 2010-2017?
- 4) Did you set any criteria for the potential buyers?
 - 4a) Are there any specific criteria about further management and public interests?
- 5) Is the properties sold only to private actors, or can a group of people, or companies, buy them?

Interview guide 2) Political parties

- 1) Why did the political system demand a land consolidation sale of Statskog's properties?
 - 1a) What were the key actors, motivations and issues behind the process?
- 2) How did the process play out in the Parliament?
 - 2a) What were the timeline of the case?
 - 2b) What were the main conflicts between the parties?
- 3) What are the perspectives of your party regarding this case?
 - 3a) Were your party satisfied with the political process and the decision that were made?
- 4) What do you think are the most sustainable management of Norwegian forests?
 - 4a) How do you think the land consolidation sale of Statskog's properties will affect this sustainability approach?
 - 4b) In what ways do you think the land consolidation sale of Statskog's properties will affect the public rights?

Interview guide 2) New forest landowners

- 1) Why did you want to buy this property?
- 2) How do you plan to manage/sustain/use the forest?
- 3) Are there any hunting or fishing opportunities on the property, and if so –do you plan to let the public use your property for hunting and/or fishing? Why/why not?
- 4) What do you think are the most sustainable management of Norwegian forests?

Interview guide 4) Civil society actors (ENGOS)

- 1) What are your thoughts on the land consolidation sale of Statskog's properties?
 - 1a) What are your conception of the background for the sale?
 - 1b) What do you see as the main challenges of the sale?
- 2) Did you get any opportunities to include your opinions and thoughts of the sales process during the political process?
- 3) How do you think it will affect the publics' opportunities to hunt and fish?
- 4) What do you think are the most sustainable management of Norwegian forests?
 - 4a) How do you think the land consolidation sale of Statskog's properties will affect this sustainability approach?
 - 4b) In what ways do you think the land consolidation sale of Statskog's properties will affect the public rights?
- 5) What role do you play for the public rights and interests?
- 6) How is your partnership/cooperation with Statskog?
 - 6a) Did the sale process cause any conflicts between you and Statskog?
- 7) Are you involved in dialogues with private property owners?

Interview guide 5) NIBIO

- 1) What are your thoughts on the land consolidation sale of Statskog's properties?
- 2) What do you think are the most sustainable management of Norwegian forests?
 - 2a) How do you think the land consolidation sale of Statskog's properties will affect this sustainability approach?



Norwegian University
of Life Sciences

Postboks 5003
NO-1432 Ås, Norway
+47 67 23 00 00
www.nmbu.no